FIRST AID MANUAL

SHARED HOPE TRAINING

Shared Hope Training

- Provide First Aid
- Considerations
- Principles of First Aid
- Resuscitation Objectives
- Assessment Principles
- Approach to an incident
- Calling for help
- Secondary survey & Vital signs

Provide First Aid (Part A)

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Introduction

What is First Aid

- It is the **initial care of someone in need of Aid** due to illness or injury, it could happen anywhere or anytime at work or at home
- **Most of us are capable of learning First Aid** & providing care until further assistance arrives or whilst someone is in transit to assistance
- We have First Aid instances occur that may be simple or may be life threatening. The more of us are able to assist others, the better chance to reduce loss to life

What to consider

- Workplace policies & procedures
- Industry codes of practice & regulations
- State & Territory Workplace Health & Safety legislative requirements
- Australian Resuscitation Council (ARC) Guidelines
- Legal & social responsibilities of the First Aider (Duty of Care)
- The available First Aid equipment & resources
- Location & nature of accidents
- Risks associated with emergency situations

Workplace Policies

- Workplace policies control how we may address a situation in a work environment
- We have to learn to juggle between our at work rules that govern how we should act or re-act compared to outside the shops in an uncontrolled environment on the way home
- Sometimes at work the policies are to refer assistance to someone more skilled!
- Outside of work we use our conscience as a guide & if we feel safe to assist

Industry codes of practice & regulations

- Each industry creates regulations about:
  - How we should work & reduce risk of injury
  - Codes of practice which suggest how to do certain work tasks
  - Risks associated with emergency situations
- The industry body for First Aid is the Australian Resuscitation Council known (ARC) Guidelines

Legal Issues

Legal Issues

- Good Samaritan Act- based on act of kindness as demonstrated in Luke 10:25-37 New International Version (NIV)
- The Good Samaritan Act:

- The objective of the Bill is to afford **legal protection** to persons in our community who assist "persons in distress", provided that such aid or assistance is given in emergency circumstances, & that any act done or omitted is done so in good faith & without reckless disregard.
- Further, the services performed must have been done so without fee or reward or expectation of fee or reward.
- Although there has been no successful litigation against Good Samaritans in Queensland to date, the threat of litigation nevertheless persists. The community deserves the legislative certainty that if they reasonably assist persons in distress, they will be legally protected.
- When providing care we are to work within our limit of skills or training - if you were to try something you saw on TV may put you at risk of negligence. ***Ref http://www.legislation.qld.gov.au/Bills/52PDF/2007/CivilGSAB07Exp_P.pd***

Consent

- Competent adults are legally entitled to refuse help, even if we feel they require assistance. *Unconscious casualties are seen to have implied consent*
- (It is assumed by law) a person of logical mind would say yes to help
- Those in charge of minors (parents & such) are deemed as decision makers for minors & therefore could refuse help as well
- This is a situation where we look at our duty of care to seek further assistance from authorities if help is required & they are refusing help (for example police & emergency services)

Cultural Awareness Responsibility

- Respect for Cultural difference is important in Australia's Diverse Culture
- Within Australia there are many cultures & nationalities. So a First Aider should try to be respectful of differences & try to assist with these things in mind, possibly use of non verbal communication may be required. We may need to seek someone of same sex to assist if necessary & culturally requested without causing conflict
- We can assist by doing our best to maintain dignity to someone injured & maintaining consent & confidentiality

Duty of Care (1/2)

- In an emergency situation, a person may take 'reasonable action' even without formal consent, which will be viewed as being acceptable in the normal conduct of life
- In relation to a minor; because they cannot give consent, if possible the consent of a parent should be obtained
- Under Australian Law a member of the public, or a First Aider in the community, usually has no legal duty of care requiring them to stop & render assistance to an injured or ill person, The Good Samaritan Act protects from prosecution a person who goes to the aid of another, acting in good faith without malice
- Although you may be at legal risk if under the influence of drugs or alcohol

Duty of Care (2/2)

- There are however instances where the First Aider/member of the community is obliged to stop & render assistance
- Situations where you are required to stop:
  - A driver of a motor vehicle involved in a vehicle accident
  - Where an employee is trained & designated as First Aider in the workplace
  - When a person trained in First Aid has taken responsibility for another individual(s) e.g. child minding
  - It should be noted that once a person begins to render assistance, there exists a legal duty of care
  - All First Aiders need to consider to render assistance with ordinary skill & 'to the best of their ability' in order to meet their duty of care

First Aid Kits & Legislation

- Codes of Practice cover issues as to
  - The contents of First Aid kits & their location on worksites (regular checks of stock should be done)
  - The number of First Aiders at a workplace given the number of staff
  - The level of staff training required & that the training complies to state authorities
  - Businesses all vary according to the risks of work carried out , each business should assess further First Aid equipment etc., that could apply to their business situation

Legislation
Further detailed information

- NSW-www.workcover.nsw.gov.au
- Victoria-www.worksafe.vic.gov.au
- Qld-www.whs.qld.gov.au
- ACT-www.workcover.act.gov.au
- N.T-www.deet.nt.gov.au
- Sth Australia-www.workcover.com
- Tasmania-www.wsa.tas.gov.au
- Commonwealth-www.comcare.gov.au
- W.Australia-www.safetyline.wa.gov.au

Safe Manual Handling

When assisting others we need to have an understanding of how to minimise injury to ourselves.

Our back strength is determined by the stomach muscles & those running down along our spinal column.

When lifting objects of any description we should first assess

- Weight & size, where you intend to move the casualty
- How you intend to lift them
- Knowing your limitations & looking for assistance when required
- Several techniques apply with all lifting techniques
  - Keep load–in this case the person close to your body
  - Feet shoulder width apart, bend at hips not waist & bend your knees keeping back in alignment with the shoulders & pelvis
  - Hold head straight & grip securely

Lifting

- Use thigh & leg muscles
- Avoid bending or twisting
- Communicate clearly
- Use improvised aids if possible
- Overall use your brain not your back

Medic Alert information

- Medic alert Bracelets & even tattoos may be on a casualty with important information that could be life saving to that person. Some may have information of allergies or blood type.
- Be aware of them & pass the information on to emergency services if you become aware of them

Infection Control

All First Aiders should have simple infection control principles to prevent the transmission of blood & body fluid infections such as H.I.V. & Hepatitis.

Safe working procedures are as follows.

- Wear **Gloves**
- **Wash hands** thoroughly after contact with blood or body fluids with soap & water asap
- **Dispose of all soiled objects** in correct waste dispenser
- First Aiders Should be **Immunized**
- Use **Mouth To Mask Shield**

We have just discussed some factors that are relative to providing assistance to others

When calling for help dial 000

Mobile Phones Call 112 – it does not require you to have credit & hopefully will connect to the nearest tower & to emergency services

In Australia we use the abbreviation

DRSABCD

as a mental stepping stone to walk our way through what to do next

D	Danger
R	Response
S	Send for help
A	Airway
B	Breathing
C	CPR
D	Defibrillation

In most situations you may only need

to do **DRS**

D Making sure its safe & feeling safe enough to become involved

R Checking for response; can be offering help & working through if they require medical attention

S Sending /Ringing for help If assistance is needed

D	Danger
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A	Airway
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A	Airway maintenance may come along if the casualty falls unconscious or has airway difficulty
B	Checking for breathing on the unconscious casualty to make sure it is normal & air is getting in & out at regular intervals
C	Unconscious & abnormal/inadequate breathing prompts us to move to CPR
D	Defibrillation is ideal straight away if CPR is underway

D Danger

R Response

S Send for help

A Airway

B Breathing

C CPR

D Defibrillation

Principles of First Aid

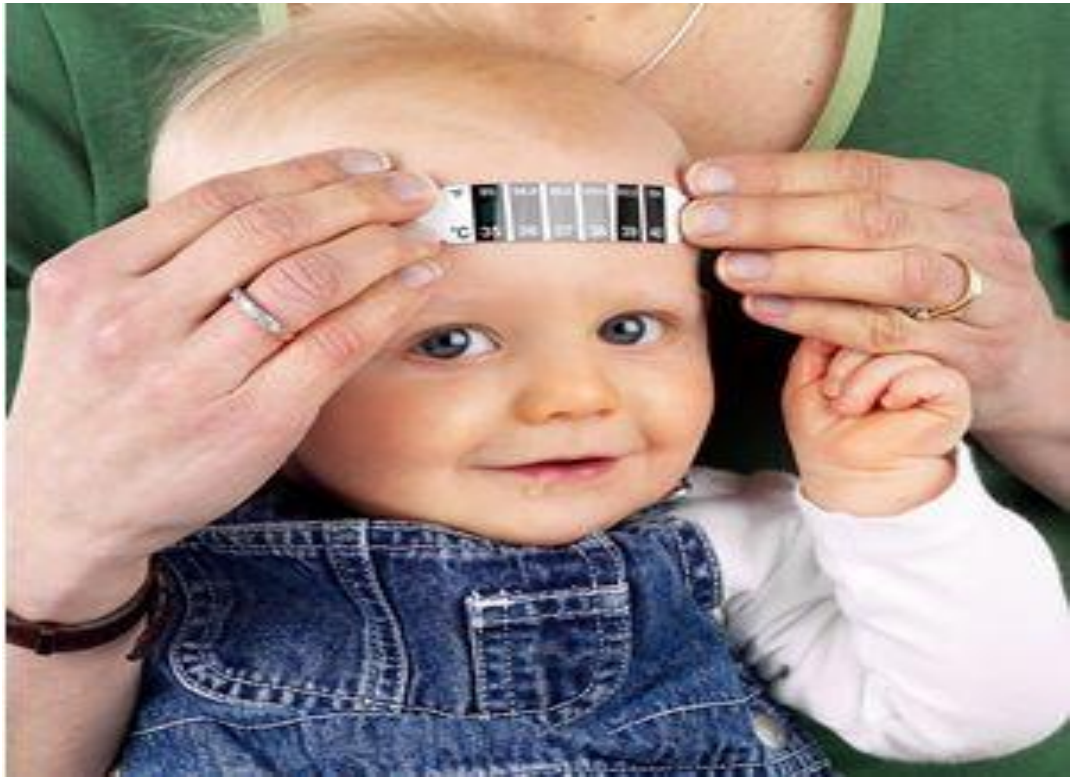
Preserve Life

Protect the Unconscious

Prevent the condition worsening

Promote Recovery

Seek Medical Assistance



- To call for assistance on your mobile you can dial 000 or 112
- For National Poisons information centre dial 131-126.
- Give the call taker the following information.
  - Location
  - Summary of incident
  - Number of people injured
  - Condition & any treatment given
  - Any hazards present
  - Answer any questions as needed

Approach To An Incident

- **Danger** – Check for danger to yourself & others, unless they are in immediate further danger do not attempt to move casualty unless airway is at risk
- **Response** - Check with talk & touch
  - (Can you hear me, open your eyes, what is your name, squeeze my hand)
  - If no response call 000 or 112
- **Consciousness:**
  - If **Conscious:** Make comfortable & observe airway breathing
  - **If Unconscious:** Clear & open airway look for signs of life check for normal breathing.
- **Breathing**
  - If **breathing normally** put into recovery position & monitor breathing
  - **Not breathing** commence CPR attach Automatic External Defibrillator ASA

Emergency Priorities (1/4)

D Danger

R Response

S Send for help

A Airway

B Breathing

C CPR

D Defibrillation

- When attending any First Aid scene you must use the **DRSABCD** approach
- So that if you find a problem at any stage you can deal with it before moving onto the next stage as follows.

Please note :

If an incident involves more than one person you must always manage an unresponsive person first

Emergency Priorities (2/4)

Danger

- **Check its safe** for you

Response

- **Touch** them on the shoulders & talk to them if they respond treat injuries as required if no response

Send for help

- **Call** 000 or 112 on mobile phones

Emergency Priorities (3/4)

Airway

- Look in the mouth, feel for loose objects like broken teeth & clear the airway, open the airway using head tilt & jaw support for adults & look for signs of life

Breathing

- Check for movement of the chest or the upper abdomen, listen for normal breath sounds, feel for movement of the chest
- The normal breathing rate is between 16 to 20 breath per minute.
- If unconscious & not breathing normally roll the person onto their back & give two rescue breaths then recheck for signs of life

Emergency Priorities (4/4)

Compressions

- Place hands centre of the chest, lower half of the sternum & apply 30 Chest compressions & 2 respirations at a rate of 100-120 beats per minute

Defibrillation

- Attach Automatic External Defibrillator & follow the machine prompts

Bleeding

- Apply pressure to the wound with a pad or bandage; elevate or immobilize as required. Wear gloves if available

Assessment Principles

When combined these three assessment tools will allow you to make a fair assessment of the patients illness or injury

- ***History*** The story of the accident or illness which can be gained from the bystanders or the casualty.
- ***Signs*** What you can see for example cuts bruising bleeding & or swelling
- ***Symptoms*** What the casualty feels & tells you (e.g..) I want to be sick & have a pain in my stomach

Primary Survey (1/2)

- Life threatening problems are identified & treated first

- This is under taken in a strict order of priorities to ensure that:
  - The most important steps are taken in logical order
  - Nothing is omitted

This is done by using **DRSABCD**

D Danger

R Response

S Send for help

A Airway

B Breathing

C CPR

D Defibrillation

Primary Survey: Play it Safe (2/2)

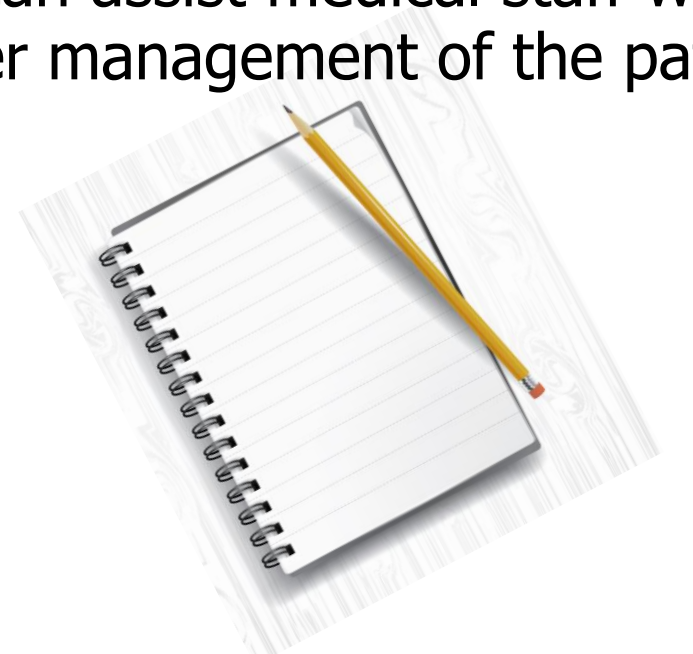
- A key to good First Aid management is to use the Play It Safe Principle which means basically if in doubt apply First Aid for the signs & symptoms & seek medical help.
- A good example of this would be chest pain. The question could be is it a heart attack or just indigestion?
- In this situation **Play it safe** & treat as a heart attack & call an ambulance.

What To Do While Waiting For Help

- Care for Airway, Breathing & Circulation
- Control any major bleeding
- Appropriate management of any other injuries
- If able record overall condition to pass on to medical staff . (e.g.) cold clammy skin & pale

Procedures To Record Treatment

- If time allows it is important to **record any First Aid management**.
- This should go with the person to the hospital.
- This can assist medical staff with the further management of the patient



- The following should be recorded:
  - Name
  - Age
  - Address
  - time of incident
  - history of accidents
  - Illnesses
  - conscious state & any changes,
  - Pulse, breathing, skin colour & any changes, changes or unusual behaviour
  - First Aid management, medications given & the name of the First Aider.

If this cannot be completed at the time it should be done ASAP after the incident has been dealt with.

Secondary Survey

- The secondary survey is a systematic check of the victim from the head to the toes to rule out any injuries or abnormalities that are not immediately obvious
- The First Aider should begin at the head & work downwards.
- When conscious this can be done by asking questions
- Examine all unconscious casualties on their side in a recovery position in order to protect their airway.

Check For Medical Identification

- Look for any medical identification such as bracelets or neck pendants these may assist in the identification of any existing medical condition or any allergies the casualty may suffer from.

Survey of the Back

- Look for bleeding
- Get a history of the incident, if you do not think about a spinal cord injury you will miss it
- A good history can be the beat indicator of a spinal injury
- A person with a spinal injury may not be aware of their injury due to pain at the fracture site

- They may be able to move their legs & arms looking unaffected, but can they push their wrist back or shrug their shoulders straighten their knees, push their feet up or down
- If these tasks cannot be performed treat as a spinal injury

- If unconscious look at the way their breathing when a quadriplegic breathes it's the abdomen that rises & the chest falls. The pulse rate will be slow (50-60 beats per minute)

Survey of the Head

- Look for bleeding lumps or depressions
- Check the ears, nose & mouth for bleeding or clear liquid which would indicate a possible fracture of the skull
- Check the jaw for deformity
- Note- with most fractures of the skull you will see blood making it hard to detect clear fluid. All head injuries should be checked at a hospital to be safe.

Survey of the Chest

- Look for any unnatural movement
- Feel for fractures by gently holding both sides of the rib cage & feeling for any unusual movement
- Feel & look for any wounds
- Observe breathing

Survey of the Abdomen

- Feel for rigidity or muscle spasm
- Look for any distension of the abdomen
- Look for any wounds

Survey of the Pelvic Region

- History of how the incident occurred is the best indicator of a possible fracture to the pelvis, such as a fall from height, or a side impact of a car
- Check for any incontinence of urine
- Look for any outward rotation of the legs
- You could support potential damage by placing paddings between knees & ankles & strap with roller bandages to keep alignment

Survey of the Limbs

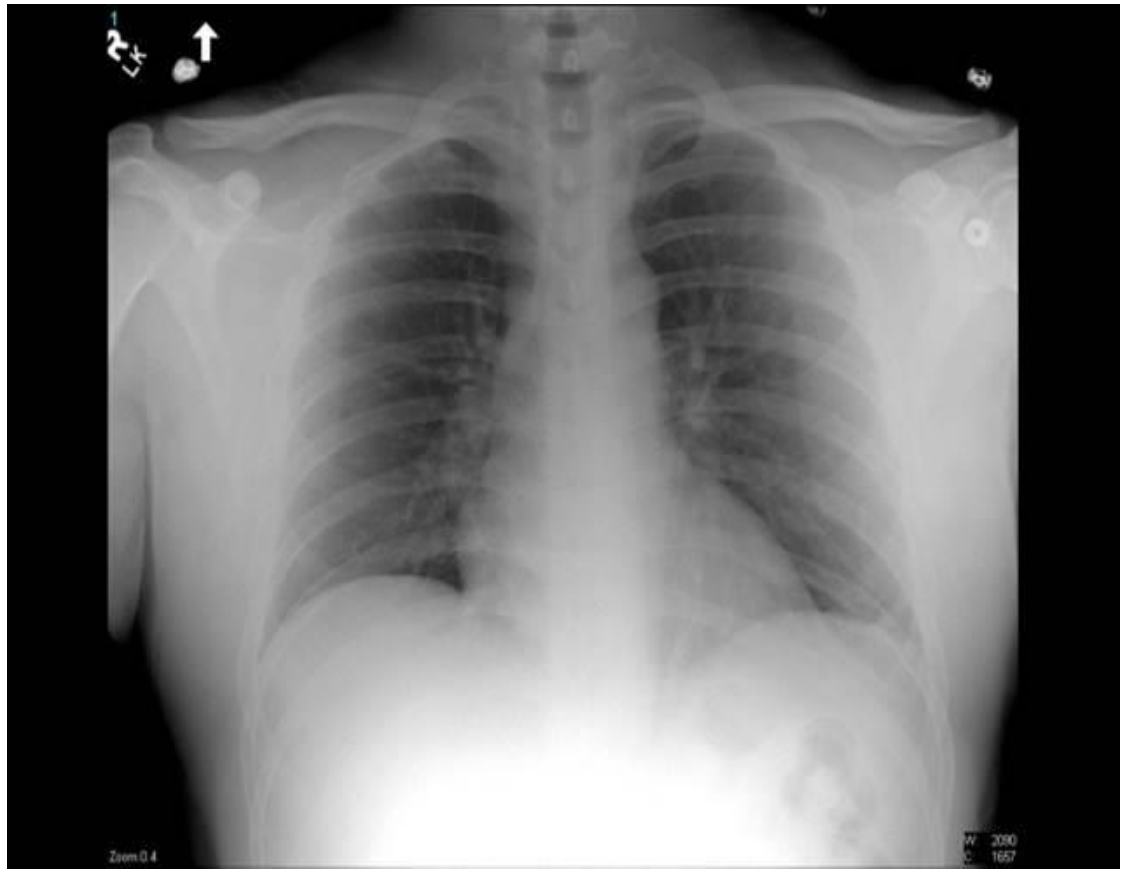
- Feel & look for any obvious deformity, irregularities or swelling to the arms or legs - beginning with the toes or fingers & working upwards. Do not pat the limb in order to check it
- Look at the bones for deformity, as a basic First Aider you can are not expected to go into deep examination
- Although advanced First Aiders may touch & examine
- Check for any bleeding

Vital Signs Observation

- Whist the taking of vital signs may seem unimportant to some First Aiders they are very important to ambulance, nursing & medical staff. The history & a good set of vital signs can provide an excellent window into the patients condition that may not be immediately apparent to the First Aider. They also provide a guide to the persons condition & response to treatment given
- **Basic Vital signs** are breathing, conscious state & skin state

Breathing

- When recording a persons breathing watch for the rise & fall off the chest, feel for the breath on the back of your hand for infants, watch for the rise & fall of the stomach.
- Note- if the breathing is regular & the depth of the breath ; if there are any noises such as crackling or wheezing.
- Normal Breathing Rates.
  - Adults 16-20 Breaths per min
  - Child(1-5yrs) 25-40 breaths per min
  - Child(6-12yrs) 16-25 Breaths per min
  - Infants(1mth-12mths) 25-40 Breaths per min



Conscious State

- The conscious state of an ill person may change from conscious & alert, to uncooperative & or aggressive, to drowsy or unconscious. It is therefore important to monitor any changes.
- This can be done by measuring for levels of conscious state in descending order.
  - Voice
  - Touch
  - Pain
  - Nothing
- The best example of a person most to suffer changes to conscious state is person with a head injury

Skin State

- The skin state is an excellent indicator of the persons level of shock. The shock process can be indicated by the pallor (colour), temperature & moistness of the skin. When recording the condition of the skin use the following.
  - Colour
  - Temperature
  - If the skin is dry or moist
  - Normal Skin in the persons race normal colour dry & warm

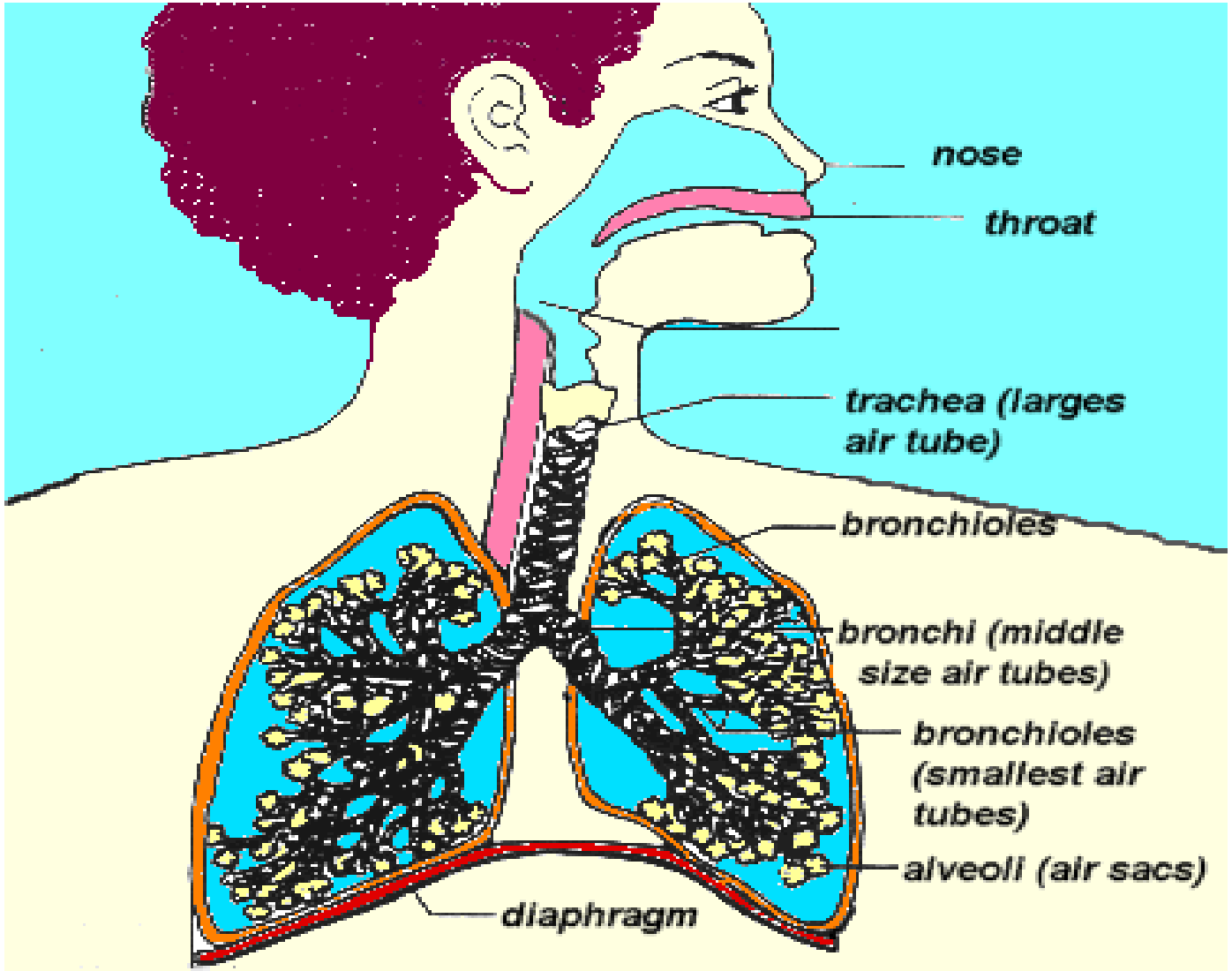
Resuscitation & Airway Emergencies

Resuscitation objectives

- To maintain life our body requires a constant supply of oxygen especially to the brain. When the brain fails to receive oxygen for more than 3 to 4 minutes the brain begins to suffer irreversible damage

- Being able to assist with airway emergencies & prove resuscitation when required may provide the brain with a supply of oxygen to prevent death of the casualty or death of the brain cells & to buy time until advanced help arrives ,the DRSABCD principles Should apply immediately at all times on unconscious & non breathing casualties

The Airway

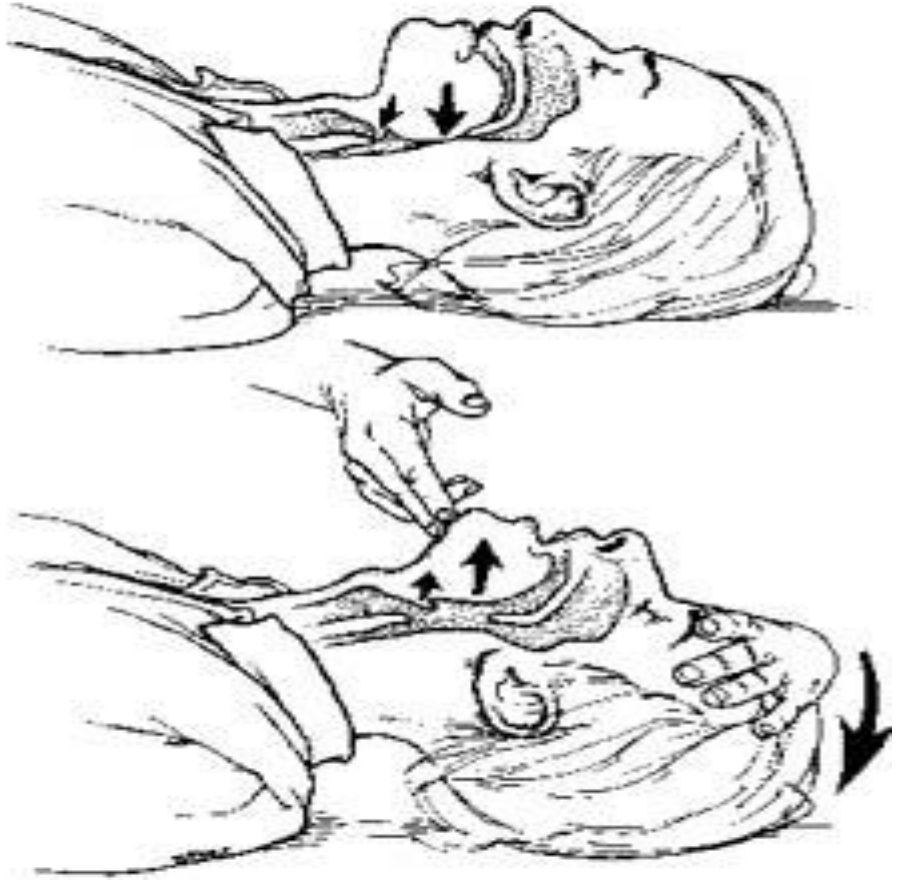


- The Airway is composed of:
  - Nose & mouth
  - Pharynx
  - Larynx
  - Trachea
  - Bronchi
  - Bronchioles
  - Alveoli
- The body needs a constant supply of oxygen & needs to dispose of carbon dioxide
- Should the airway become blocked for any reason Brain cells will begin to die leading to rapid death

Airway management For Adults

- When an unconscious person is lying on their back, gravity allows the jaw to drop backwards - allowing the tongue to block the airway. The airway of a person will also become blocked if it falls forward in a car accident for example

- To open an adults airway you should gently tilt the head backwards & support the jaw at the point of the chin open the mouth slightly



Airway management For Infants

- To open an infant or small child's airway you must keep the head in the neutral/horizontal position

- A very slight head tilt may be neede on some occasions.

Loss of Cough & Swallow Reflexes

- All of us are continually swallowing all of the time for example while you are reading this your mouth will be filling with saliva which you will swallow
- After a meal you may suffer from gastric reflux & swallow immediately to stop the contents entering into your airway, Some casualties may become unconscious & as a result of this they may lose the ability to cough & swallow to clear their own airway
- These casualties do not respond to shout & squeeze stimuli.

Vomiting

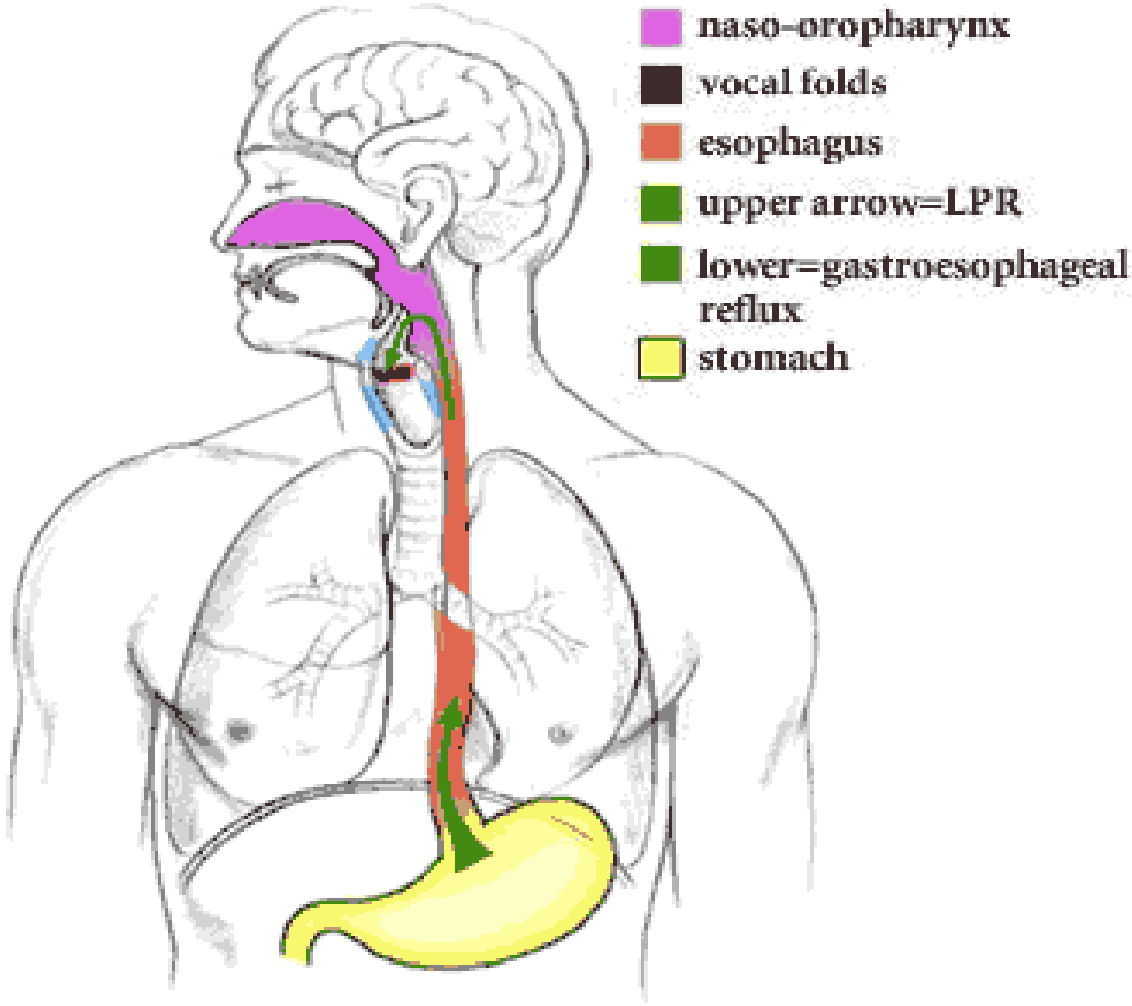
- This is an active & noisy process during which the muscular action of the stomach causes it to eject its contents

- Vomit can block the airway & when inhaled it can damage or destroy the lung tissue; if this happens during rescue breathing or CPR immediately place the patient into the recovery position to protect the airway & keep it clear

Regurgitation

- Regurgitation occurs in an unconscious person because the muscles at the top of the stomach relax & allows a slow passive flow of the stomach contents into the airway & lungs

- All to often it goes unrecognized in the unconscious casualties because unlike vomiting this is a silent processes there for all unconscious people must be placed into the recovery position



Clearing The Airway

- Care of the airway takes precedence over all other injuries including spinal injury
- Remove any visible object such as lose teeth dentures extra
- Place the casualty into the recovery position to allow any fluids to drain from the mouth & to rake out any foreign material

WHEN WAS THE FIRST RECORDED CPR ?

50 years ago **125 Years ago** **Over 2000 years ago**

CPR

- Cardio Pulmonary Resuscitation is the combination of rescue breaths with chest compressions.
- CPR maintains oxygen in the blood while providing artificial blood circulation until more advanced life support arrives e.g.. ambulance. .
- To perform CPR the patient needs to be
  - Unconscious
  - No signs of life
  - Not breathing normally

Rescue Breathing

- There are two main methods of performing rescue breathing.
  - Mouth to Mouth
  - Mouth to Mask
- Mouth to mouth method can be used if you feel it is safe or encourage the persons partner or family if available .
- Mouth to mask is safer when carrying out CPR.

Mouth To Mouth

- Open the airway by tilting the head back place the palm of one hand on the head & apply jaw lift open the mouth, remember to keep the head in neutral or horizontal position for infants & children.
- Take a breath in & seal your mouth over the persons mouth, make sure to seal the nose by pinching or with your cheek
- Blow into the mouth twice to inflate the lungs, ensure the chest rises & falls with each breath
- Listen for air escaping from the mouth
- Check the patients stomach has not become distended with air
- After two initial rescue breaths check for signs of life, if none, commence chest compressions

Mouth To Mask Technique

- By using a mouth to mask or a mouth to shield technique you will provide your self with better protection against infection risk
- Position yourself at the head of the casualty
- Place narrow end of the mask on the persons nose
- Breath through mouth piece of the mask as required

Complications of Rescue Breathing

- If the chest does not rise & fall check the head tilt, air seal & for airway obstruction
- If the stomach becomes inflated turn the person into the recovery position & recheck the airway. Do not apply pressure to the stomach. Distension of the stomach can occur when the First Aider blows too hard
- If the person vomits or gurgling is heard as air expires after each inflation put the person into recovery position & clear the airway

Performing CPR

- Turn the person onto their back on a firm surface. Kneel by persons chest.
- Place the heel of one hand on the middle of the chest (between the nipples) Place the other hand on top of the hand on the chest & interlock fingers or wrap thumb & fingers around the wrist
- With the arms straight depress the chest rhythmically ensuring that pressure is exerted through the heal of the bottom hand only.
- The recommended depth of the compression is the same for adults , children & infants 1/3 of the depth of the chest- approx 5+ cm for adult & children & approx 4 cm for infant at a compression rate of 100-120 BPM

Ratios For CPR

- The number of breaths to compressions has now been standardized for both one or two operators performing CPR for adult, child or infant
- This now makes it far easier to remember & perform CPR however the rate of compressions required in one minute is 100bpm. CPR can be exhausting therefore if there are two people performing CPR
- It is advisable to change every two minutes or so.
- Ratio of Compressions to breaths
  - **Compressions** **30**
  - **Breaths** **2**
  - **Rate of compressions per min** **100-120**

Compression only CPR

- If unable or unwilling to do rescue breathing carry out continuous compressions at a rate of 100 -120 per minute.
- This is carried out until help arrives or signs of life are identified or unable to continue.
- CPR can be exhausting therefore if possible engage the help of others in performing CPR
- It is important to allow the rib cage to fully rebound which can assist the body to create a form of self aspiration.
- A well opened airway is to be obtained to allow the body to aspirate

Considerations for CPR in the Infant & the Pregnant Woman

- When performing CPR on a infant you should use only two fingers over the middle of the chest to perform the chest compressions to one third of the chest
- Due to anatomical changes that occurring late pregnancy a change in how to perform CPR needs to be made.
- To allow for the pressure from the uterus & restricting return venous flow to the heart we can create left lateral tilt .
- This is achieved by placing padding under the right buttock to an obvious tilt to the left. With the shoulders & chest staying flat

Duration of CPR

The First Aider should continue with CPR until:

- The return of normal breathing
- Trained help arrives
- A Doctor pronounces life extinct
- It is physically impossible to continue
- You are in immediate danger

The Recovery Position

- All unconscious casualties should be placed into the recovery position to help maintain their airway
- Kneel next to person & place far arm out at right angles to body bend the nearest arm & place across chest with fingers to far shoulder
- Bend nearest leg up at right angle to the body
- Roll the person onto side by gently pushing on the shoulder closest to you as well as bent knee which should rest on the ground at right angles while the other leg remains straight. Rest upper most bent arm across the straight arm
- Check airway & tilt the head slightly backward with the face sloping down to allow fluids to drain.

Revival Check

- Do not stop CPR unless signs of life return or until relieved or to exhausted to continue
- Should signs of life return put the person into the recovery position
- Check Airway Breathing & every two minutes
- Do not leave the person alone & treat any other injuries after completing a secondary survey ensure you continually maintain & check the airway

Choking

- If a person is choking, can cough, speak or cry out it indicates that their airway is not completely obstructed as to cough you need to be able breath in
- Do not intervene at this stage; these circumstances as action such as slapping the back may dislodge the object & cause it to completely block the airway
- The person should be encouraged to cough the obstruction out themselves while help is called for

Partial Airway Obstruction

- When a partial obstruction of the airway occurs you may see the person suffering with the following
  - Wheezing
  - Difficulty breathing
  - Coughing or spasms
  - Noisy inspiration
  - Cyanosis blue/mottled skin due to a lack of oxygen

- Treatment for the partially obstructed airway is:
  - The conscious patient who is still able to cough & breath should be reassured & encouraged to keep on coughing in an attempt to clear the airway
  - Use gravity to help assist the ejection of the object where possible & loosen any tight garments
  - Call for help

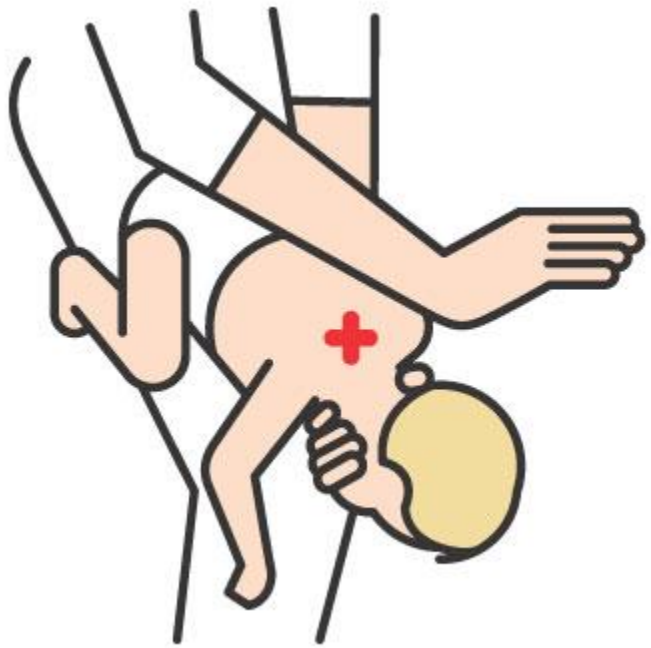
Total Airway Obstruction

- In a total obstruction of the airway the casualty will be unable to breathe, speak or cry
- They might grip their throat & suffer from agitation
- Cyanosis blue/mottled skin due to a lack of oxygen which will lead to altered conscious state & eventually a loss of conscious
- In infants & children, as well as the above you may also see:
  - Flaring of the nostrils
  - In drawing of the soft tissue between the ribs & above the sternum

- Sit casualty up & lean forward
- Apply 5 back slaps in a upward motion with the heel of your hand, then recheck the airway
- If unsuccessful give 5 chest thrusts as per CPR, but slower. If this works place person into recovery position & monitor
- If the above fails alternate between the 2 until assistance arrives

Choking In Infants & Children

- Choking of the infant & child should be managed as follows
- Sit down & place the infant or child across your upper legs with the head down
- Deliver 5 back slaps with approximately half of the strength required for an adult, stop if the object becomes dislodged. Check for breathing & place into recovery position.
- If above is unsuccessful give 5 chest thrusts, stop if object is ejected place into recovery position
- If these methods fail you will need to commence chest compressions as in CPR 2 fingers for an infant & one or two hands for a child at a lesser rate than adult.



Drowning

- Never attempt to rescue a drowning person beyond your own swimming ability
- The victim will swallow large amounts of water causing vomiting or regurgitation
- In most victims laryngeal spasm relaxes after loss of consciousness & water & vomit may be drawn into the lungs. In some cases however this does not happen & the lungs remain dry.
- Should the patient's stomach be distended do not attempt to empty by applying pressure.
- All near or resuscitated drowning victims should go to hospital for observation.

Management of the Drowning Patient

- Immediately remove the person from the water & place them into recovery position
- Clear the airway & follow **basic life support principles DRSABCD**
- **Seek urgent medical assistance**
- If there is a suspected spinal injury remove the person from the water gently while keeping the spine & neck in good alignment.
- Once on ground place in recovery position removing any water or vomit from the airway. Remember the airway always has priority

Asthma

- An asthma attack is caused by the narrowing & spasm of the small air passages in the lungs. This is then complicated by swelling & excessive secretions of mucus in those air passages.
- As a result of the above the casualty finds it harder & harder to breathe, particularly when breathing out, which cause the wheezing respirations.
- The onset of an asthma attack can be caused by such things as changes in weather, allergies, colds, infections, exercise, nervous tension or some times for no apparent reason at all

Recognition of an Asthma Attack

- In mild case a cough may develop
- In medium cases wheezing breath sounds are usually present, with rapid breathing & increased pulse rate
  - The skin will be pale & sweaty & sometimes cyanosed (blue)
  - The casualty may have difficulty speaking e.g.. short phrases or single words between breaths
- In severe cases the wheezing may not be heard
  - The person will be distressed anxious fighting for breath & exhausted
  - The person may suffer from an altered conscious state lapse into unconsciousness & respiratory arrest (No breathing)

Management of Asthma Attack

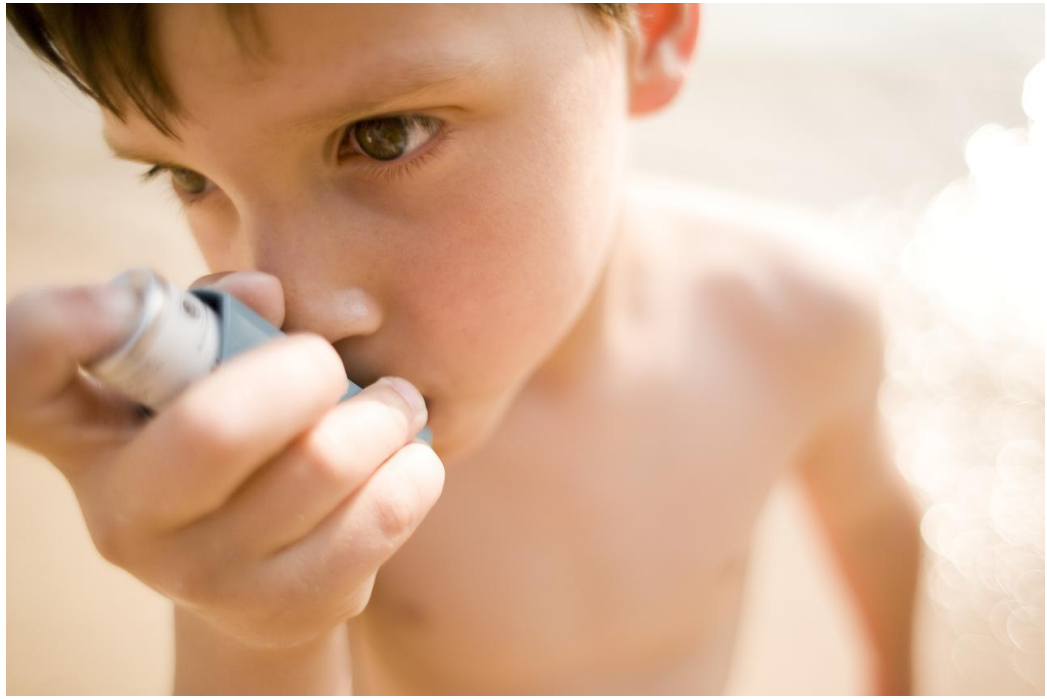
- Give the casualty reassurance help them into upright position e.g.. sit them into a chair & lean them forward & rest their head on a support such as a table or pillow. This allows for easier expansion of the chest
- If the person has prescribed medication for Asthma Ventolin, Asmol, Bricanyl Or Respolin can assist
- The administration of these medications using either a puffer or spacer device if available. Give four inhalations ask the person to breath out after each puff
- Wait 4 minutes & if no improvement repeat above & call for help repeat step 2 until help arrives

Management of the Unconscious Asthma Victim

- Clear the airway & follow basic life support principles
- **Seek urgent medical assistance**
- In a severe asthma attack rescue breaths will require much greater force to inflate the lungs & a slower rate of inflation to allow air to escape between ventilations

Occurrence of Asthma in Children

- Episodic
  - Attack happens infrequently
  - Associated with things like colds lasting 2 to 10 days
  - The child is free of symptoms between attacks
- Frequent Episodic,
  - Attacks occur at regular intervals of less than 4 weeks
- Persistent Asthma
  - These children have acute attacks
  - There are residual symptoms such as overnight cough which persist sometimes until the next attack
  - Symptoms such as overnight cough, tight chest, wheeze - all cause for constant difficulty in day to day life



Measuring Asthma Attacks in Children

- Asthma attacks in children are measured as: Mild, Moderate & Severe.
- A mild to moderate attack would be characterised by dry cough, wheeze, repeated coughing at night.
- A severe attack would be characterized by, a wheeze may or may not be heard, pale skin, unable to speak, altered consciousness
- Severity of attacks are usually measured on the basis of how frequently they occur e.g.. sleep disturbance, wheeze or tight chest, need for extra doses of medications

Triggers For Asthma

Some possible triggers for Asthma are

- Dust
- Bed Mites
- Pet Hair (However this is a rare trigger)

Asthma Medications

- Relievers are those medications designed to give immediate relief during an attack.
- These Medications are inhaled by the casualty. Examples include:
  - Ventolin given by puffer or by pump
  - Atrovent which is taken the same way as Ventolin
- Preventer medications are designed to give long term relief & take 2-4 weeks to build up a therapeutic level in the blood stream.
  Examples:
  - Steroids
  - Theopylines
- Both types are usually found in autumn coloured inhalers

Asthma Action Plan For Children

- In cases parents & care givers must have an action plan already worked out before any attack occurs
- This plan needs to take into account the following
- Assess severity
- Basic emergency care (Including the administration of reliever medications)
- Notification of parent or guardian as per established policy if any.
- When to call for emergency assistance e.g.. Ambulance

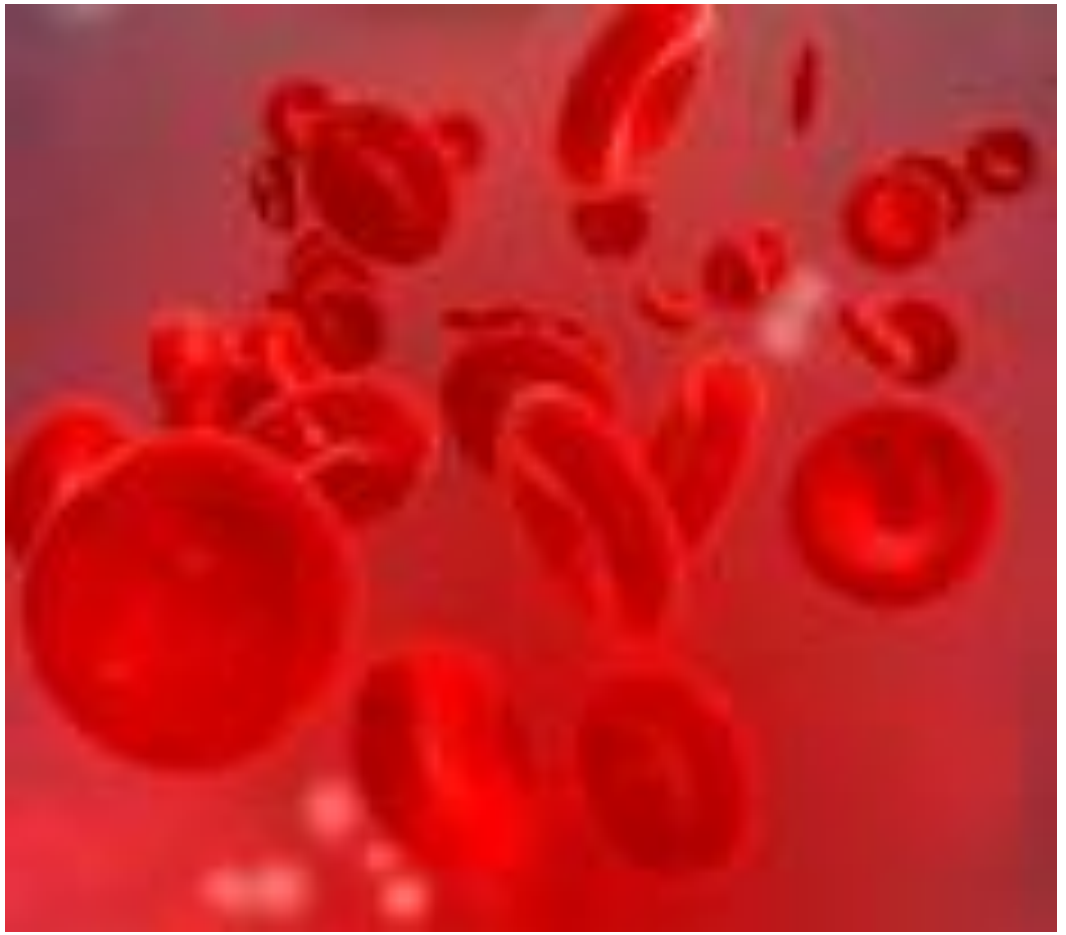
Asthma Action Plan for Children /Adults

- If possible use a spacer chamber
- Give 1 puff followed by 4 breathes
- Do this 4 times
- Allow them to sit for 4 minutes & check for improvement
- No Improvement repeat
- If still no improvement call ambulance & repeat 4 puff /minutes process until help arrives= emergency assistance e.g. Ambulance

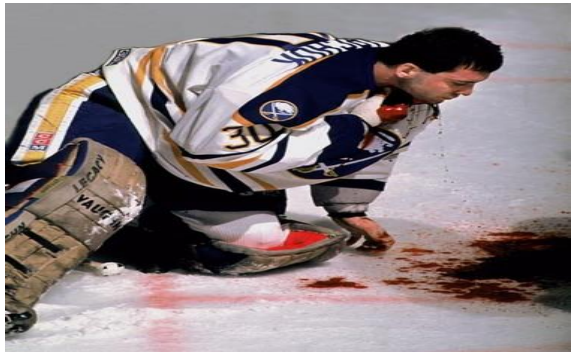
Trauma Management

The Role of Blood in the Body

- The body needs blood to transport oxygen & nutrient around the body to all cells of the body & to also remove to transport waste to the kidneys & lungs.
- Blood is pumped under pressure by the heart & is transported through the blood vessels. The body needs sufficient amounts of blood to be circulating at all times to reach all of the body's cells this is why controlling blood loss is so important



Types of Bleeding



- There are three types of bleeding
  1. **Arterial**
  2. **Venous**
  3. **Capillary**

1. **Arteries** are major blood vessels which carry bright red oxygenated blood around the body from the heart at high pressure. When an artery is damaged blood spurts from the wound in time with the heart beat.
2. **Veins** are blood vessels which return dark red blood (De-oxygenated blood) back to the heart. When a vein is damaged blood flows steadily from the wound.
3. **Capillaries** are minute vessels containing both arterial & venous blood. As there is very little pressure blood from these wounds, such as grazes only oozes

Control of Major External Bleeding

- Check for any dangers to yourself or others
- Seek help
- If available put on protective gloves
- Check for embedded objects, if seen do not remove
- Quickly apply direct pressure to the wound by holding the edges of the wound together with hand. Get the person to assist if possible.
- Apply a firm clean dressing & apply a bandage to hold it in place. A clean tea towel or handkerchief can be used if a dressing is not available
- Elevate & rest the injured area reassure the person as this will help to slow down the heart rate reducing the blood flow

Control of Major External Bleeding

- Firmly apply a compact pressure pad/ dressing & bandage to hold in place
- Immobilize the injured part if possible e.g.. with a sling for an injured arm.
- If bleeding continues through the pad, do not remove the first dressing, but apply a second dressing directly over the first & hold into place with bandage.
- If the previous methods do not control the bleeding apply direct pressure to the artery directly above the wound.
- If the person is unconscious place them into the recovery position & treat from there.

Control of Major External Bleeding

- DO NOT apply a tourniquet unless all previous methods have failed & the situation is life threatening
- If a tourniquet must be used
  apply a wide bandage minimum 5cm
  above the knee or elbow
  noting & recording the time applied

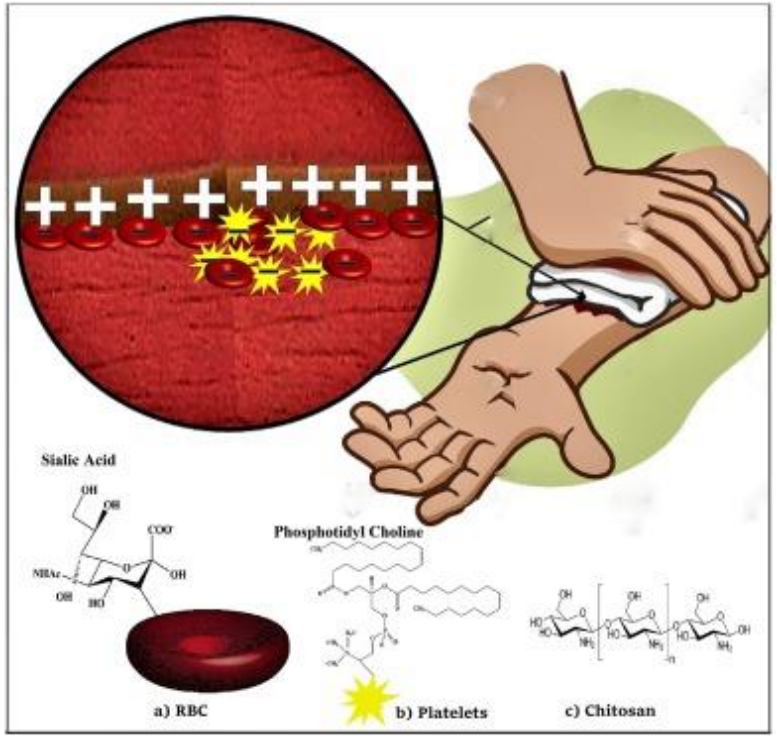
- Ensure the tourniquet can be seen & only apply tight enough to control bleeding whilst using a wound dressing
- Remember that if you come into direct contact with blood or body fluids to disinfect yourself, or if you have any open cuts which come into contact with the casualties blood to clean it thoroughly & seek medical help

Hemostatic Bleeding Control

- **Hemostatic dressings** are a valuable adjunct in external hemorrhage control when the source of bleeding is a location not amenable to tourniquet placement, such as in junctional regions (i.e, neck, axilla, and groin)

- **Wound Dressing Selection: Types and Usage**

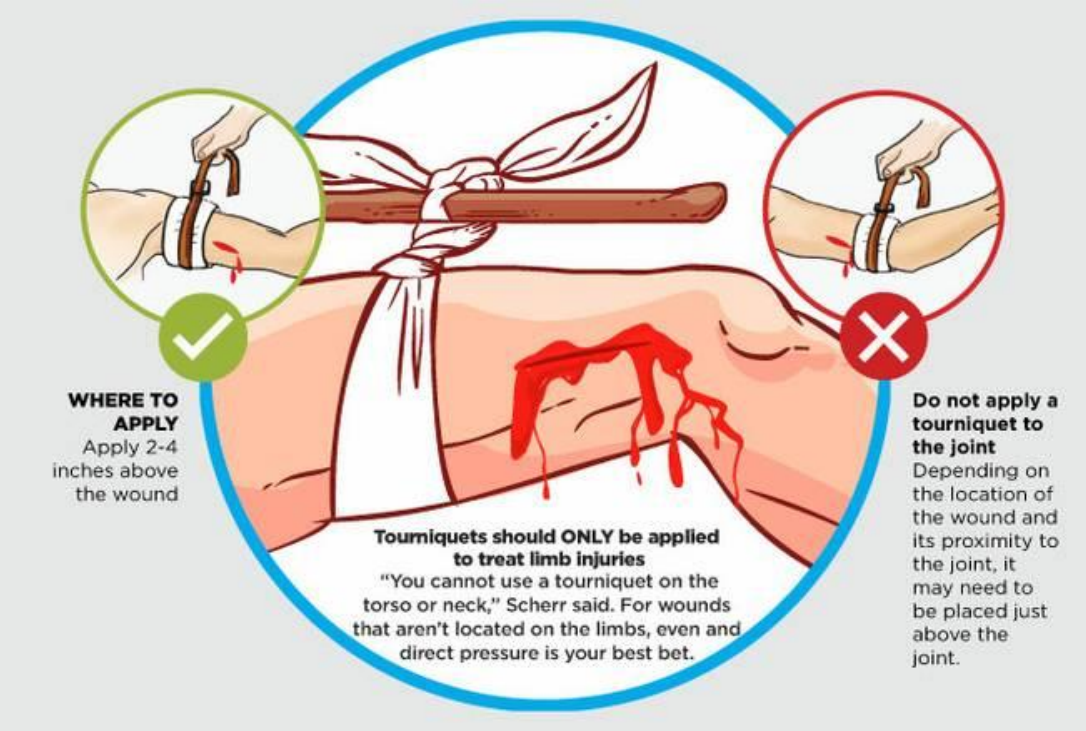
- Gauze Dressings. Gauze dressings are made of woven or non-woven materials and come in a wide variety of shapes and sizes for example:
- Transparent Films.
- **Foams**.
- Hydrocolloids.
- **Alginates**.
- Composites.



- If a gauze packing was put in your wound, it should be removed in **1 to 2 days**.

Tourniquet Application

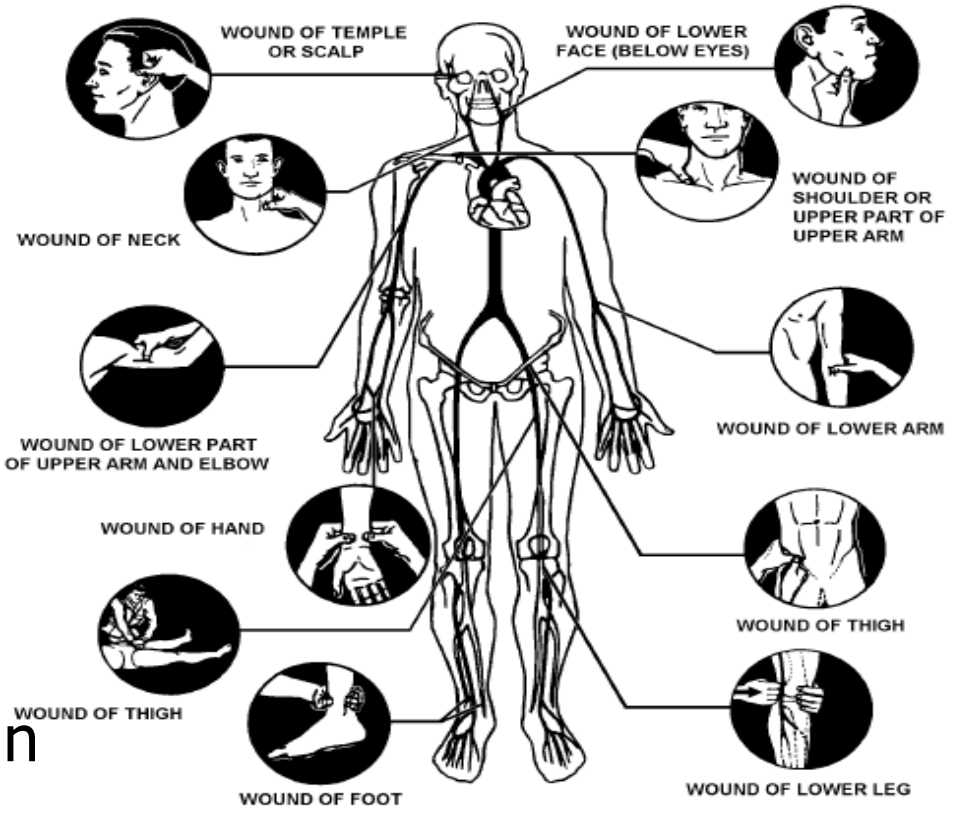
- A **tourniquet** is a device that is placed around a bleeding arm or leg. **Tourniquets** work by squeezing large blood vessels. The squeezing helps stop blood loss
- Applying a tourniquet too tightly or loosely can pose danger to nearby tissue and increase the odds of irreversible nerve and muscle damage. The tourniquet should provide only as much pressure as needed to halt arterial **blood loss**.



Pressure Point Bleeding Control

- If normal methods of bleeding control fail then apply pressure on the main artery above the wound by pressing on it with your fingers

- This will reduce the blood supply to the wound.
- When the bleeding has been controlled stop applying pressure on the artery & maintain direct pressure on the wound using a pad & bandage.



Bleeding From the Nose

- Have the casualty apply direct pressure to the soft part of the nose by pinching firmly just below the bone for at least 10 minutes.
- The person needs to breath through their mouth.
- Sit the person upright with their head slightly forward.
- If the bleeding has stopped after 10 minutes ask the person not to blow their nose for several hours.
- If bleeding has not stopped after 10 minutes reapply the above for a further 10 minutes apply cold packs to back of the head & to their forehead.
- If this fails to control the bleeding or bleeding starts again once pressure is removed **seek medical assistance**

Bleeding From the Face Or Scalp

- Most face & scalp wounds bleed profusely when the wound is only minor
- To treat face & scalp wounds apply the general principles for controlling external bleeding e.g.. pressure to the wound site
- If the casualty has a good conscious state sit them up as this helps to reduce the bleeding
- The unconscious person should be managed with basic life support first & placed into the recovery position treatment should continue from there
- Pressure over the wound needs to be maintained this can be done with a roller or scalp bandage

Bleeding From Varicose Veins

- Bleeding from Varicose veins can often result in a large loss of blood
- Therefore prompt first management is required as follows.
  - Apply direct pressure to the affected area to control bleeding use a firm pad & bandage
  - Reassure the person & elevate the limb
  - If bleeding continues through the pad remove it & apply new pad
  - **Seek medical assistance**
  - If the person is unconscious clear the airway apply basic life support management & treat the person in the recovery position
  - **Call for an Ambulance**

Amputations

- Today most amputated parts can be successfully rejoined using micro-surgical techniques.
- To increase the chances of success three main things are required

1. MOST IMPORTANT being the prompt transport of the person & the severed part to the hospital.
2. Correct management of the severed part
3. Early hospital notification to allow the hospital to prepare for the casualties arrival

Management of the Stump

- Control any bleeding by direct pressure & elevating the stump
- Rest & reassure the casualty
- Apply a pad & bandage to the stump
  folded towels can be used
  if large pads are not available
- DO NOT apply a tourniquet
  this can cause further damage.
- If unable to control bleeding
  use pressure point control.
  In most cases there
  is not a large loss of blood
  due to blood vessel constriction
- If these measures fail
  use a tourniquet as a last resort
  note the time & record when the tourniquet was applied.

Care of the Amputated Stump

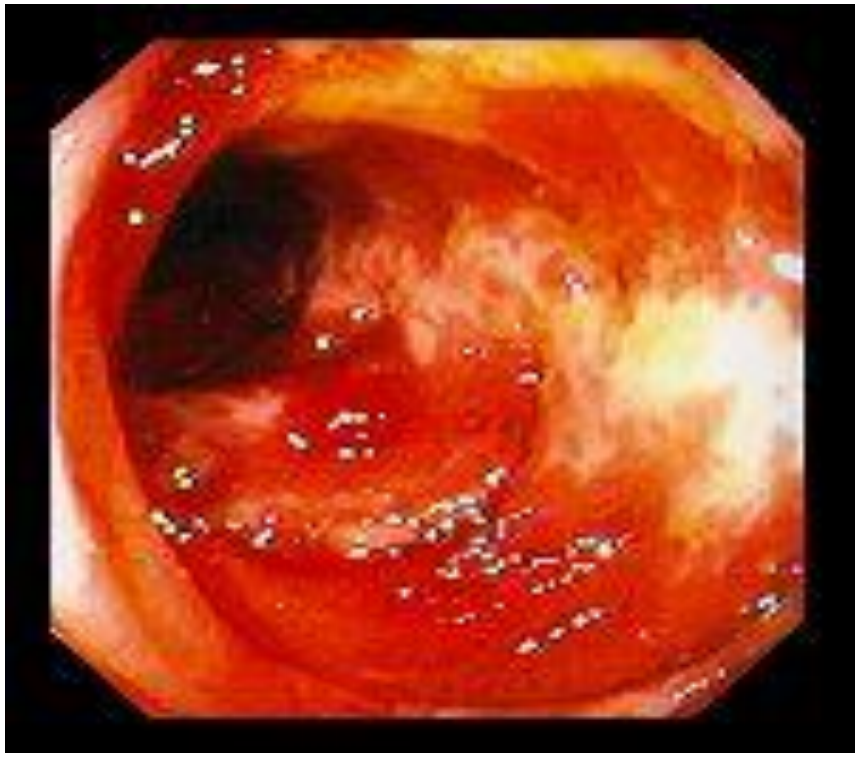
- Place the severed part into a clean plastic bag or container & seal.
- Preferably float the bag/container in an esky or container of icy water.
- If this in not practicable place the bag on top of crushed ice placing a thin material such as a tea towel between the ice & plastic bag (build a small amount of ice around the sides)
- DO NOT wash the severed part or allow it to come into direct contact with ice.
- **Seek medical assistance** e.g. Ambulance as soon as possible

Bleeding from Embedded Objects

- When a foreign body is embedded in a wound do not remove it or likewise attempt to shorten it as you will increase bleeding & may cause further tissue damage.
- The only occasion where you should consider this action is if the size is unmanageable & you are in a remote area
- Control the bleeding by pressing the wound edges together .
- DO NOT put pressure on the object.
- Build up dressings around the object to give support & control bleeding secure these dressings with a roller bandage, again do not apply the bandage over the object.
- Elevate the limb as best as possible & call for help.

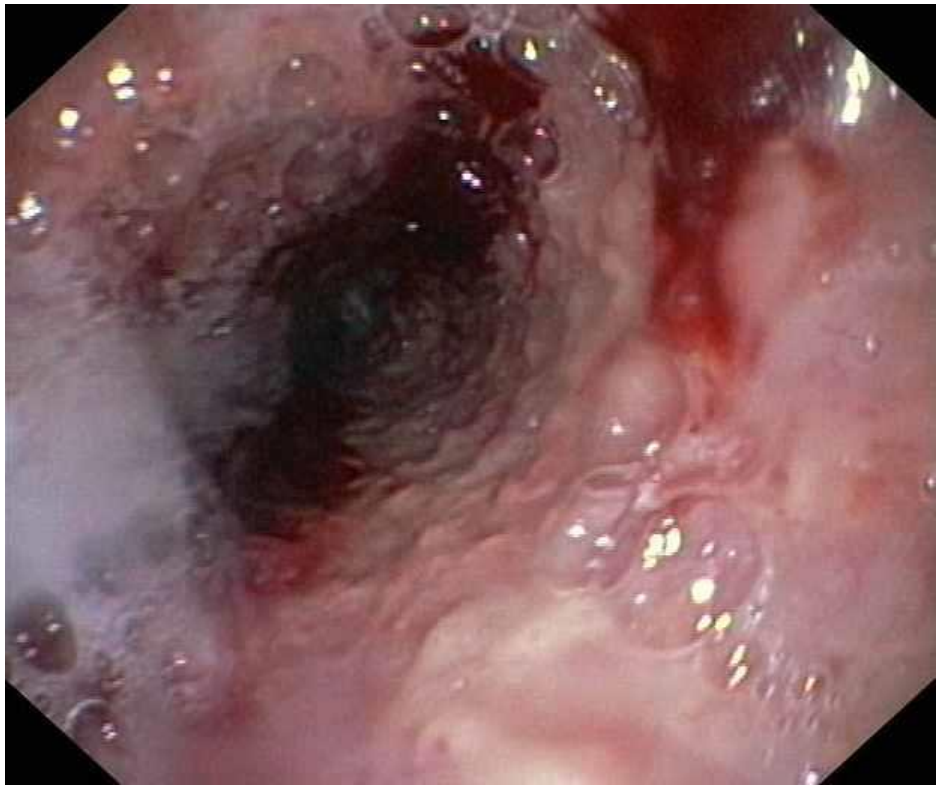
Internal Bleeding

- Internal bleeding can be caused by a direct blow to the body resulting in a fractured bone the rupture of an organ such as the liver or spleen or the rupture of blood vessels
- It can also be caused by medical conditions such as stomach ulcers or a penetrating injury such as a gun shot wound.
- Internal bleeding can be either revealed or concealed.
  - Revealed bleeding this condition is made obvious by the flow of blood from an orifice such as the mouth, rectum, ears, urine, bruising or a penetrating wound.
  - Concealed internal bleeding can be difficult to detect as it collects within a body cavity such as the abdomen or skull.



Recognition of Internal Bleeding

- A key to recognition of a person with internal bleeding is the history. Did they fall, do they have stomach ulcers?
- Pain around the affected area
- Rigidity & distension of the abdominal muscles if the area is affected
- Cold pale & sweaty skin
- Rapid & week pulse
- Rapid shallow bleeding
- Anxiety or restlessness
- Nausea & vomiting may develop
- May complain of thirst & giddiness
- As shock envelopes the person becomes drowsy & may become unconscious & unresponsive



Management of Internal Bleeding

- Reassure the casualty
- Assist into a position of comfort. If the person is suffering with breathing difficulties put them into an upright position.
- If no breathing difficulties elevate the persons legs
- Loosen any tight clothing
- Cover the patient with a blanket BUT DO NOT OVER HEAT
- Quickly examine the person for any obvious injuries & treat as required
- DO NOT GIVE FOOD OR DRINK
- Call for help & monitor breathing & conscious levels every 5 minutes
- If unconscious clear the airway & apply basic life support principles

Bleeding From the Ear

- Bleeding from the inside the ear indicates either the eardrum has been ruptured or the casualty has a suspected skull fracture
- History is the most important indicator of the potential problem e.g.. if the casualty has fallen you should suspect a skull fracture
- However if the casualty has been complaining of ear ache for a day or more & has got a cold or upper respiratory infection the chances are the casualty has suffered a ruptured ear drum.
- If a skull fractures suspected or there is a major head injury be aware that the forces involved in these injuries may have caused a hidden neck fracture

Management of Bleeding From the Ear

- If suspected ruptured ear drum assist the casualty into a position of comfort this is usually the sitting or lying position with the head tilted towards the affected side so that blood or fluid can drain freely
- Do not plug the ear as this may allow pressure to build up in the skull
- **Seek urgent medical assistance**
- Do not allow any ointments, ear drops or any other substance into the ear
- If the casualty is unconscious follow **basic life support principles**
- Ruptured ear drums will heal within a few days

Shock

- The shock process is caused by the lack of effective circulating blood volume
- This results in the body's supply of oxygen to the tissues being inadequate at the time to meet its functional needs.
- When oxygenated blood flow drops below minimal levels death can result unless First Aid management is applied.
- This condition is commonly termed shock & it can be caused by injury or illness.
- The casualty will have the following signs, rapid & week pulse, cold, pale & sweaty skin, rapid shallow breathing, may feel anxious or restless, complain of thirst or giddiness, may complain of nausea & vomiting
- As shock increases the casualty becomes drowsy & may become unconscious & unresponsive

Management of Shock

- Control any bleeding
- Lie the person down & elevate the legs
- Immobilize any fractures & cover any wounds.
- Cover the person with a blanket
- Do NOT over heat the person. The persons condition could deteriorate.
- Beware that the person needs protection from underneath as well

- DO NOT give the person food or drink as it may cause vomiting however if 4 hours away from rescue you may give small frequent drinks of water, soft drink etc.
- If the person is or becomes unconscious or drowsy follow basic life support principles

Penetrating Injuries

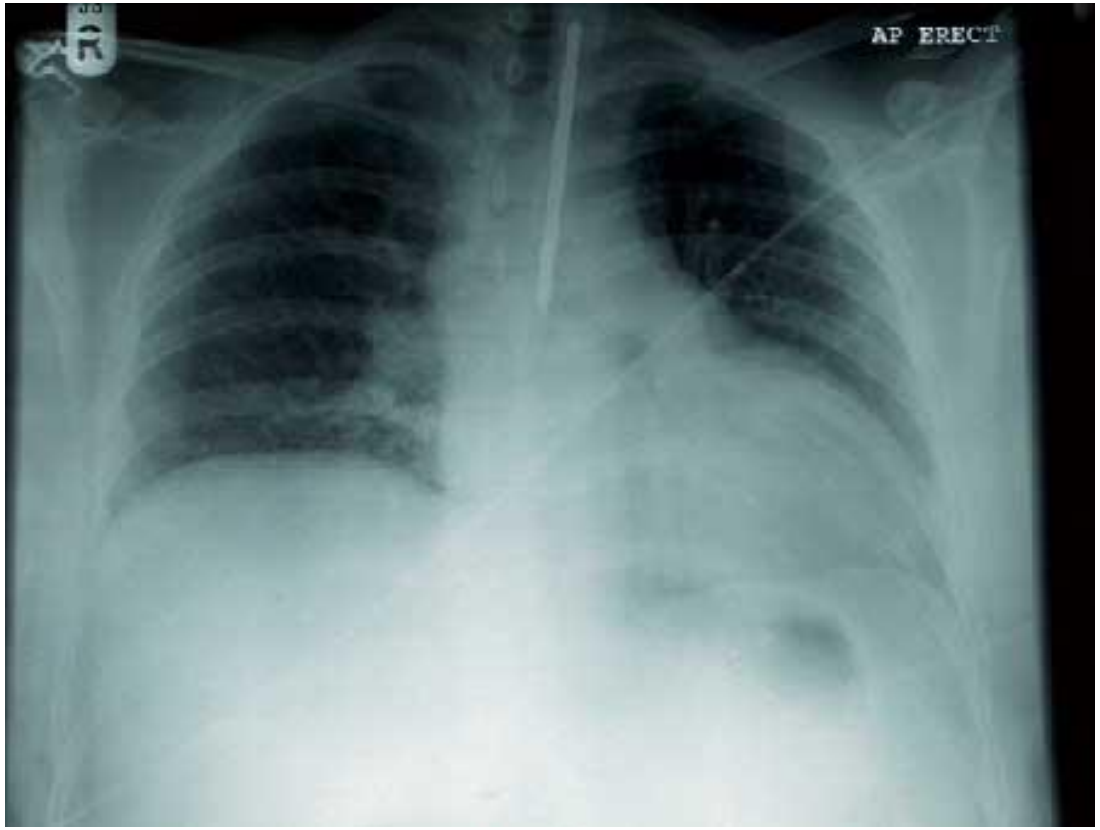
- Penetrating injuries sometimes cause an immediate threat to life but in many cases if the person can reach medical assistance promptly they can be stabilized & resuscitated
- This chance for survival is often missed because the First Aider does not recognize the seriousness of the injury.
- This is almost always the case because the entry wound is so small & the First Aider is not aware of the internal consequences
- Penetrating injuries can be caused by two basic methods, stab & projectile wounds.
  - Stab wounds mostly have a small opening but potentially injure numerous blood vessels & organs.
  - Projectiles will usually follow the path of least resistance causing lacerations to soft tissue & deeper organs
- Some munitions split & tumble causing massive internal damage, exit wounds will be larger than the entry wound.

Recognition & Management of a Penetrating Injury

- Penetrating injuries can be recognized by.
  - Blood loss
  - Shock
  - Small entry wound
  - Large exit wound
  - Extensive tissue damage
  - Secondary tracks from a ricochet e.g.. skull
- The management for a penetrating wound is to.
  - Control bleeding & reassure the person
  - Remove clothing & search for exit wound treat as required.
  - Place patient in position of comfort
  - DO NOT GIVE THEM FOOD OR DRINK
  - Call for help
  - If the person is or becomes unconscious follow basic life support principles

Penetrating Chest Wound

- Open wounds to the chest can result in injury to the heart or major blood vessels. They can also result in build up of blood in the chest cavity which can cause a build up of pressure & collapse the lung on the injured side.
- The uninjured side can also be affected due to the increasing pressure being exerted on it from the injured side. This can quickly lead to the collapse of the second lung & eventual death.



Management of Penetrating Chest Wound

- Assist the patient into a position of comfort usually the half sitting position & leaning to the injured side with head & shoulder supported
- Quickly cover the wound site with airtight dressing or plastic sheet/ aluminium foil & secure three sides only **DO NOT TAPE THE BOTTOM** of the sheet as this acts as a one way valve allowing air to escape from the chest but not to enter
- Check for exit wounds
- Call for help
- If the person is or becomes unconscious follow **basic life support principles**

Paradoxical Breathing Flail Chest

- When a patient suffers multiple fractures of the ribs a section of the chest wall can lose its rigidity & become lose resulting in abnormal breathing this is known as a flail chest
- This section of the chest wall moves in the opposite direction during breathing & is known as Paradoxical Breathing e.g. .when breathing in the flail section is sucked inwards & vice versa when breathing out

Management of Paradoxical Breathing Flail Chest

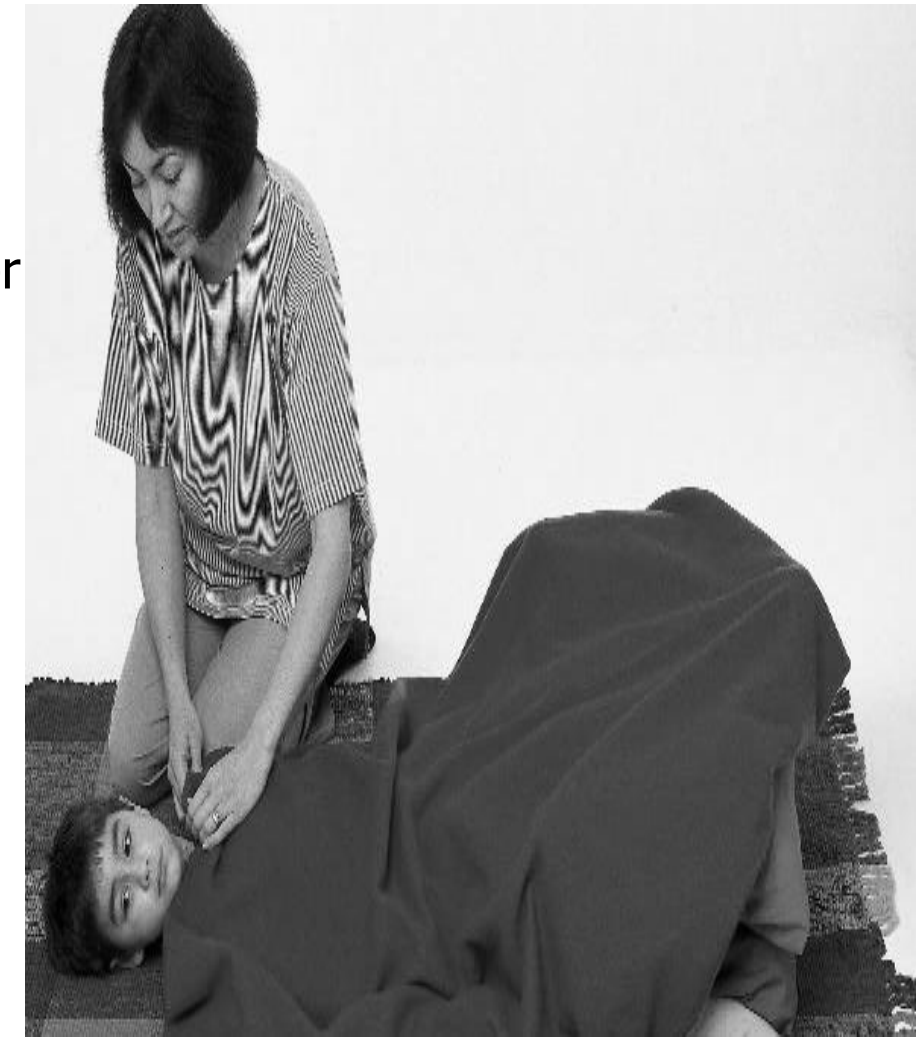
- Assist the patient into a position of comfort usually the half sitting position with the head & shoulders supported & lent over to the injured side.
- Assist in the immobilization by placing a thick pad over the affected side & secure the arm with a broad bandage
- Apply elevation sling on the injured side
- If the person is or becomes unconscious apply basic life support principles
- Call for help

Abdominal Injuries

- Injuries to the abdomen can be caused by variety of reasons such as
  - Motor car accidents
  - Blows from blunt objects
  - Sporting Injuries
  - Heavy falls
  - Crushing by a heavy weight
  - Penetration wounds e.g. knife, gunshot
- Main indicator of a potentially serious injury is the history.
- Abdomen injuries can be recognized by Pain at the site of injury, nausea & or vomiting, onset of shock, distension & rigidity of the abdomen wall, difficulty with breathing, bleeding into the bowel causing dark & offensive smelling stools, bleeding from kidneys blood in the urine, evidence of wound site & possible protruding intestines.

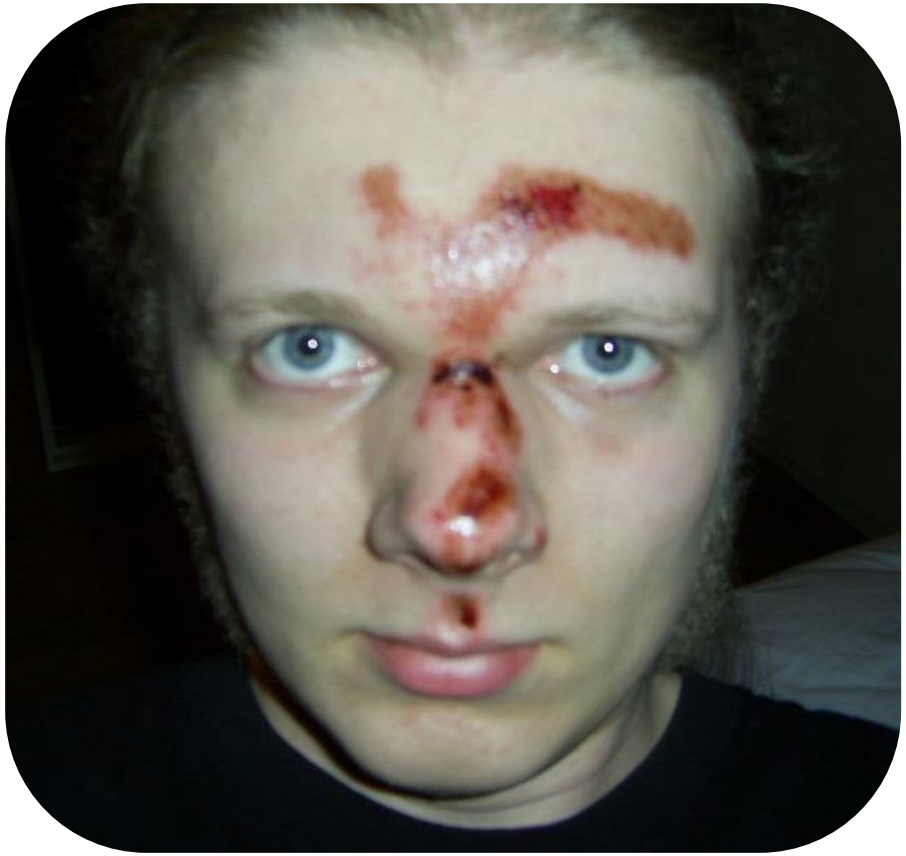
Management of Abdominal Injuries

- Reassure the patient lie them on the back with head & shoulders slightly raised & knees slightly bent & supported in order to relax the abdomen muscles.
- Loosen any clothing around chest neck & waist area cover the person with a blanket BUT DO NOT overheat. Protect the person from external environment DO NOT GIVE FOOD OR WATER.
- Lightly cover any protruding intestines with a large non stick dressing or a dressing lightly soaked in saline DO NOT USE a dry dressing as it will stick.
- If the person is or becomes unconscious follow basic life support principles.
- Call for help



Head Injury

- After a blow to the head a person may suffer injury to the Scalp, Skull, Eyes, Ears, Brain, or Spine
- Anybody who losses consciousness even for only a brief period of time MUST be seen by a doctor
- If a head injured person does not lose consciousness but later develops any of the following signs or symptoms then you must **seek urgent medical assistance**.
  - Headache giddiness, drowsy or irritable.
  - Slurred speech & blurred vision
  - Develops confusion & disorientation.
  - Nausea & vomiting, Swelling & Bruising around the eyes bleeding into eyes.
  - Bleeding or clear fluid in the ears, nose & mouth.
  - Loss of power or coordination of the limbs
  - Unconsciousness or suffers seizure



Management of Head Injuries

- All patients with a significant head injury should be treated as having a spinal injury as well until ruled out
- Call For help
- Keep the patient calm & support the persons neck as best as possible.
- If blood or clear fluid is coming from the nose, ears or mouth put the person into a position of most comfort lying down with the head to the injured side ensure that you support the neck & that fluid can freely drain. Try to keep the head from moving backwards to protect the spine.
- DO NOT give water or food
- DO NOT give Aspirin as this may cause bleeding in the skull
- Be prepared for vomiting
- If the person is or becomes unconscious follow basic life support principles
- If Conscious no signs of neck/back injury keep at rest on back

Spinal Fractures

- Approximately 300 new patients with spinal cord injuries are admitted into hospital each year in Australia making the incident of spinal injury one of the highest in the world
- The most important indicator of spinal injury is the history followed by examination
- Ask the patient the cause of their injury , if they have pain in their neck or back, do they have pins or needles electric shock or funny feelings in the body, are they able to move their arms/legs & can they form a fist
- If a patient cannot perform any of these tasks they should be treated as a spinal injury until proven otherwise

Management of a Spinal Injury

- The key principle to managing a spinal injury is the protection of the Airway first & then minimal movement of the spine.
- Avoid movement of the patient, if possible wait for the Ambulance reassure the patient & advise against movement.
- Support the patients neck
- Loosen any tight clothing protect from environmental conditions
- Support sides of patients body with pillows extra immobilize patients legs.
- DO NOT ATTEMPT to realign the neck or back. It is in that position for a reason e.g. the patient may have a fracture.
- IF the patient is or becomes unconscious apply basic life support principles.
- Call for help

Provide First Aid (Part B)

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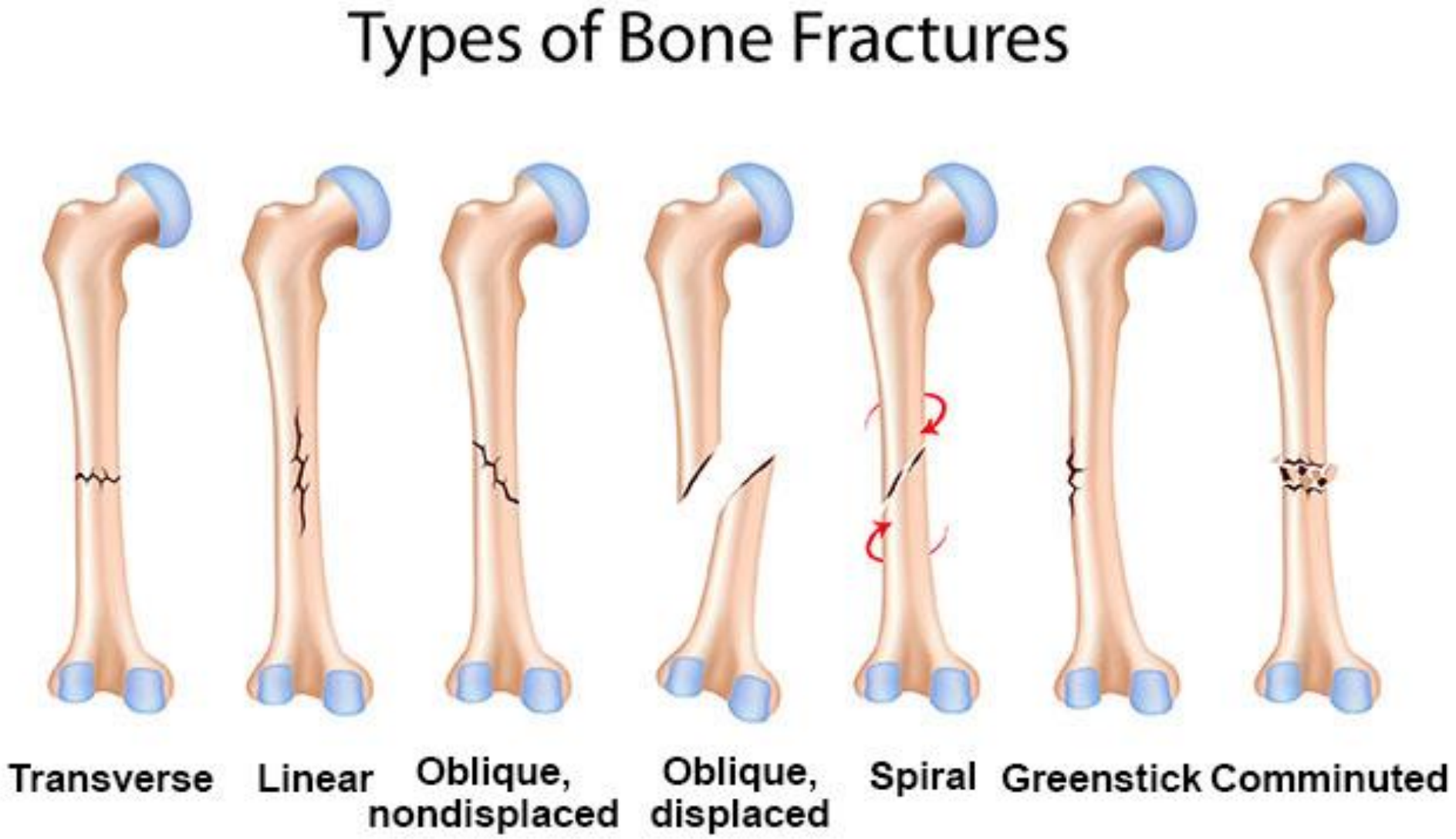
Fractures

- A fracture is where the bone is either broken or cracked
- In children the bone may bend resulting in a green stick fracture.
- Fractures can be caused by.
  - Direct force a bone is broken at the site of impact.
  - Indirect force The bone breaks some distance away from the point of impact.
  - Abnormal muscle contraction a fracture can result due to a sudden muscular contraction

Types of Fractures



Recognition of a Fracture

- To help recognize a fracture look for the following :
  - Pain at or near the site.
  - Difficulty/impossible to move
  - Loss of power
  - Swelling
  - Deformity
  - Unnatural movement
  - tenderness

General Management of a Fracture

- Always control any bleeding before treating the fracture
- Stopping movement is the main aim of treating any fracture is to prevent movement of the broken bones by immobilization
- It is preferable to firstly to immobilize the joints above & below the fracture & then above & below the fracture itself
- Check for circulation in the limb
- Check for nerve function
- If there is no pulse or nerve function **urgent medical assistance is required**
- Never attempt to realign or reposition the limb
- Place the limb in the position of most comfort
- Elevate the fracture & apply a suitable sling
- If the patient becomes or is unconscious **apply basic life support principles**
- Call for help

Lower Arm Sling




1. Press triangle bandage against chest

2.Lift short corner up over elbow then lift lower section up

3. Drape over opposite shoulder

4. Go to back & tie off to side of neck

Upper Arm /Collar Bone Sling






1.If patient is comfortable with hand resting on opposing shoulder

2. Place bandage over arm & shoulder

3. Tuck under forearm & extend past elbow

4.Pull long corner past elbow creating a pinch knot

5.Pull both opposing ends together over back

6.Tie off at back

Management of Dislocations

- A dislocation occurs at a joint when a sudden force ruptures the ligaments forcing the bones of the joint into an abnormal position
- The patient will complain of severe pain & loss of function of the affected part
- All dislocations should be managed as potential as fractures
- Therefore no attempt should be made to relocate realign or re position the affected limb.
- Assist the casualty to Immobilize the limb
- **SEEK MEDICAL ASSISTANCE**

Management of Bruises Strains Sprains

- Sport injuries can involve muscles, tendons , ligaments & cartilage which are either ruptured, sprained or strained.
- These Injuries should be treated using the **R.I.C.E principles of management**

R Rest the injured part

I Ice compressions applied to the affected area for 20 minutes every 2 hours for up to 24 hours(check the injured area every 10 minutes to ensure it is still pink)

C Compression bandages should be applied firmly but not tightly & should extend beyond the injured area.

E Elevate the part to reduce swelling

Blast Injuries

- During an explosion the body is subjected to changes in air pressure
- This can rupture the delicate air sacs which exchange gases causing bleeding within the lungs & the patient to become hypoxic (lacking in oxygen)
- Additionally other areas of the body can be subjected to trauma.
- A blast victim may suffer from difficulty with breathing, coughing, chest or abdominal pain, nausea & vomiting, shock, blood shot eyes, red spots on face neck & or chest, may develop bleeding from the rectum, be unconscious & as shock increases the patient may become drowsy & unresponsive

Management of a Blast Victim

- Reassure the patient
- Control any bleeding
- Assist the patient into a position of comfort i.e. if they have breathing difficulty assist them into the upright position
- If no breathing difficulties are seen then place them on their back with their feet elevated.
- Loosen any tight clothing & place a blanket over them
- DO NOT over heat the patient
- DO NOT give food or drink
- While waiting for medical assistance re-assure & monitor
- If the patient is or becomes unconscious apply basic life support principles

Crush Injuries

- When a part of the body is crushed by a heavy object there is serious risk of death occurring upon the extrication of the patient, particularly if there has been a delay in removing the crushing force
- Should there be a delay in releasing a crushing force a complication known as **crush syndrome** may develop.
- As a rule if over 1 hour has past wait for help before removing forces
- At first instance **crushing forces must be removed immediately after the incident if this is physically possible !**

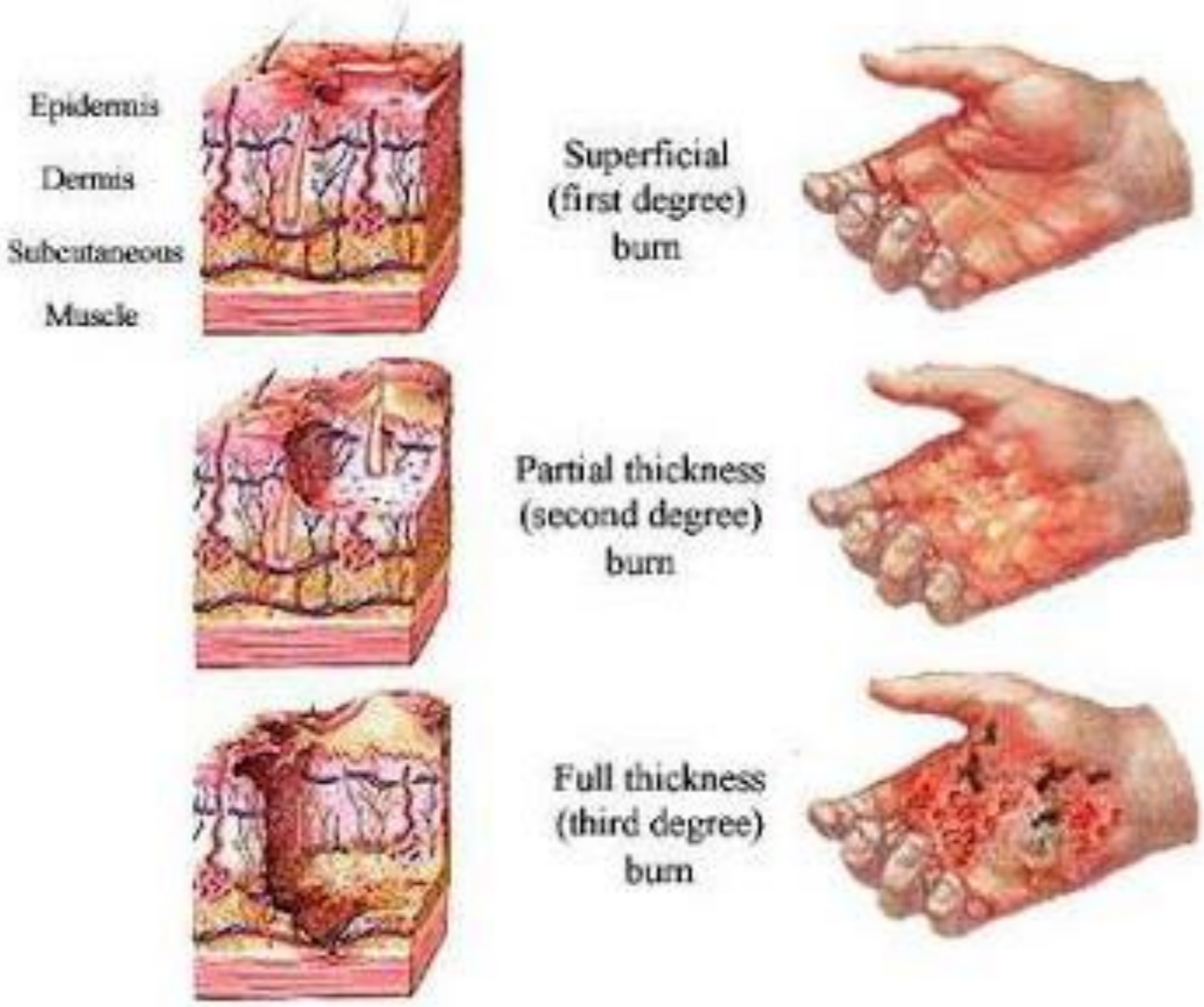
Management of a Crush Injury

- Do not enter a trench, cave in area or mine shaft collapse without expert help
- If possible remove the crushing object/force
- Control any bleeding & treat for shock
- Immobilize the limbs
- **Seek urgent medical assistance**
- If the patient is or becomes unconscious **apply basic life support principles**

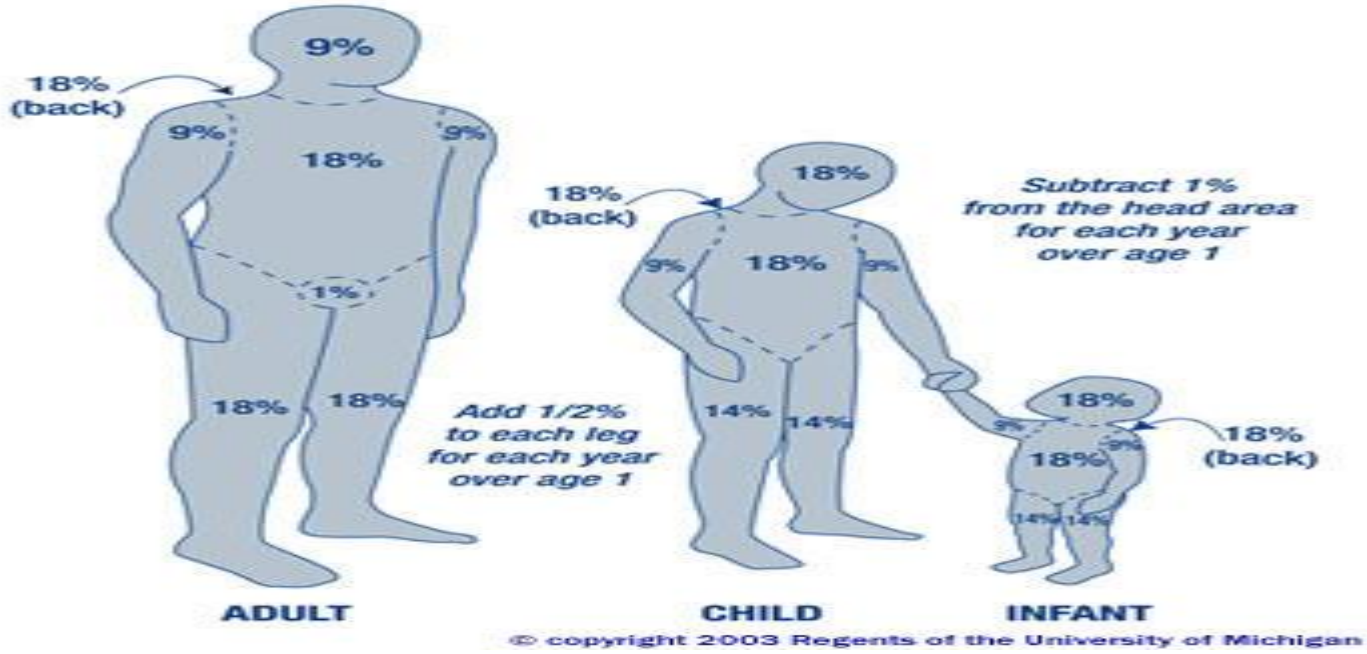
Burns

- Burns to the skin can be life threatening & require immediate treatment
- Different kinds of burns:
  - Dry Burns caused by flames or hot objects
  - Wet Burns or Scalds are caused by hot liquids or steam
  - Electricity , Cold Burns & Radiation
- Burns are assessed according to the amount & area & Depth involved
- Any of the following should be considered as serious
- Any deep burns in particularly to children & infants, Inhalation burns , burns to hands , feet , armpits & genitalia superficial burn involving 9% for Adults or 5% for infants & children

Depth of Burns



The Rule of Nines for Burns



Management of Burns

- Immediately cool the affected area with cold running water for a minimum of 20 minutes while gently removing any clothing which has been burnt or soaked with boiling water
- DO NOT remove anything sticking to the sink, cut around it instead as you may pull away the skin.
- Remove any constricting rings bracelets extra
- Cover the area with a non stick or lint free dressing & elevate the limb
- DO NOT break any blisters or apply any ointments or butter/powders
- Call for help
- If the patient is or becomes unconscious apply basic life support principles

Mouth & Throat Inhalation Burns

- Burns to the airway can be caused by the inhalation of hot gases , drinking or swallowing hot fluids or corrosive substances
- The patient will have the following symptoms or signs Difficulty breathing & swallowing. pain in the mouth & throat & possible unconsciousness
- Management for the inhalation burn patient
- Reassure the patient remove any constrictive items from around the neck
- Small sips of water/Administer oxygen
- Call for help
- If the patient is or becomes unconscious apply basic life support principles

Electric Shock

- Before managing a patient with electric shock always switch off the power source first
- For low voltage such as 240 volts switch of the power at the mains or meter box
- If you are confronted with an incident involving high voltage power lines i.e. a car has hit a power pole stay at least 6 metres away in dry conditions or 9 metres away in wet or damp conditions until power has been isolated as the ground in this area will be energized with electrical current

Management of Electric Shock

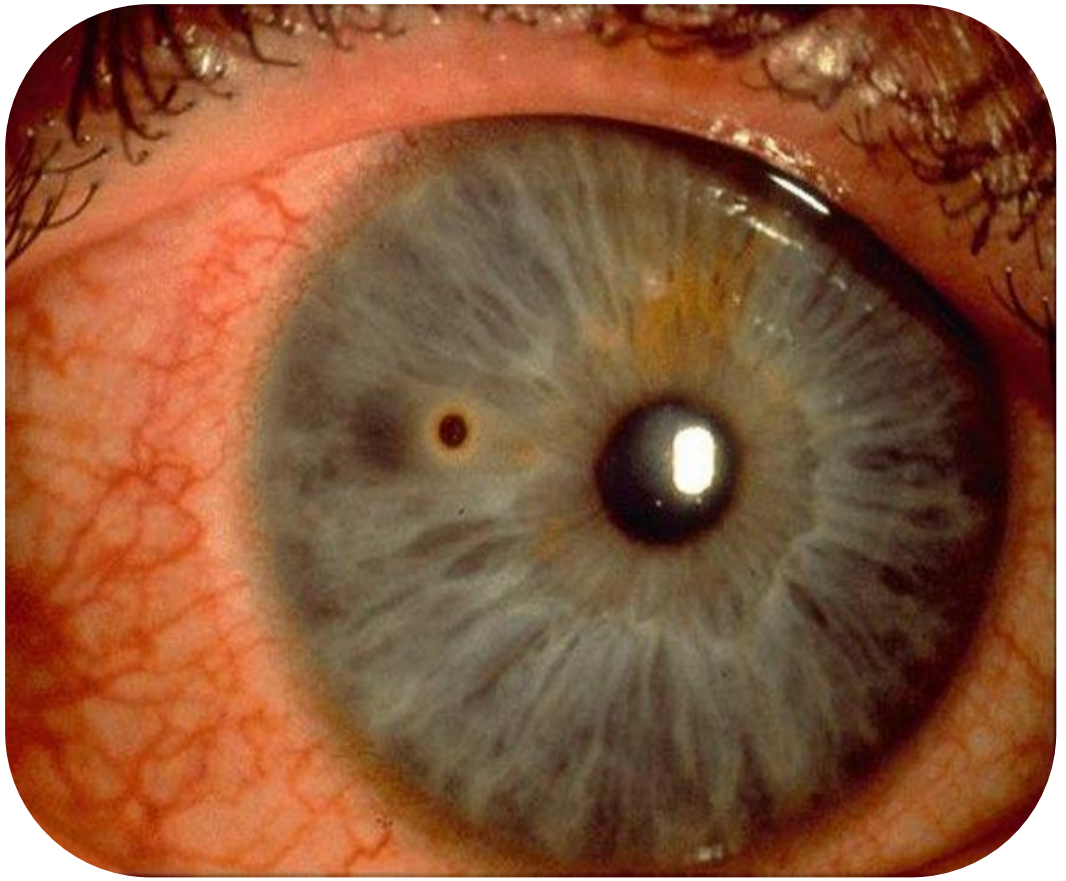
- Control the source of power
- Manage any burns
- There will be an entry & exit burn so a full examination of the body will be required.
- All patients that receive an electrical shock regardless of the size should be reviewed by a doctor to ensure there are no complications
- If the patient is or becomes unconscious apply **basic life support** principles
- Call for help

Eye Injury

- The eye is very delicate so great care must be taken when treating an eye injury
- The eye can be damaged in many ways as follows
  - Foreign bodies
  - Chemicals
  - Ultraviolet radiation
  - Smoke
  - Heat
  - Direct blows
- All eye injuries should be transported & reviewed at the nearest hospital or medical facility.
- **REMEMBER YOU ARE ONLY ONE EYE INJURY AWAY FROM BEING BLIND**

Management of a Foreign Object in the Eye

- Sit the patient down facing a light & locate the object by looking at the eye & eyelids
- Ask the patient to look up look down look left look right
- If the particle is on the colored part of the eye only ever use irrigation to remove it
- Turn the patients head toward injured side & irrigate the eye with an eye stream or balanced water/salt solution
- If these are not available you may use tap water
- If irrigation is not successful & the object is in the white of the eye you can use a damp cotton bud to lift the object out
- If this fails pad the eye & transport patient to hospital.



Management of Chemical & Heat Burns

- Immediately irrigate the eye with cold running water for at least 30 minutes
- Do NOT waste time looking for a neutralizing agent
- Ensure that you irrigate under the eyelids
- Sweep away any particles from the white of the eye only, using damp cotton bud
- Continue with irrigation until all particles are removed
- Lightly pad the eyes
- Arrange **urgent medical assistance**
- Ascertain whether the chemical is acid, alkali in a powder form or solution
- Chemical contact with skin- flood with cool water & seek medical attention

Management of Welders Flash & Snow Blindness

- The flash from welding & snow glare can injure the unprotected eye causing it to become inflamed & painful
- Treatment is as follows
  - Gently irrigate the eye with eye stream or cold running water for 20 minutes
  - Lightly pad the eyes
  - **Seek Medical Assistance**

Management of Smoke in the Eyes

- For eyes that have been exposed to smoke manage as follows
  - Instruct the patient not to rub the eyes
  - Irrigate the eyes with eye stream or tap water

Management of Bleeding Or Direct Blows To the Eyes

- Assist the patient to lie or sit down
- Place an unmedicated eye pad gently over the affected area secure with adhesive tape
- Advise the patient not to move the uninjured eye as this will cause the injured eye to move as well
- If the above is not successful then reassure the patient & proceed to pad the uninjured eye to help prevent movement of the affected eye
- **Seek medical help**

Management of a Penetrating Eye Injury

- DO NOT remove the penetrating object
- Reassure the patient & lie them flat with one pillow
- Place padding around the object DO NOT place pressure onto the object
- Pad the unaffected eye to reduce movement of the injured eye
- **Seek urgent medical assistance**
- If in a remote area transport the patient lying flat on their back.

Medical Emergencies

Heart Attack

- The greatest cause of death in Australia is from heart attack due to Coronary Heart Disease
- The heart is a muscle that does not rest except to slow down when we sleep & like all other living tissues it requires its own oxygen enriched blood supply via the coronary arteries
- Should a coronary become blocked the patient will suffer a heart attack
- The patient complains of sudden onset of tight heavy pain across the chest which is poorly localized & unrelieved by posture or medication
- Pain can radiate to the neck jaw shoulders or arms usually the left side
- They develop nausea vomiting & difficulty with breathing may look pale & have cold & sweaty skin & become dizzy & fatigued

Management of a Heart Attack

- Rest the patient & reassure DO NOT allow the patient to move around unnecessarily as this places extra strain on the heart.
- **Send for urgent medical assistance.**
- Do not leave the patient unattended loosen any constrictive clothing around the neck chest & waist.
- BE PREPARED FOR A SUDDEN LAPSE INTO UNCONSCIOUSNESS.
- If the patient is or becomes unconscious then apply **basic life support** principles
- Call for help

Angina

- Angina occurs when the blood flow from the coronary arteries is insufficient to meet the oxygen requirements of the heart muscle
- As a result of this lack of oxygen the patient develops chest pain. Normally this pain resolves with rest & patients have medications such as Anginine , Isoptin , Cardizem & Adalat for use when an attack occurs
- The patient usually complains of a slow onset of pain across the chest which is usually poorly localized & associated with physical exertion or emotional distress
- The pain can radiate to the neck jaw or shoulders or arms usually the left
- They develop shortness of breath & look pale & distressed

Management of Angina

- Rest the patient in a position of comfort usually sitting upright.
- Assist the patient to self administer their own medications.
- If the patients chest pain does not resolve with rest & or medication i.e. a maximum 3 fresh Anginine tablets **seek urgent medical assistance**
- If the patient is or becomes unconscious apply the **basic life support** principles.
- **Call for help**

Stroke (C.V.A)

- Stroke is the term commonly used term (other wise known as Cerebral Vascular Accident) a condition where the patient suffers bleeding into the brain caused by a ruptured blood vessel or by a clot blocking the blood supply to an area of the brain, both of which result in the death & damage of brain tissue.
- Strokes can occur in anyone including elderly however individuals with high blood pressure or women who are smokers & take oral contraceptives are also in a high risk category.
- Due to the different areas of the brain that can be affected & damaged the signs & symptoms of a stroke may vary

Recognition of Stroke (C.V.A)

- A patient who is suffering from a stroke may have the following signs or symptoms.
  - Difficulty or loss of speech
  - Weakness or paralysis on one side of the body (It can be both)
  - Loss of muscle tone to the muscles on one side of the face resulting in dropping of the mouth & dribbling
  - Patient may be confused
  - Patient may lose control of their bladder & bowels
  - Unequal pupils
  - Patient may vomit
  - Patient may become unconscious

Management of Stroke/ C.V.A

- Give reassurance but DO NOT ask them questions if they can not speak, just maintain reassurance.
- Assist the patient into a half sitting position & support their head & shoulders on pillows.
- Loosen any tight clothing.
- Gently wipe away any saliva from the mouth.
- Administer oxygen via a Hudson's mask at 6 litres/min.
- If the patient is or becomes unconscious apply **basic life support** principles.
- Call for help.

Diabetes

- Diabetes is a condition caused by a disorder of the Pancreas. The pancreas produces insulin which helps the body to regulate sugar concentrations within the blood.
- The pancreas of Diabetic is either not producing enough insulin or none at all.
- This can result in the development of the following two conditions.
  - Two much sugar in the blood (Hyperglycaemia)
  - Two little sugar in the blood (Hypoglycaemia)
- A person with diabetes can control these conditions with diet & medications such as Insulin injections or tablets.
- Unfortunately an imbalance can occur between insulin & sugar levels which can result in unconsciousness or even death.

Low Sugar Levels (Hypo)

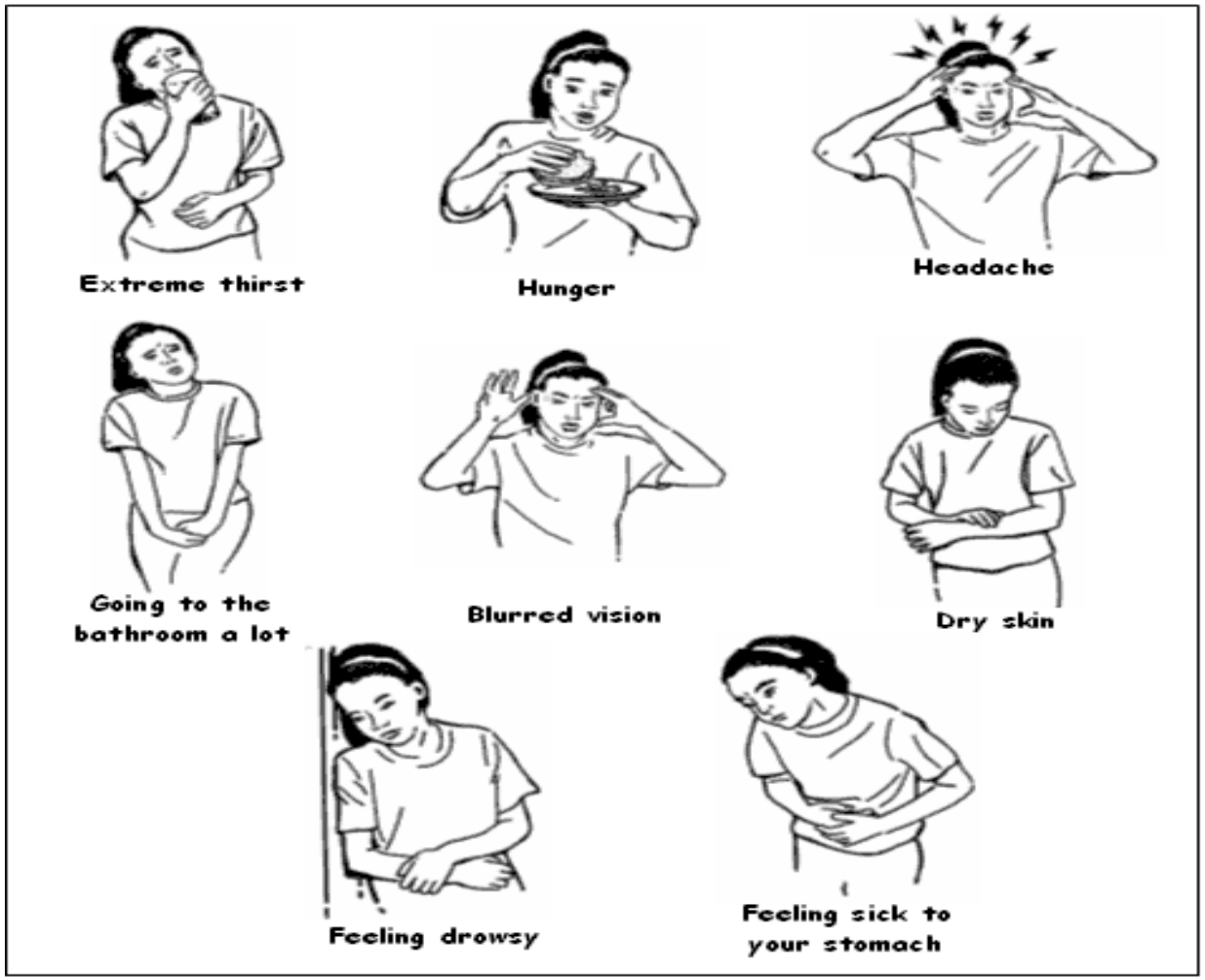
- Should a diabetic inject too much insulin, miss a meal , over exercise or develop an infection they can develop low blood sugar levels commonly called a Hypo. This is the most common problem a first aider will come a across with the management of a Diabetic. This condition can progress quickly.
- The patient may become week light headed & or giddy.
- Usually develops mental confusion & may appear drunk or become aggressive.
- Develops cold pale skin & rapid pulse.
- The patients levels of consciousness will deteriorate even to the point of unconsciousness.

Management of Low Sugar Levels (Hypo)

- If the patient is co-operative & able to swallow
  give them a large spoonful of honey
  or a drink of a sugar drink lolly or chocolate.
- Followed by Carbohydrates Like bread etc
- DO NOT give Nutra Sweet, Saccharin or other non sugar drinks
- **Seek medical assistance**
- If the patient is or becomes unconsciousness
  apply **basic life support** principles

High Blood Sugar Levels(Hyper)

- This condition develops when the patient has not taken their insulin & is not that often seen by the First Aider as the patient is able to take corrective measures
- Never administer Insulin to a patient as incorrect or inappropriate administration can be fatal
- **Always seek Medical advice**
- The Diabetic with high sugar levels will have the following signs & symptoms
- Drowsiness & thirst
- The breath develops a fruity smell which is commonly referred to as smell of nail polish remover
- Increased urine output
- Unconsciousness



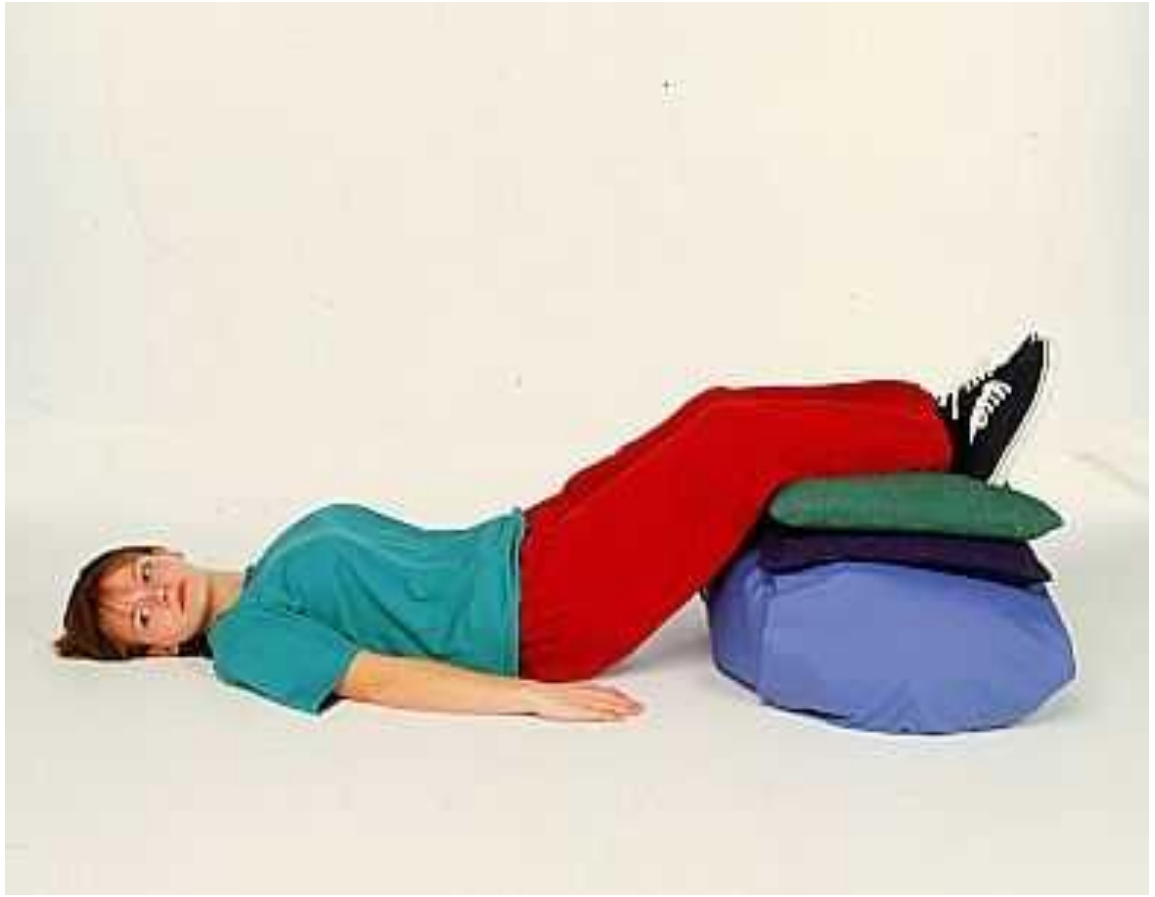
Management of High Blood Sugar (hyper)

- Assist the patient to self administer their own medication.
- Seek medical advice if in doubt
- If the patient is or becomes unconscious apply **basic life support** principles
- Should you accidentally give sugar to a patient with high blood sugar levels YOU WILL NOT CAUSE ANY FUTHER HARM.

Epileptic Seizures (fits)

- An epileptic seizure is caused by a disturbance of electricity within the brain
- The patient often falls to the ground suffering with rigid & jerking muscle spasm which is followed by blueness to the skin & frothing to the mouth
- Quite often the patient can lose control of their bowels & bladder
- When they recover they often suffer with temporary loss of memory, fatigue & later embarrassment
- Children could suffer seizures due to high temperatures 40 degrees can be serious

Management of Fainting



- Assist the patient to lie down raise the legs & keep the upper body flat.
- Loosen any tight clothing & ensure an adequate supply of fresh air.
- Protect the patient from heat or cold environment. DO NOT OVERHEAT.
- DO NOT give food or drink as this may induce nausea & vomiting.
- Reassure the patient as they recover as they may have some confusion & be embarrassed.
- Check for further injuries.
- If they become unconscious apply **basic life support** principles.
- **Call for help**

Hypothermia

- The onset of Hypothermia is usually slow & can go unnoticed it begins when the body temperature falls bellow 35deg
- This can result from such things as immersion in water or inadequate clothing
- Body temperature can be lost via several mechanisms
  - Conduction heat is lost with contact to cold environment
  - Convection heat is lost as airflows over the body
  - Radiation the body normally losses temperature by radiating heat
  - Evaporation heat is further lost by breathing & water removes heat as it evaporates from the body

Signs of Hypothermia

- It is not easy to recognize the onset of hypothermia
  BUT WATCH OUT FOR:
  - Unexpected or unusual behaviour often accompanied with complaints of coldness or tiredness
  - Physical & mental tiredness including slowness to respond to or understand simple questions
  - Sudden fits of shivering
  - Slurred speech or uncommunicative
  - Visual disturbances
  - Violent or unexpected outbursts of energy possible resistance to help
  - Falling collapse & coma
  - Skin cold to touch & no capillary refill when fingernails pressed
  - Slow pulse & breathing

Management of Hypothermia

- Move the patient to the nearest warm sheltered position
- Lie the patient flat & remove any wet cloths replace with blankets ,warm slowly, sleeping bag, news paper your own body heat
- Be careful not to overheat the patient
- Give hot warm sweetened drinks
- NEVER GIVE ALCOHOL
- Assess for local cold or frostbite
- DO NOT ENCOURAGE EXERCISE if the patient is too exhausted
- DO NOT rub or massage the extremities
- If no signs of life after immersion they may have drowned commence CPR whilst re warming the patient.

Immersion

- Prevention of hypothermia in water while awaiting rescue
- In cold water hypothermia may be delayed by:
  - Wearing a life jacket
  - Wearing as much clothing as possible, especially over the head
  - Holding your Knees close to your body to assist with the retention of body temperature
  - Keeping still & not trading water as exercise increase the rate of cooling by up to 30%
  - Wear a rubber helmet as well as a wet suit when diving or water skiing in cold water

Frostbite

- Due to the exposure of extremes of cold the body can freeze. The most common areas affected are the toes, nose, fingers , ears or chin
- Frostbite can be classified as either superficial involving only the skin or deep which involves the skin , muscle , blood vessels & nerves.
- The patient complains of NUMBNESS to the affected area.
- The skin appears wax-white or mottled blue in colour
- The Patient develops impaired movement of the affected part
- The skin feels hard
- Immediately rewarm the affected area with skin to skin heat transfer or water at 42deg
- Do Not re expose the affected area to the cold

Exposure To Heat (Hyperthemia)

- The body maintains a core temperature of 37deg regulated by the brain.
- The brain assist the body to lose excess body heat via several ways i.e. expired breath, urine, faeces & the skin with perspiration
- Of the heat regulating organs the skin is the most effective & loses heat quickly due to evaporation, conduction, convection & radiation
- However if part of this system fails then the patient will suffer heat exposure.
  - The three stages of heat exposure are
  - Heat cramps.
  - Heat exhaustion.37-40 degrees
  - Heat stroke +40 degrees

Heat Cramps/Exhaustion

- Heat cramps are characterized by severe muscle pain in especially the legs & the stomach. Because cramps may lead to heat exhaustion, the patient may complain of faintness, dizziness & marked weakness.
- Move the patient to a cool spot.
- Give them a drink like Staminade or mix ½ a teaspoon of salt with water.
- DO NOT GIVE SALT TABLETS
- If vomiting or diarrhoea occurs **seek urgent medical assistance**
- Help patient to stretch cramped muscles
- Sponge patient with cold water

Heat Stroke

- Heat stroke is an extremely serious condition, which can result in the death of the patient
- The body can no longer control its temperature due to excessive heat & a break down of the temperature regulating centre
- Unlike the patient with heat cramps/exhaustion, the patient with heat stroke has a reddish blush to their skin & is not SWEATING
- Recognition of heat stoke can be made by:
  - A history of exposure to high temperature.
  - Hot flushed skin complains of headache.
  - May develop noisy breathing
  - May develop deep unconsciousness

Management of Heat Stroke

- Move the patient to the nearest cool shaded area & remove all unnecessary clothing
- Lie the patient down with head & shoulders slightly raised
- Douse the patient with cold water & cover with a wet sheet
- Fan the patient with electric fan, newspapers, etc.
- Apply ice packs to the patient's armpits, groin, neck, & back, because these areas are rich with blood vessels close to the skin, cooling them may reduce body temperature
- **Seek urgent medical help**
- If the patient is or becomes unconscious apply **basic life support principles** while also administering above treatment

Hyperventilation

- This can develop in some people as a result of emotional upset or stress
- The person may lose emotional control & possibly collapse
- During the episode the person may Hyper-Ventilate (breathe too quickly) thus blowing of too much carbon dioxide from their blood in a short period of time
- This does not mean they have too much oxygen but rather too little carbon dioxide which results in the following: Anxiety , rapid breathing , palpitations, tightness around the chest, feelings of suffocation, normal pink colour & pins & needles around the mouth or lips , in the fingers & toes eventually leading to spasm of the fingers & toes.

Management of Hyperventilation

- Gently but firmly reassure the patient.
- Isolate the patient from bystanders.
- If the patient is breathing rapidly instruct them to slow down their breathing
- If the patient has developed pins & needles have the patient breath in through their mouth & out through their nose physically slowing the breathing down until symptoms disappear
- Check for injury
- If the symptoms recede quickly & there are no injuries no medical help should be necessary however do not leave the patient alone.

Drug Overdoses

- Some drugs can make patients either very drowsy & later result in unconsciousness.
- Other drugs can lead to patients becoming very tense.
- Others can cause patients to become very panicky or even aggressive
- Some drugs can result in dangerous levels of dehydration
- So what should you do?
- Deal with the signs & symptoms you recognize as listed below & when in doubt call for help:
- Tense & Panicky
- The usual cause is due to hallucinogenic drugs Amphetamines, Ecstasy , LSD & Magic Mushrooms as well as high doses of Cannabis or a combinations of these
- If some one is really tense & panicky follow the steps on next page.

Drug Overdoses

- Clam & reassure them quietly explaining that the panicky feeling will eventually go
- If possible remove them from loud noises & bright lights
- Treat any signs of Hyperventilation, overheating or dehydration
- Overheating or dehydration tends to take place with drugs like Ecstasy or Amphetamines
- These drugs raise the body temperature & give the user a body boost
- When used in clubs these drugs often cause people to dance for long periods getting even hotter leading to a loss of body fluids up to half a litre an hour, which has been the main reason for Ecstasy related deaths

Drug Overdoses

- The overheating or dehydrating drug over dose can be recognized as follows
  - Cramps
  - Hot & Dry Skin
  - Headaches & vomiting
  - Dizziness
  - Sudden fatigue
  - Feeling like urinating but inability to do so
  - Fainting
- Move the person to a cool area
- Apply cold water to cool them down & fan them as well as removing any unnecessary clothing while ensuring their modesty
- Call for help apply basic life support if required.

Drug Overdose

- Tips for dealing with bad trips
- It is advisable to **call an Ambulance** in such cases but while waiting the following approach can be used
  - Acceptance try to gain the persons trust & confidence by keeping calm
  - Reduce stimuli take the person to a quiet area where they feel safe keep your movements slow & smooth allowing them to move freely
  - Reassure the person that the drug is causing the effect & that it will go away
  - Rest Make them comfortable & reassured. If they become violent call for help
  - Talk down
  - Talk in a soothing tone & if required remind them who they are discuss pleasant simple topics

Allergic Reactions

- Allergic reactions are usually minor & localized
- They can be caused by medicines, foods, bites & stings or things we touch or breath
- Severe life threatening reactions are known as Anaphylactic reactions & can occur to a patients sensitivity to certain foods, insect stings or injected drugs extra
- Recognition
  - Cold pale sweaty skin
  - Rapid & week pulse difficulty breathing
  - Wheezing or tight chest
  - Nausea & vomiting
  - Mottled rash to face & neck facial swelling
  - Anxious or restlessness
  - May become unconscious

Management of Allergic Reactions

- Assist the patient into a position of comfort
- If the patient has an Epipen assist the patient to self administer ASAP
- Remove blue safety hold firm place against thigh & press firmly& hold for at least 3 seconds
- Loosen any tight clothing around the neck, chest & waist remove any watches rings or bracelets in case of swelling
- Monitor the patients condition .
- If the patient is or becomes unconscious **apply basic life support principles**
- **Call for help (000).**
- Childcare workers can also use the child's

management plan to guide the response

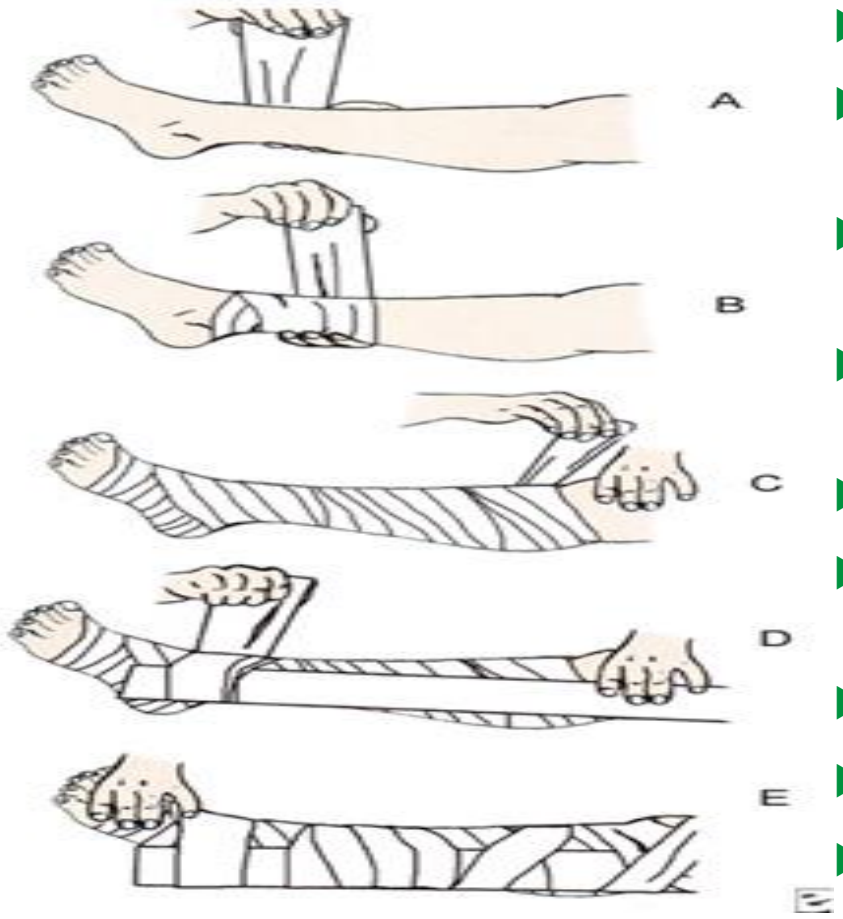
- For childcare response to those not pre-diagnosed Use the facilities emergency Epipen
- Only if advised by Emergency services should another child's Epipen be used

Poisoning Snake Bites & Stings

Snake Bites

- All bites from snakes should be treated as potentially venomous
- Death could occur in minutes if nothing is done
- The signs & symptoms of a snake bite are many & varied depending on the venom
- Some of the signs & symptoms are listed below
  - The patient has a high level of anxiety
  - The bite is often variable in appearance
  - You may see one or two fang marks even up to six or just a small scratch
  - Snake bites can often be painless but continued bleeding from the site may be a feature
  - Headache nausea , vomiting abdominal or chest pain , drowsiness , blurred or double vision , breathing difficulties or cold & pale skin

Management of A Snake Bite



- Immediately rest, calm & reassure the patient
- Remember the slower the pulse rate the slower the rate of adsorption of the venom
- DO NOT WASH THE VENOM OFF THE BITE. As the venom may be identified later at the hospital
- Apply a firm broad bandage around the limb over the area of the bite
- DO NOT put on tight enough to cut of circulation
- Bandage from the fingers/toes working upwards ensuring you cover the whole limb
- Mark the area of the bite mark on the bandage
- Immobilize the limb.
- If the patient is or becomes unconscious **apply basic life support principles**
- **Call for help**

The Funnel Web Spider

- The Australian Funnel Web Spider is highly venomous
- Signs & symptoms of the Funnel Web bite are as follows
  - Tingling around the mouth.
  - Muscle spasm & weakness
  - Pain at the site of the bite
  - Profuse sweating
  - Copious secretions of saliva
  - Outpouring of fluid from the lungs
  - Breathing difficulty
  - Unconsciousness
  - Respiratory arrest
- MANAGMENT for the Funnel Web Bite is the same as the SNAKE BITE

The Red Back Spider

- As with most spiders its the female that is the most venomous
- Few people have died since the anti venom has been developed
- By applying first aid the patient has an excellent chance of full recovery
- The signs & symptoms of a Red Back Spider bite are as follows:
  - Pain at the site
  - Sweating around the bite site
  - Nausea & vomiting
  - Muscle weakness & spasm
  - Aches & pains & general soreness which may persist for several days to weeks

Management of a Red Back Spider Bite

- Rest & Reassure the patient
- Apply a cold compress to the bitten area to relive the pain
- Immobilize the limb
- **Seek medical help**
- The Red Backs venom usually acts slowly & serious illness can take hours to develop
- However you should ensure that Emergency assistance is called in order to have the anti venom administered

Bee & Wasp & Ant Stings

- The sting of a bee or wasp or even an ant can lead to an allergic reaction otherwise known as Anaphylactic shock which is a life threatening condition
- Unlike the wasp the barb of the honey bee must not be pulled straight out
- Remove it by scraping it sideways with a finger nail razor or knife this is to prevent further injection of venom
- Apply an ice compress to relive pain & swelling
- **Call for help**
- If the patient is or becomes unconscious **apply basic life support principles**

Tick Bite

- The Australian Paralysis Tick can be found anywhere on the body
- But they are usually found in hairy areas, skin clefts & crevices
- Recognition:
  - Local irritation
  - Slow onset of weakness & lethargy
  - Muscle weakness
  - Blurred vision
  - Difficulty Breathing
  - Rarely allergic reactions occur causing local swelling, wheezing.
  - Difficulty in breathing & collapse

Management of a Tick Bite

- Locate & remove the tick as soon as possible by doing the following.
  - DO NOT squeeze the tick not even slightly as it may inject even more venom
  - Lever the tick outwards using sharp pointed tweezers or scissors on each side of the ticks head
  - DO NOT grasp the body as this may cause more toxin to be injected
- **Seek immediate medical advice**

Marine Stings

- All jelly fish have stinging capsules that cause pain when they come into contact with human skin
- As identification of jelly fish can be difficult all victims of jelly fish stings should be observed for at least 30 minutes
- It should be noted however that only in tropical regions do jellyfish pose a threat to life & require prompt treatment to lessen venom absorption
- The key to good management is when in doubt treat for the worst case scenario

Blue Bottles & Non-Box Jelly Fish

- Recognized by
  - Pain to the stung area
  - Localized wheal marks which are often white with red margins in the early stages
  - Pain in the groin or armpits
  - Headaches
  - Nausea & vomiting
  - Breathing difficulty may occur after extensive envenomation

Management of Blue Bottle & Non-Box Fish Stings /non tropical

- Assist the patient from the water
- Refrain the patient from rubbing the stung area
- Observe ABC's
- Apply hot compress or hot water to the affected area to relive the pain, ensuring the water does not scald the patient & review after 20 minutes
- **If the patient is or becomes unconscious apply basic first aid principles**

Box Jelly Fish

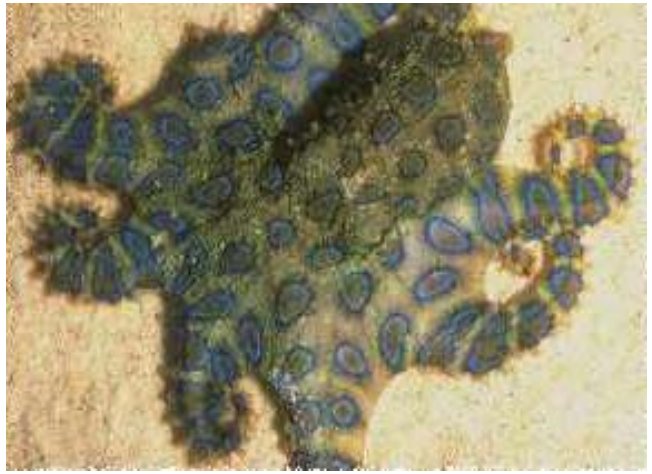
- The Box Jelly Fish is found in the tropical waters of Australia
- The sting can be fatal & is recognized as follows
  - Immediate severe pain
  - Irrational behaviour
  - Characteristic ladder pattern over stung area
  - Loss of consciousness
  - Cessation of breathing
  - Cardiac arrest

Management of Box Jelly Fish Sting

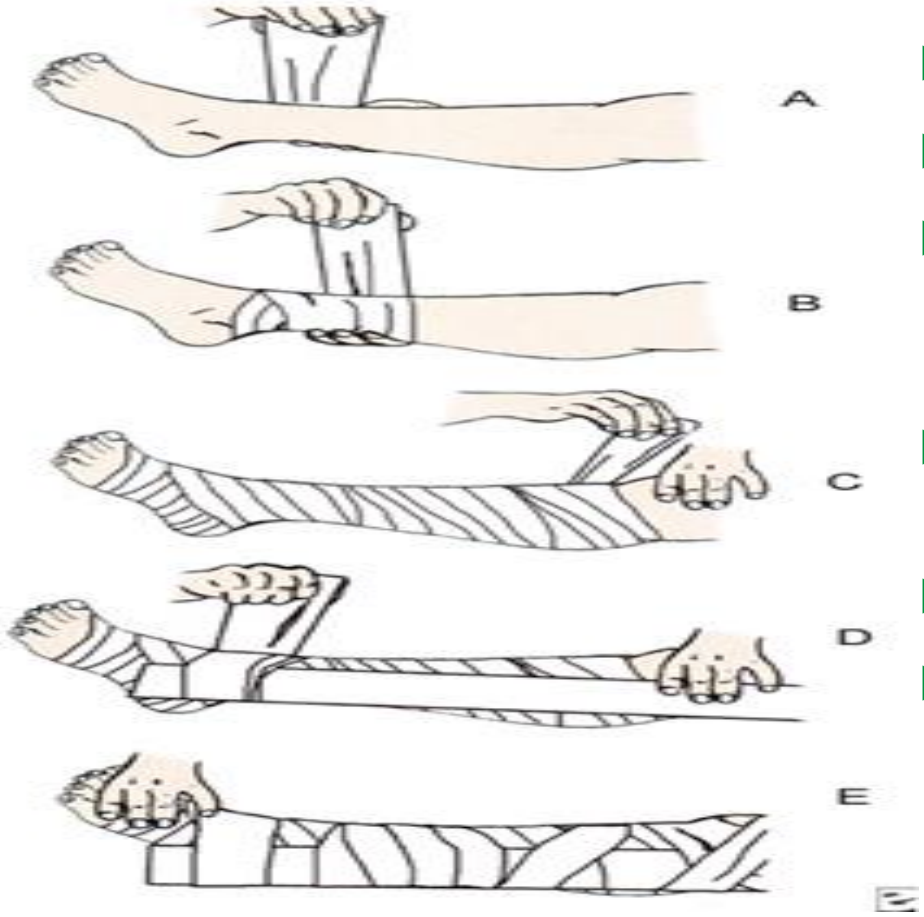
- Assist the patient from the water
- Avoid touching any of the adherent tentacles
- Restrain the patient from rubbing affected area.
- Observe ABC's
- FLOOD the affected area with vinegar to prevent further stinging from remaining adherent tentacles
- Use Hot water if no vinegar available
- **DO NOT leave the patient alone**
- **Send for urgent medical assistance & anti venom**.
- Keep the patient still to reduce absorption of venom
- **If unconsciousness apply basic life support principles & above treatment**
- **DO CPR IMMEDIATELY as Required**

Blue Ringed Octopus/Cone Shell

- The Blue Ring Octopus is found in all Australian waters
- While it is only small it is extremely dangerous
- If bitten the patient will not feel any pain
- Where as the Cone Shell sting will be extremely painful
- Within a few minutes the patient will develop numbness of the lips & tongue.
- Progressive Weakness of the muscles of respiration leading to cessation of breathing.
- If resuscitation is commenced promptly & continued until medical aid arrives the patient has an excellent chance of recovering



Management of Blue Ringed Octopus/Cone Shell Sting



- Rest & reassure the patient
- Treat as for snake bite
- If breathing difficulty continues supplement the breathing with rescue breaths during long pauses in breathing effort
- DO NOT assist when the patient is breathing or attempting to breathe
- **Seek urgent medical assistance**.
- **DO NOT leave the Patient alone**

Stone Fish , Bull Routs & Stingrays

- Stone Fish & Bull routs have sharp spines, which can deposit venom deeply under the skin causing excruciating pain
- However only rarely do severe poisonous effects occur
- Stingrays have a powerful spine on their tail, which can cause serious wounds.
- Recognition
  - Severe pain swelling to affected area
  - Grey blue discoloration
  - There may be an open wound as stingray barbs can cause deep wounds & stone fish leave fragments in the wound
  - Irrational behaviour & panic may occur

Management of Stone Fish Bull Routs & Stingray Stings

- Place the stung hand or foot in warm water (no hotter than the rescuer can comfortably tolerate)
- Take care not to burn the victim
- Manage & observe ABC's
- Arrange for transport to medical assistance
- DO NOT USE Pressure immobilization bandage.
- Anti venom is available for Stone Fish envenomations.

Management of Poisoning

- Rest & reassure the patient
- Monitor
- Attempt to identify from the patient or bystanders the nature of the poison & the time it happened & if possible the amount involved
- **Seek medical help promptly (Poison Information Centre 131-126)**
- **Call an ambulance**
- **If the patient is or becomes unconscious apply basic life support principles.**
- When performing CPR on a suspected Poisoning victim make sure to clean the mouth first & to wear protective gloves.
- Any of the patients vomit should be sent to hospital to help identify the type of poison.

Chain of Survival is You

- The chain of survival is a description of the 4 key elements required to save lives
  - Early request for Ambulance
  - Early CPR
  - Early defibrillation
  - Early advanced life support
- Having an AED earlier increases chances of life returning once cardiac arrest occurs

Automated External Defibrillation

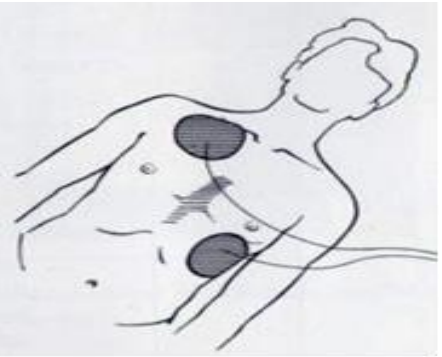
- Early Defibrillation is critical, Defibrillation is the only way to revert lethal heart rhythms
- In order for the heart to pump efficiently it is controlled by two key electrical pacemakers
- When a person suffers a cardiac arrest this electrical system will develop lethal, rapid & erratic heart rhythms known as Ventricular Fibrillation or Ventricular Tachycardia
- This is later followed by Asystole where no electrical activity exists
- These above rhythms stop the heart from pumping effectively
- If not corrected, it will result in death
- The only way to revert these rhythms is by applying a measured electrical shock using a device known as Defibrillator to the patients heart.

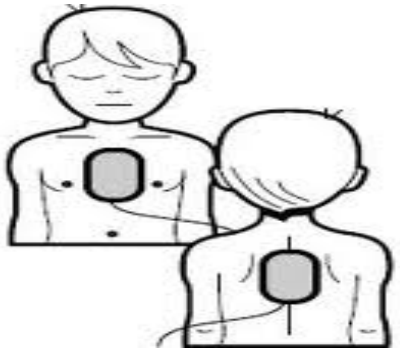
Automated External Defibrillation

- Automated External Defibrillator's (AED) allow the trained first aider to deliver a shock to the patient if either of these rhythms are detected by the unit.
- AEDs will analyses the heart rhythm for you through defibrillation pads & advise if a shock is required via voice or visual prompts.
- In many cases of cardiac arrest there may be a need to deliver multiple shocks
- However the AED will advise you again if this is the case
- PROMPT use of an AED gives the patient the best chance of a positive outcome.

Defibrillation Pads

- Defibrillation pads are used to read the electrical signals of the heart they are made from a soft thin foam which is adhesive on one side & are lined with a special gel.
- A set should always be in a sealed pack with the AED at all times to ensure the unit is always ready for use along with a disposable razor.
- The Correct placement of the pad is essential to ensure the correct level of shock is given to the heart.
- Child pads are lower in output & fitted front & back
- Before using ensure the patients chest is free from chest hair & is dry.
- To apply the pads simply peel the backing from the pad & place in position as indicated on the particular brand of AED (One must always be positioned onto the bare chest just below the right collarbone & the other bellow & slightly to the left side of the patients left breast.





Safety Procedures for Using AEDs

- Whilst an AED can save lives there are safety precautions that must be taken
- Only attach an AED to some one who is not responsive & not breathing normally & never during a training demonstration
- Ensure that nobody is touching the patient
- Ensure that the electrodes are firmly attached to the patients chest
- Beware of implants if the patient has a pace maker or cardioverter implant ensure the gel pads positioned a minimum of 10cm away
- Turn off mobile phones radios extra than can cause an incorrect rhythm recognition & subsequent shock advisory
- Beware of fire & explosive hazards such as oxygen & Glyserly Trinitrate patches used by Angina patients
- Beware of water & fluids as they conduct electricity & you or bystanders may be shocked
- Avoid having the patient in contact with metal fixtures as it may cause burns
- Possible data Misinterpretation can be cause by excessive movement or vibration so ensure that there is as little movement of the AED as possible
- Only use the batteries & accessories supplied by the manufacture of the AED

Procedure For Using an AED

- Always commence CPR as soon as possible while waiting for the AED to be set up for use
- Do not just relay on the AED
- The basics of First Aid are vital
- Check the area ensure it is safe to use a AED
- Open the AED turn on & listen to prompts
- Quickly prepare the chest & attach the pads following the diagrams on each pad for correct location
- Ensure the pads have good contact with the skin.
- Plug in connector if required
- Follow voice prompts
- If shock advised by AED
  1. Check the area is clear
  2. Clearly call shock advised all clear DO NOT TOUCH THE PATIENT
  3. Look to ensure nobody is touching the patient
- Once satisfied that nobody is touching the patient press the Shock button
- Immediately recommence CPR for 2 minutes after each shock & follow prompts
- Continue 2 minutes of CPR after each shock until successful

Infant & Child Emergencies

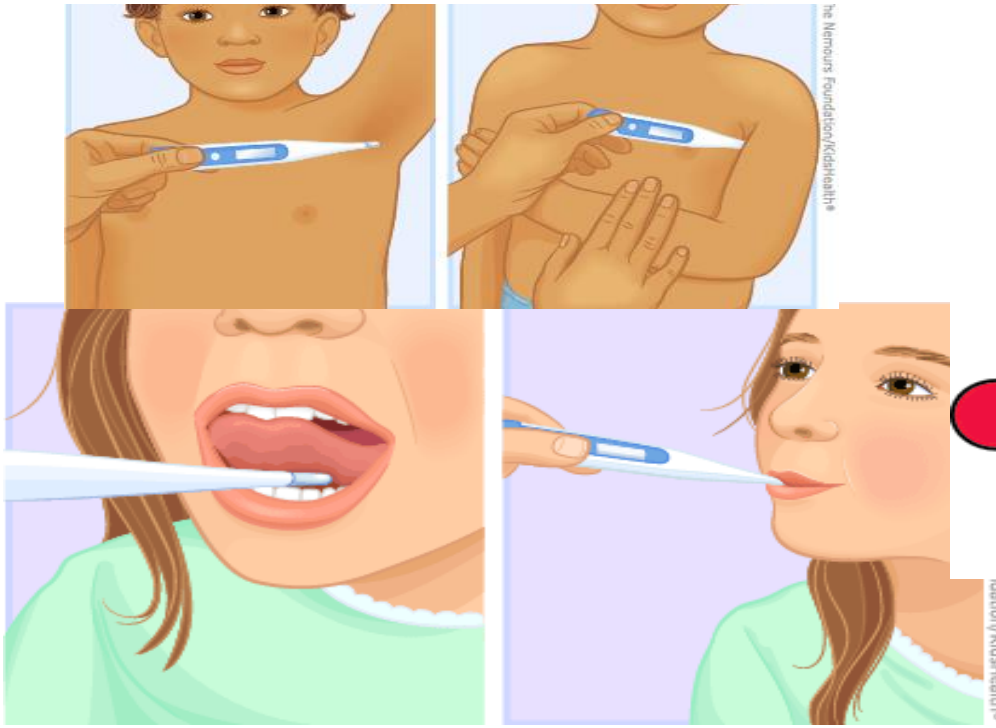
Infant Convulsions

- Children under the age of 4 years can suffer an epileptic type seizure due to a high temperature caused by illness ie colds throat or urinary tract infections
- This condition is usually very frightening for the parents
- However it is rarely dangerous if prompt first aid is administered
- Recognition
  - Hot & sweaty skin the skin may be flushed at first but may become blue especially in the lips.
  - Generalized stiffness & rigidity of the body
  - The patient may develop arching of the back & head
  - The eyes may role or upturn
  - Patient may hold their breath & develop congestion of the face & neck
  - May develop projectile vomiting

- Management
  - Protect the patient from immediate danger. Turn the patient on to their side. Clothing should be minimal depending on the temperature of the room or weather outside. Lightly cover the child with cotton sheet.
  - **Seek medical help**

Infant Convulsions

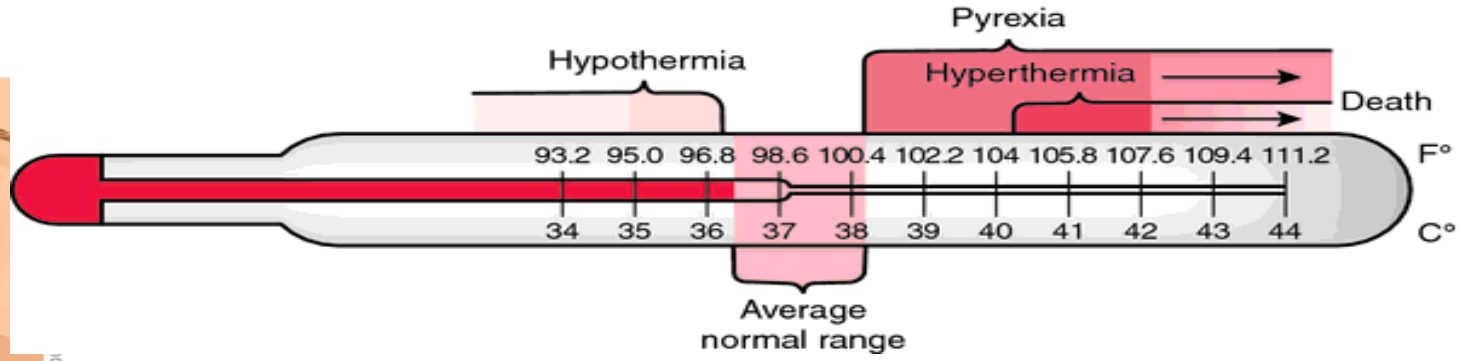
A rectal temperature can be taken in either of these positions.



Febrile Seizure

Call Your Doctor and Go To The Nearest Emergency Room Immediately

A **Febrile seizure**, also known as a **fever fit** or **febrile convulsion** is a generalized convulsion caused by a fever in infants or small children. During a febrile seizure, a child often loses consciousness and shakes



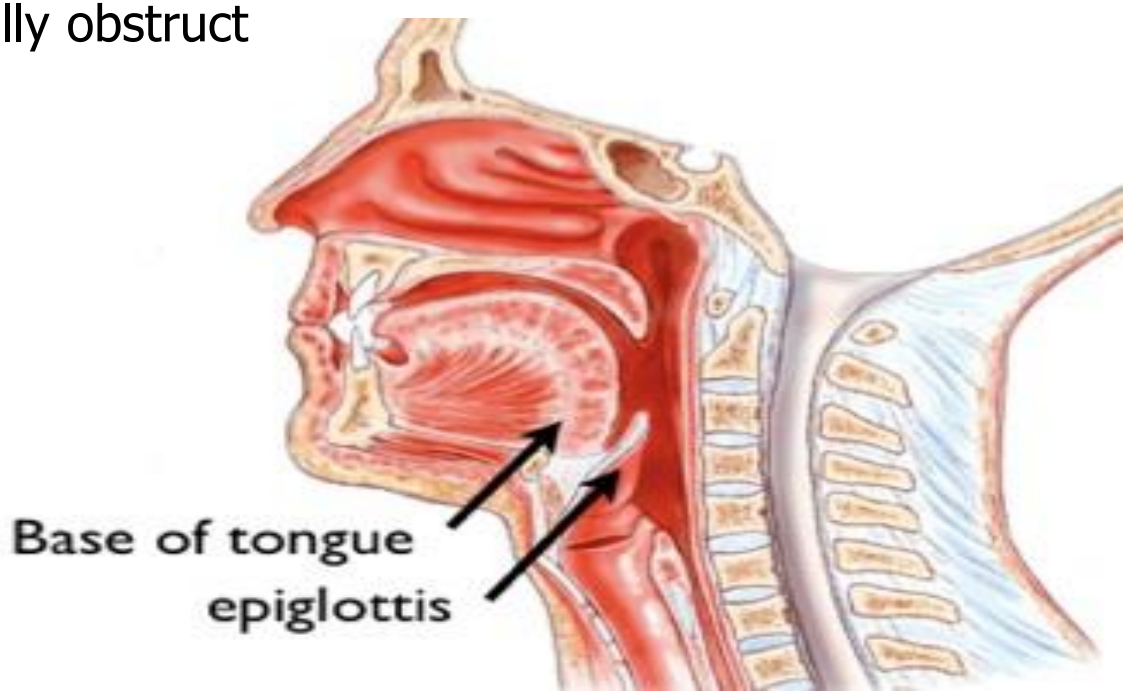
Croup

- Croup is a condition commonly seen in children under 4 years of age in the winter months
- It involves an inflammation of the airway i.e. Pharynx, Larynx & Trachea, which can cause it to obstruct
  - Recognition
  - Barking cough
  - Difficulty Breathing
  - Hot skin
  - Fatigue
  - Cyanosis
  - Management
  - Support & reassure the child

- Turn on hot water tap of the shower & close the doors in order to create a steam filled room
- Enter steam filled room to assist with the patients breathing this does not cure the illness but may buy you a little extra time until medical help arrives
- **Call for help**

Epiglottitis

- Epiglottitis is inflammation of the Epiglottis (situated over the vocal cords)
- Usually due to bacterial infection
- Commonly seen amongst the 1 to 4 year old age group
- It is a very serious condition as the air way may totally obstruct
- Recognition
  - Strider.(harsh vibrating cough) in many cases
  - Looks anxious
  - Patient tends to sit forward
  - Constant dribbling because of difficulty with swallowing
  - Reaction of the chest upon inspiration
  - Skin flushed & have a high temperature
- Management
  - Posture the patient in the sitting position
  - Give lots of reassurance
  - DO NOT INSPECT the airway as this may make the condition worse
  - **Seek urgent medical assistance**



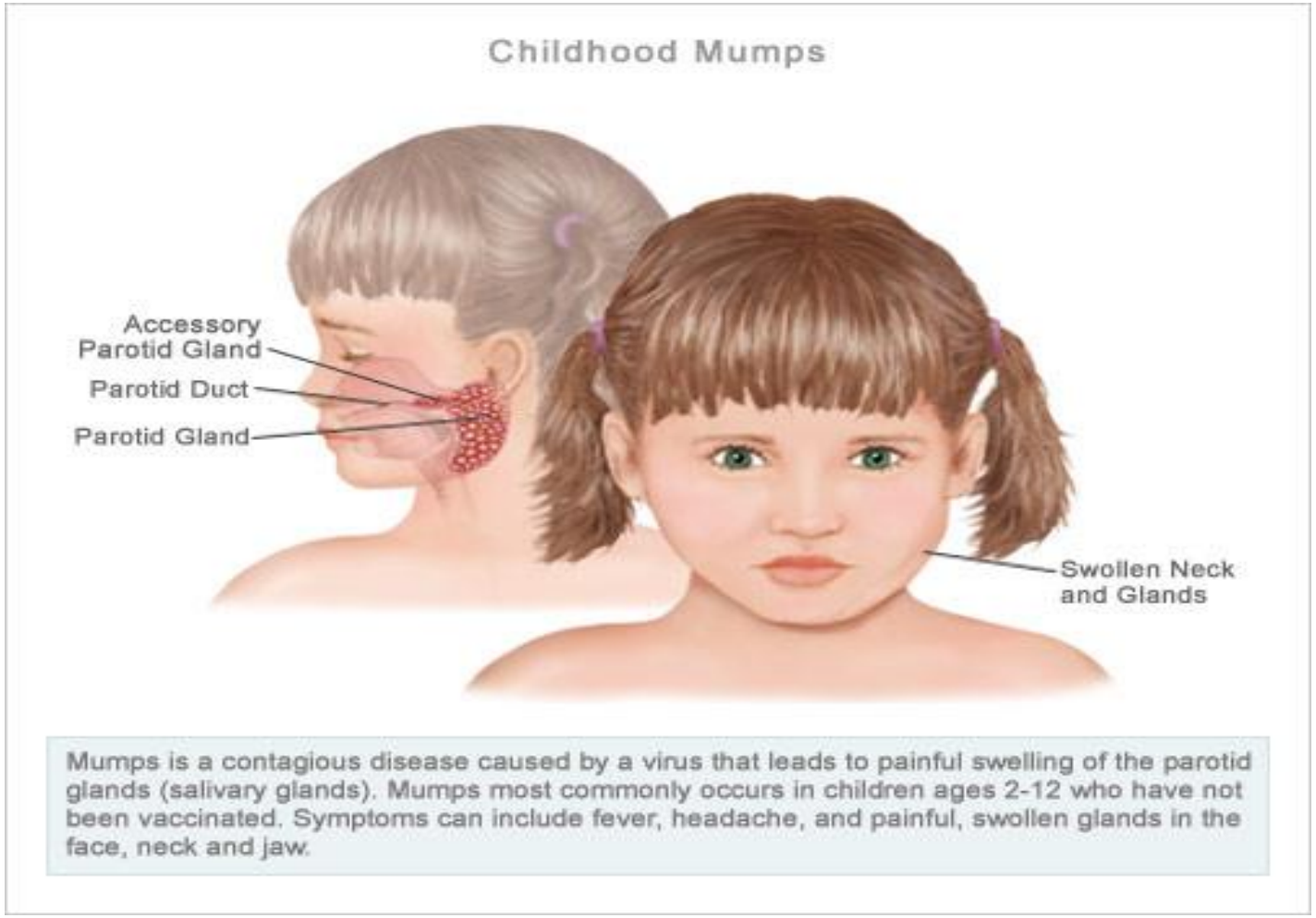
Whooping cough

- Symptoms
  - Short dry cough
  - Increasing in severity

- Treatment:
  - See the doctor

Mumps

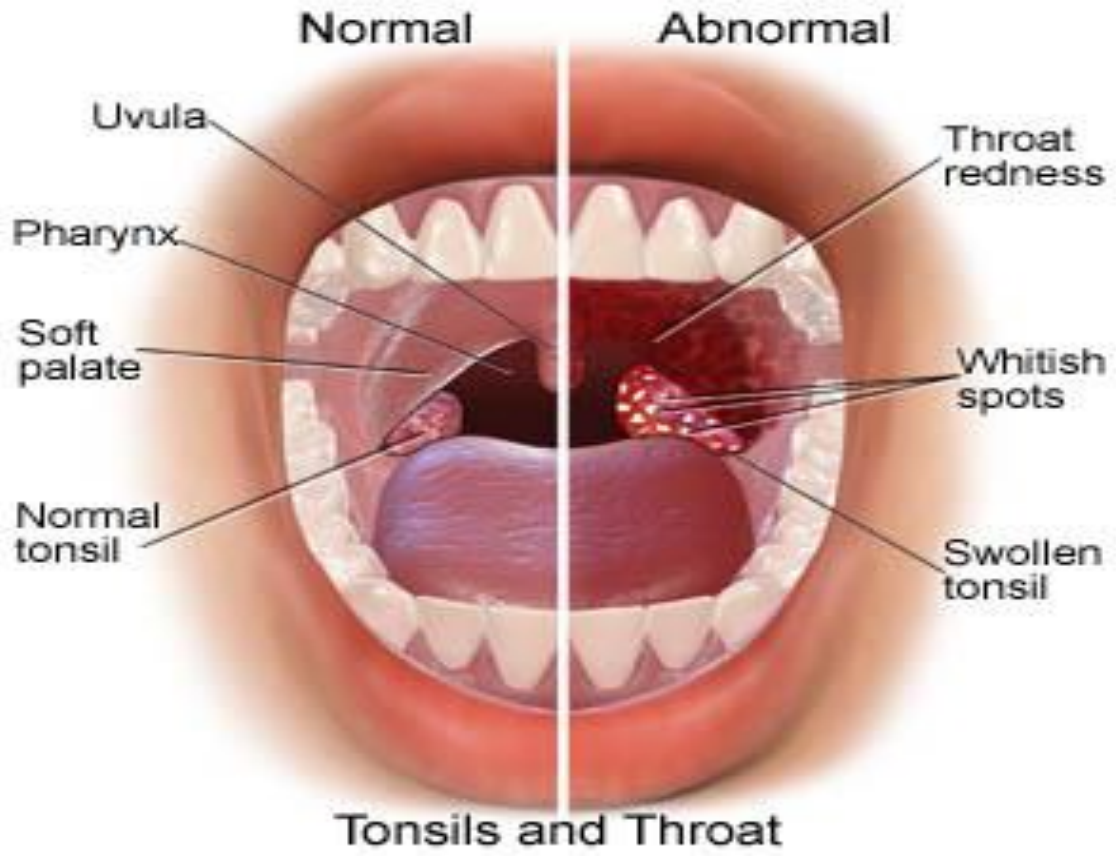
- Symptoms:
  - Fever
  - Sore throat
  - Swelling of throat/glands
- Treatment:
- See the doctor



Tonsillitis

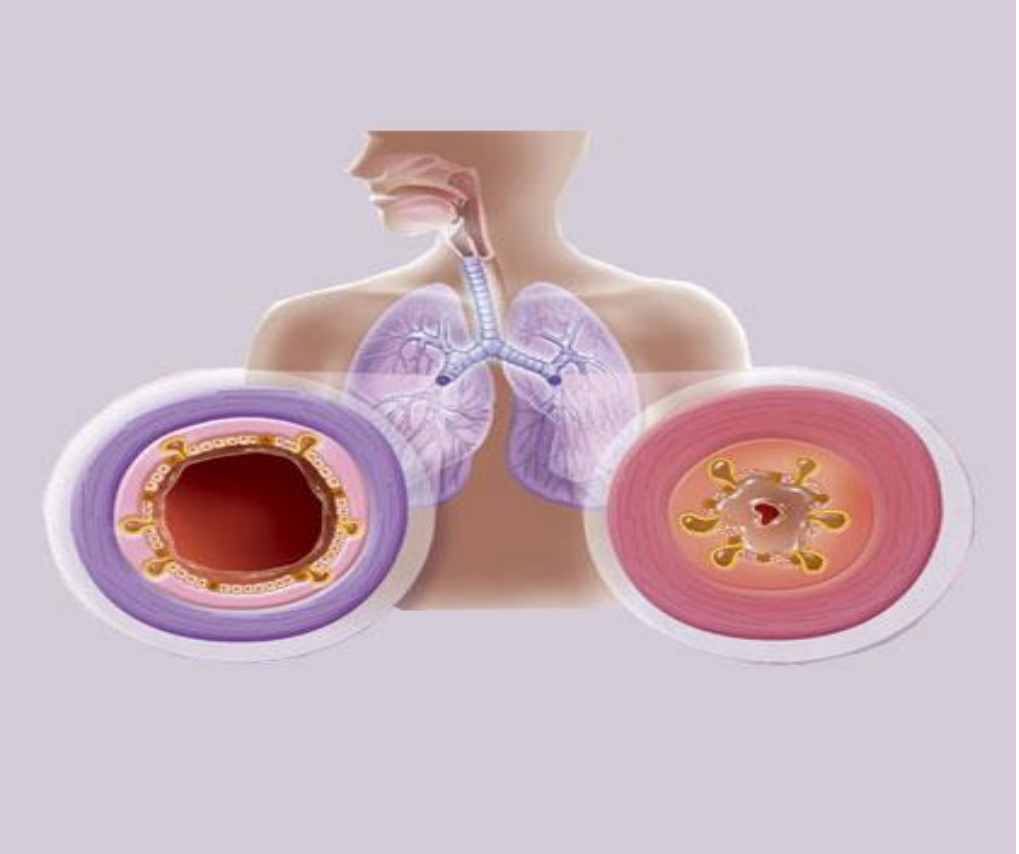
- Symptoms:
  - Sore throat
  - Difficulty swallowing
  - Fever
  - Headache & earache

- Treatment:
  - See the doctor



Bronchitis

- Symptoms:
  - Dry cough
  - Slight fever
  - Chest pain
- Treatment:
  - See the doctor



Worms

- Symptoms:
  - Itchy bottom
  - Restless sleep
  - Teeth grinding in sleep

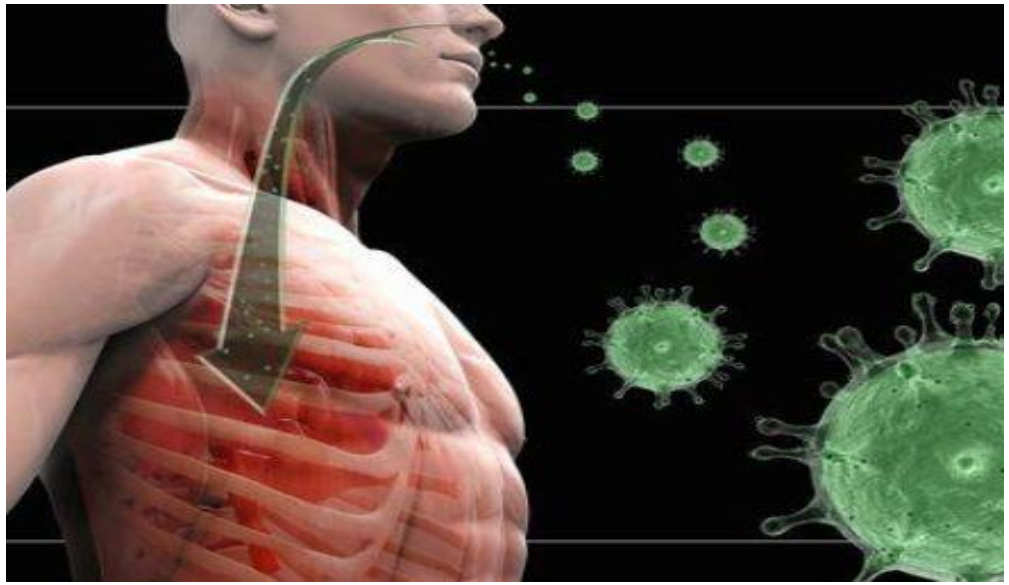
- Treatment:
  - Medication given to all the family

Hand, Foot & Mouth Disease

- This illness is caused by the Coxsackie Virus
- Usually presents with sudden onset of sore throat, fever & greyish lesions on the mouth, fingers, palms & soles of feet & occasionally the genitals
- The incubation period is 3-6 days
- The symptoms usually last a few days, up to 1 week
- Treatment is general management of infectious illness
- Exclusion: until child is well enough to attend nursery

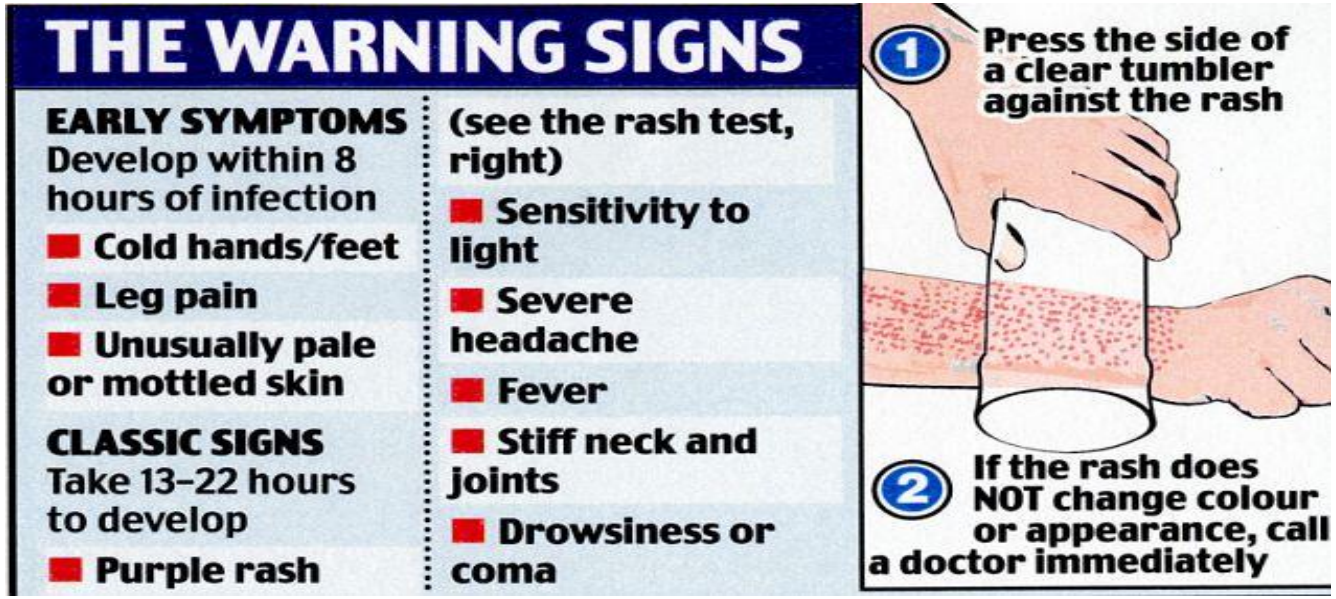
SARs Virus

- Symptoms:
  - High fever
  - Headache
  - Aching body
  - Dry cough



- Treatment:
  - **Urgent hospitalisation**

Meningitis



- **Urgent Hospital treatment**

Ear Infection

- Symptoms:
  - Pulling at an ear
  - Mild fever
  - Irritability
  - Partial hearing loss

- Treatment:
  - Children's Paracetamol
  - See doctor - antibiotics

Chicken Pox

- Symptoms:
  - Group of small raised spots
  - Skin eruptions anywhere
  - Blisters from scabs
  - Mild fever for 2 days
- Treatment:
  - Cold compress
  - Discourage scratching

Measles

- Symptoms:
  - Running nose
  - Harsh hacking cough
  - Sensitive eyes to light
  - White spots in mouth
  - Red spreading rash

- Treatment:
  - Cold compress for eyes
  - Children's Paracetamol

Childcare workers

- The definition of a serious incident from the Education & Care Services National Regulations is:
  Regulation 12: meaning of *serious incident*:

(a) The death of a child:

(i) while being educated & cared for by an education & care service or

(ii) following an incident while being educated & cared for by an education & care service.

(b) Any incident involving serious injury or trauma to, or illness of, a child while being educated & cared for by an education & care service, which:

(i) a reasonable person would consider required urgent medical attention from a registered medical practitioner or

(ii) for which the child attended, or ought reasonably to have attended, a hospital.

e.g. whooping cough, broken limb, anaphylaxis reaction

(c) any incident where the attendance of emergency services at the education & care service premises was sought, or ought reasonably to have been sought

(d) any circumstance where a child being educated & cared for by an education & care service

(i) appears to be missing or cannot be accounted for or

(ii) appears to have been taken or removed from the education & care service premises in a manner that contravenes these regulations or

(iii) is mistakenly locked in or locked out of the education & care service premises or any part of the premises.

You need to notify the regulatory authority within 24 hours of becoming aware of a serious incident.

Prevention- Food Safety

- Health, hygiene & safe food practices National Regulations: Regulations 77, 168
- To minimise risks to children, an education & care service or a family day care educator must implement:
  - Adequate health & hygiene practices
  - Safe practices for handling, preparing & storing food
- The service must also ensure that policies & procedures are in place about these practices
- Centre-based services that prepare & serve food may be required in some jurisdictions to register as a food business or comply with food safety legislation in each state & territory
- Educators should be particularly aware of safety standards for storing & reheating food brought in from home
- The National Health & Medical Research Council (NHMRC) publication, Staying Healthy: Preventing infectious diseases in early childhood education & care services provides further information on recommended health & hygiene practices

Incidents, injury, trauma & illness

- National Law: Section 174 National Regulations: Regulations 85–87, 168, 177–178, 183
  - An approved service must have in place policies & procedures in the event that a child is injured, becomes ill, or suffers a trauma
  - These procedures should be followed & must include the requirement that a parent be notified, as soon as possible & within 24 hours, in the event of an incident, injury, illness or trauma relating to their child (including the death of a child)
  - The National Regulations require that an incident, injury, trauma & illness record be kept, & that the record be accurate & remain confidentially stored until the child is 25 years old
  - Information should be recorded as soon as possible, & within 24 hours after the incident, injury, trauma or illness

Serious incidents

The National Law requires the regulatory authority to be notified of any serious incident at an approved service. A serious incident means:

- The death of a child while attending a service, or following an incident while attending a service.
- Any incident involving serious injury, trauma or illness of a child while being educated & cared for at an education & care service which a reasonable person would consider required urgent medical attention from a registered medical practitioner, or for which the child attended or ought reasonably to have attended a hospital.
- This might include for example, whooping cough, a broken limb or an anaphylactic reaction
- An incident at the service premises where the attendance of emergency services was sought, or should have been sought if a child:
  - appears to be missing or cannot be accounted for
  - appears to have been taken or removed from the service premises in a way that breaches the National Regulations, or
  - is mistakenly locked in or locked out of any part of the service premises.
- 'Medical attention' includes a visit to a registered medical practitioner or attendance at a hospital
- Emergency services' may include ambulance, fire brigade, police & state emergency services
- A serious incident should be documented as an incident, injury, trauma & illness record as soon as possible & within 24 hours of the incident

Infectious diseases National Regulations: Regulations 4, 88

- An approved service must take reasonable steps to prevent the spread of infectious diseases at the service, & ensure that the parent or emergency contact of each child enrolled at the service is notified of the occurrence of an infectious disease as soon as possible
- The service must have policies & procedures in place about dealing with infectious diseases.
- For family day care services, the service need only notify the parents of children being educated & cared for at the residence or venue where there is an occurrence of an infectious disease
- The National Health & Medical Research Council (NHMRC) publication, Staying Healthy: Preventing infectious diseases in early childhood education & care services provides detailed information on infections & diseases which are required to be notified to the local public health department.
- It also provides information about exclusion periods for infectious diseases.
- Notifying all families of the occurrence of an infectious disease should be done in a manner that is not prejudicial to the rights of any child or staff member. For example, 'There is a case of chicken pox in the toddler room' rather than 'John has chicken pox'
- This might be done through a notice at the entrance to the service.
- Cases of some infectious diseases are required to be notified to the local public health department.
- Public health staff can provide valuable advice, support & resources to help manage outbreaks of illness, such as diarrhoea .
- Services should also notify families of exclusion periods for infectious conditions, such as in a policy document, through a poster displayed in the centre or in a family handbook.

First Aid Kits National Regulations: Regulations 89, 168

- A centre-based service must provide an appropriate number of suitable first aid kits that are easily recognisable & readily accessible to adults
- The service must have policies & procedures about the administration of first aid to children being educated & cared for by the service
- A family day care educator must provide a suitable first aid kit at the residence or family day care venue that is easily recognisable & readily accessible to adults
- First aid kits should also be taken when leaving the service premises for excursions, routine outings or emergency evacuations
- A belt bag is one way of taking a modified First Aid kit on an excursion or to the outdoor play space
- A Risk assessment can assist in determining First Aid kit requirements
- Services might use data gathered from their incident, injury, trauma & illness records to determine the appropriate locations & contents for their First Aid kits

Medical conditions

National Regulations: Regulations 90–91

- An approved service must have a policy for managing medical conditions which sets out practices in relation to the following:
  - the management of medical conditions
  - if a child enrolled has a specific health care need, allergy or relevant medical condition, procedures requiring parents to provide a medical management plan
  - requiring the development of a risk minimisation plan in consultation with the child's parents

  requiring the development of a communications plan for staff members & parents. Medical conditions that must be outlined in the service policy include asthma, diabetes, or a diagnosis that a child is at risk of anaphylaxis.
- Staff members & volunteers must be informed about the practices to be followed
- If a child enrolled at the service has a specific health care need, allergy or other relevant medical condition, parents must be provided with a copy of the policy
- Where a child has been diagnosed as at risk of anaphylaxis, a notice stating this must be displayed at the service

Administration of medication National Law:

Section 167 (protection from harm & hazards) National Regulations: Regulations 92–96, 178, 181–184

- Medication (including prescription, over-the-counter & homeopathic medications) must not be administered to a child at a service without authorisation by a parent or person with the authority to consent to administration of medical attention to the child
- In the case of an emergency, it is acceptable to obtain verbal consent from a parent, or a registered medical practitioner or medical emergency services if the child's parent cannot be contacted
- In the case of an anaphylaxis or asthma emergency, medication may be administered to a child without authorisation
- In this circumstance, the child's parent & emergency services must be contacted as soon as possible

The medication must be administered:

- from its original container before the expiry or use-by date
- in accordance with any instructions attached to the medication or provided by a registered medical practitioner
- for prescribed medications, from a container that bears the original label with the name of the child to whom it is prescribed
- with a second person checking the dosage of the medication & witnessing its administration
- details of the administration must be recorded in the medication record
- In the case of a family day care service, or a service that is permitted to have only one educator, a second person is not required to check the dosage & witness the administration of the medication
- The National Regulations set out requirements for confidentiality & the storage of medication records
- A child over preschool age may self-administer medication under the following circumstances:
  - written authorisation is provided by a person with the authority to consent to the administration of medication
  - the medical conditions policy of the service includes practices for self-administration of medication.

Childcare Staff First Aid Training

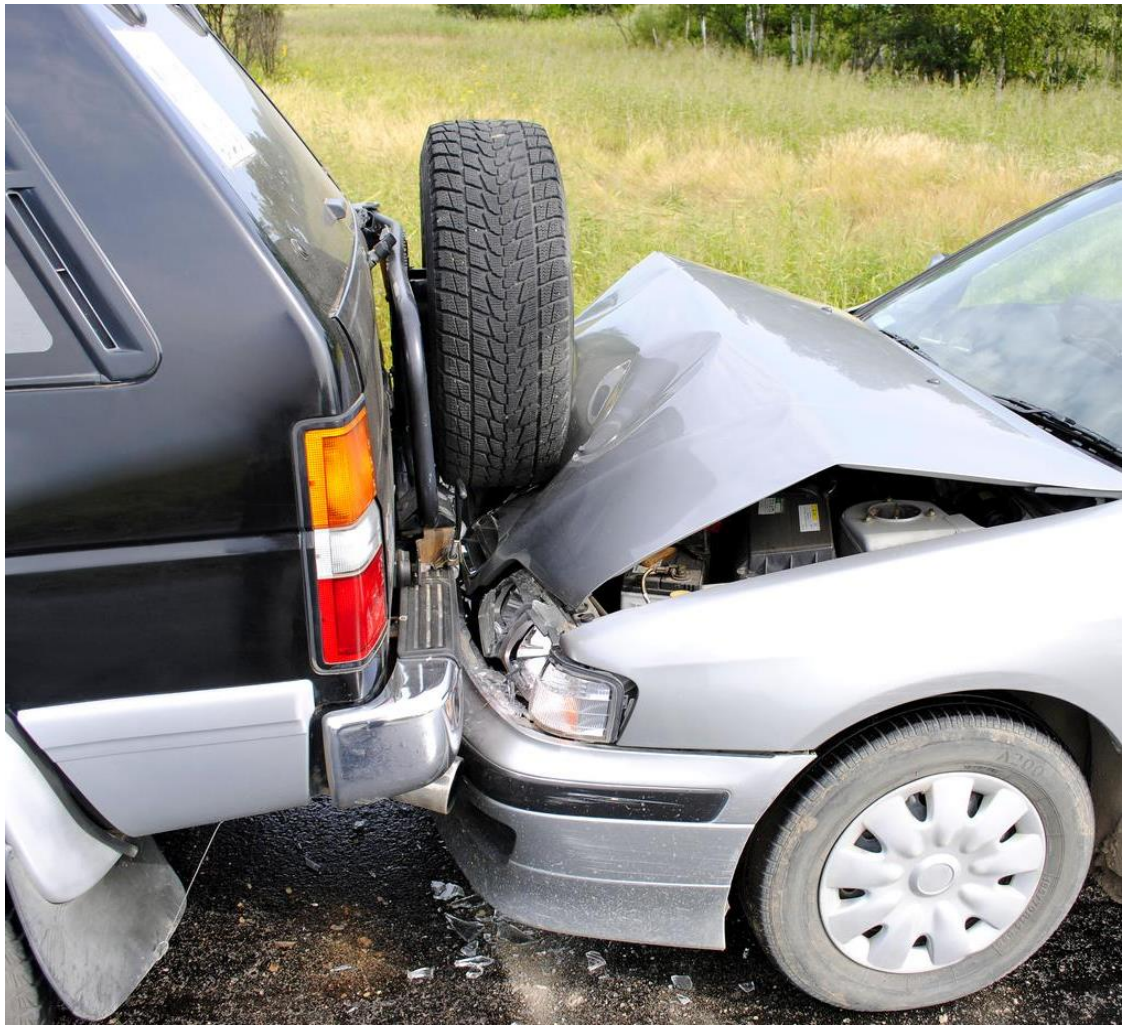
- The First Aid, anaphylaxis management training & emergency asthma management training required must be updated at least every three years from the date of completion

- The First Aid certificate may specify additional requirements to keep it valid. For example, if your First Aid certificate requires the CPR component to be completed every 12 months to keep it current, you will need to comply.

Triage

- Is the term used to work out priorities in dealing with multiple casualties
- We see it at hospitals when we are waiting & they are sorting out most urgent care to less urgent care
- For normal First Aiders adopt a do the most good for the most amount of casualties & make use of others around to help as many people as possible

Motor Vehicle Accidents



- Call for rescue services
- Make the scene safe
- Turn off cars ignition/ remove keys
- Stay aware of potential hazards with other vehicles & fuel leaks
- Position your vehicle safely with hazard light on

Motor Vehicle Accidents

- Don’t attempt to move unless there is immediate danger
- Maintaining the airway by supporting the head with back tilt
- Control bleeding
- Immobilise fractures
- Provide re-assurance & make as comfortable as possible

  Note changes & timelines if possible

Motor Vehicle Accidents

- Important information to 000
- Location use landmarks & common sense approach
- Type of accident
- Number of people
- What rescue services are required

Motor Cycle accidents

- Extreme care with helmets
- ONLY REMOVE IF:
  - Casualty is unconscious
  - They are Vomiting
  - Airway is at risk
  - 2 people if possible to remove
  - 1 to support the head & neck
  - 1 to remove slowly
  - Place a support under head