



सत्यमेव जयते

**DEPARTMENT OF**  
PERSONAL & TRAINING(DoPT)



**Dr.Marri Channareddy**  
**Human Resource Development**  
Institute of Telangana



**TRIBAL WELFARE DEPARTMENT**

**GOVERNMENT OF INDIA, DEPARTMENT OF PERSONNEL & TRAINING SPONSORED  
TRAINING FOR ALL: INTENSIVE TRAINING PROGRAMME (ITP) TO THE FUNCTIONARIES  
OF TRIBAL WELFARE DEPARTMENT, GOVERNMENT OF TELANGANA**

**TWO DAYS TRAINING COURSE  
TO  
PART TIME HEALTH COORDINATORS /  
ANMS/STAFF NURSE OF TW INSTITUTIONS**

# INTENSIVE TRAINING PROGRAM (ITP-TWD)

## **TWO DAYS TRAINING COURSE TO PART TIME HEALTH COORDINATORS / ANMS/STAFF NURSE OF TW INSTITUTIONS**

Dr. Marri Chenna Reddy Human Resource Development Institute of Telangana  
&  
Tribal Welfare Department, Telangana State

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# 1. COMMON AILMENTS AMONG STUDENTS

## HEADACHE

-It is one of the most common ailment by which everybody suffers on one or the other occasions.

-It may be simply due to fatigue, exhaustion, worry or some diseases.

### Causes:

Exhaustion, Anxiety or worries, sleeplessness, constipation, Defective vision, Dental condition, Common cold, Nasal or Paranasal sinus infection, febrile illness, Hypertension, Hypotension, Refractive errors, Brain infections or tumours, Migraine, Glaucoma.

### Symptoms and signs:

-Pain anywhere in head which may be constant, throbbing or intermittent.

### Treatment:

-Place cold compress on the head.

-Analgin /Disprin /Paracetamol: 1 to 2 tablet along with milk or water.

-Find out the cause and treat accordingly or shift the casualty to hospital.

## MIGRAINE

-No cause can be found.

-Headache may follow lack of food, noise, heat, travelling or emotional disturbances.

### Symptoms and signs:

- Vision can precede headache.

-Nausea and vomiting.

-Intense throbbing headache.

-He cannot tolerate light or noise.

### Treatment:

-Pain killers in the form of analgin, disprins.

-Tab migril / vasograin three times a day.

## EARACHE

-This can be very painful

### Causes:

-Boil in the ear.

-Tooth abscess.

-Middle ear infection after tonsillitis.

-Wax in the ear.

-Air travel.

-Under water swimming.

### Symptoms and signs:

-Constant or throbbing pain in the ear.

### Treatment:

-Find out the cause and treat it.

-Analgin/Disprin/Brufen/Proxyvon.

-For wax: Dewax or solwax.

## TOOTHACHE

-Most important cause is dental caries.

**Symptoms and signs:**

- Pain in the teeth or jaws, which may be constant, throbbing or intermittent.
- The pain may be made worse by cold or hot food and drink.

**Treatment:**

- Analgin/Disprin/Brufen/Proxyvon.
- If symptoms persist or if there is fever or swelling around the tooth, consult dental surgeon.

**COMMON COLD AND COUGH****Symptoms and signs:**

- Running nose, Headache, watering of eyes, mild fever.

**Treatment:**

- Tab cosavil/wikoryl 1 tab three times a day.
- Tab vitamin C 500mg per day.
- Tincture benzoin/karvol inhalation.
- Benadryl/Phensedyl 1 table spoon three times a day.
- In children, give syrup phenergan or tixylic one tea spoonful three times a day.

**NECKACHE/BACKACHE****Symptoms and signs:**

- Pain anywhere in neck/back increased by movement.

**Treatment:**

- Apply hot water bottle at neck.
- Tab brufen/voveran 1 tab three times a day.
- Local application of medicream or relaxyl.

**PAIN IN ABDOMEN**

- There are many cause of abdominal pain including ,indigestion, colic, cramp, loose motions, constipation or food poisoning.

**Symptoms and signs:**

- Pain anywhere in the abdomen which may be dull or sharp.
- Constant or intermittent localised or generalised.

**Treatment:**

- Find out the cause and treat it.
- Place the patient in the half sitting position with the head and shoulders supported .Bend the knees and support in this position.
- Place hot water bottle over the affected area.

**Adults**

- Tab Baralgan/Sapsmindon/Spasmoproxyvon.
- Tab Digene.

**Children**

- Baralgan/Spasmindon/Piptal drops.

**DIARRHOEA AND DYSENTERY**

- Watery loose motions are called diarrhoea but if they are associated with blood and mucus then theses are called dysentery.

**Causes:**

- Indigestion.
- Bacterial infection.
- Amoebic dysentery.
- Food poisoning.



**Symptoms and signs:**

-Loose motions, loose motion with blood and mucus, vomiting, fever, malaise, weakness, pain in abdomen.

**Treatment:**

- Tab Sulphaguanidine/Sulphathalazole 4 tab. Start tab every 6 hourly.
- Dependal-M three times a day.
- Tab. Baralgan/Spasmindon.
- Tab.Stemeti/A vomine/Perinorm if there is vomiting.
- Plenty of fluids, rice with curd ,kichidi.
- Avoid chillies and spicy food.
- Maintain proper hygiene and sanitation.
- Protect food from flies.
- Wash hand properly.

**CONSTIPATION**

-Incomplete evacuation of bowel in forty eight hours is constipation.

**Treatment**

- Tab Dulcolax/Pursennid(2tab at bedtime) or liquid paraffin/cremaffin at bed time.
- Adequate fluids , green vegetables, seasonal fruit may avoid constipation.

**FEVER (PYREXIA)**

Fever is when a human's body temperature goes above the normal range of 36–37° Centigrade (98–100° Fahrenheit). It is a common medical sign.

Other terms for a fever include pyrexia and controlled hyperthermia  
Temperature can be measured in the mouth, rectum (anus), under the arm, or inside the ear.

**Causes:**

Almost the most common cause of fever are common infections such as cold and gastroenteritis, other causes include

- Infections of ear ,lung,skin,throat,bladder or kidney.
- Conditions that cause inflammation
- Side effects of drugs
- Autoimmune diseases
- Hormone diseases
- Blood clots etc.

**Symptoms**

- feeling cold when nobody else does
- shivering
- lack of appetite
- dehydration — preventable if the person drinks plenty of fluids
- depression
- hyperalgesia, or increased sensitivity to pain
- lethargy
- problems concentrating
- sleepiness
- sweating

If the fever is high, there may also be extreme irritability, confusion, delirium, and seizures

**Management:**

- If the child has high grade fever >102°F immediately shift the student to nearest hospital and inform command centre.

- If the child has temperature of 99-101°F treat with Paracetamol dosage according to the age
- Monitor the body temperature for every 6<sup>th</sup> hourly and give Paracetamol and tepid sponging
- Dehydration should be corrected by giving ORS and plenty of oral fluids Tepid sponging is mandatory if fever is >102°F
- Do not start antibiotic without Doctor's consultation.

### **VOMITING**

-It occurs due to gastritis , food poisoning or travel sickness.

#### **Treatment:**

- Tab stemeti/Avomine/Perinom.
- Tab Digene.
- Treat the cause.

### **ALLERGY**

A damaging immune response by the body to a substance, especially a particular food, pollen, fur, or dust, to which it has become hypersensitive

#### **Signs and symptoms:**

- Red, itchy rash or raised areas of the skin (weals)
- Red, itchy eyes
- Wheezing or difficulty in breathing
- Swelling of hands, feet and face
- Abdominal pain, vomiting and diarrhoea

#### **First aid management:**

- Assess the severity of the allergic reaction
- History of any known allergy
- Remove the trigger
- Seek medical advice

### **NOSE BLEEDING**

- Tilt the head of the victim forward to allow the blood to drain from the nostril
- Advice the victim not to speak, swallow, cough , spit or sniff
- Clean around his nose Luke warm water
- Cold application as necessary

### **FRACTURE**

A break or crack in the bone is called fracture

#### **Signs and symptoms:**

- Pain and difficulty in moving the leg
- Deformity, swelling and bruising
- Difficulty in moving

#### **First aid management:**

- Stabilize or secure the affected part (splitting the part with hard substance)
- Do not allow the client to eat or drink
- Monitor the bleeding and control the bleeding

### **INSECT BITES**

Insects such as bees, wasps etc cause stings which are very painful.

**SYMPTOMS AND SIGNS:**

- Sharp pain.
- Swelling around the affected area with the central reddened puncture point.
- Sting may be there in the wound.
- Shock.
- Stings in the mouth and throat may cause swelling leading to asphyxia.

**TREATMENT****1. REMOVAL OF STING**

- If the sting has been left embedded in the skin hold tweezers as near to the skin as possible grasp the sting and remove

*DO NOT* – squeeze the poison sac because this will force the remaining poison into the skin

**2. TREATMENT**

- Bee venom is acid and it should be neutralized by application of ammonia, soda or methylene blue.
- Wasp venom is alkaline and it should be neutralized by application of vinegar, or lemon juice.
- To relieve pain and swelling apply cold compress and surgical spirit.

**3. TREATMENT OF INSECT STING INSIDE THE MOUTH OR THROAT.**

- To reduce swelling, give ice to suck. Rinse the mouth with cold water or solution of water and bicarbonate of soda.
  - If breathing becomes difficult, place the casualty in recovery position.
- If required, shift the casualty to hospital.

**SCORPION BITE****Symptoms and signs**

- Itching swelling.
- **Burning** pain.
- Increased sensation or numbness near the site of bite.
- Restlessness, lacrimation, salivation.
- Nausea, vomiting.
- Profuse sweating, 4-6 hours after bite.

**TREATMENT**

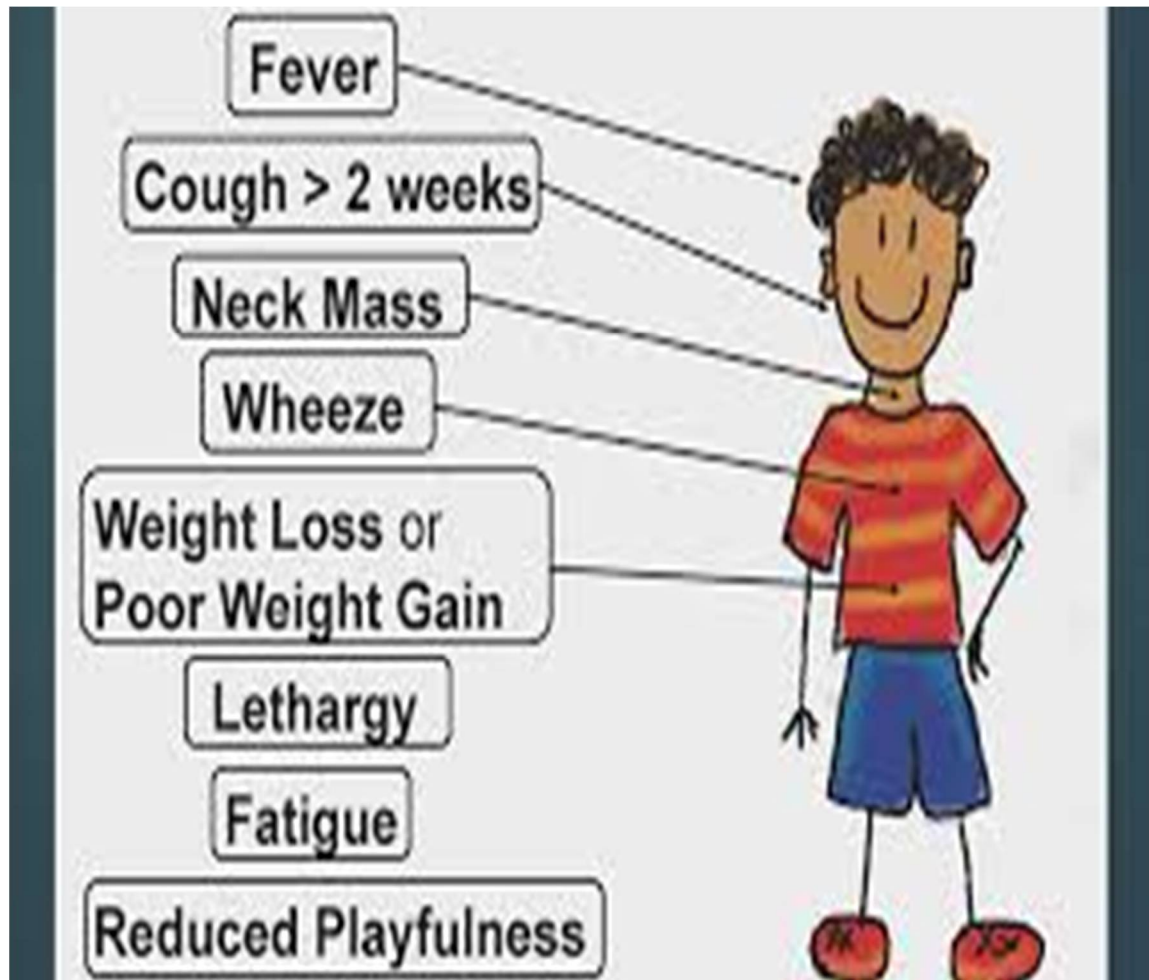
- If the sting is on the extremity, apply a tourniquet proximal to the site of sting and release it every 5 to 10 minutes for a few seconds to prevent gangrene formation.
  - Apply ice packs on the region to slow down the absorption of poison. Apply fresh potassium permanganate solution on the wound .it stops the pain immediately.
- Shift the patient to hospital.

**TUBERCULOSIS**

If the child has persistent productive cough for more than 2 weeks along with the weight loss, fever the child is suspected of TB.

**PROTOCOLS FOR MONITORING TB CASES BY THE HEALTH SUPERVISOR:**

1. The ANM should take the child to the nearby hospital if the child complains of productive cough along with weight loss and fever.
2. TB disease is treated by taking several anti-TB medicines for 6-9 months. The ANM should take the special care of the child while taking medicines. If drugs are not taken regularly, the bacteria that are still alive may become resistant to those drugs.



#### PREVENTION OF TB TO THE OTHER CHILDS:

1. Vaccination: By giving BCG vaccination.
2. Always cover the mouth child's mouth when the child coughs are sneeze. Seal the tissue in a plastic bag then throw it away.
3. Wash the child's hand after coughing or sneezing.
4. Don't visit other people's house and don't invite them to visit you.
5. Stay at home doesn't go to the school as it can spread to other child's.
6. Use a fan or open windows to move around fresh air.

**COMMON MEDICAL EMERGENCIES AMONG STUDENTS****FAINTING**

- It is brief loss of consciousness (generally not more than few minutes duration) and caused by temporary reduction in the flow of blood to the brain.
- It has got rapid and full recovery.

**Causes**

- Nervous reaction to pain or fright.
- Due to emotional upset, exhaustion or lack of food.
- After long periods of physical inactivity. In this condition large volume of blood collects in lower part of body reducing the total amount of blood available in the circulation.

**Symptoms and signs:**

- Same as that of shock.
- Slow and weak pulse.
- Casualty looks pale.
- Giddiness.

**Treatment:**

- Allow She/He to sit down and help him to lean forward with the head between the knees and advise him to take deep breaths.
- If in parade or standing in crowd, advise him to flex the leg muscles and toes to aid circulation.
- If he is unconscious but breathing normally, lay him down with legs raised or place in recovery position. Maintain an open airway.
- Loosen any tight clothing at the neck, chest and waist to assist circulation and breathing.
- Keep him in the open space or in the shade to allow fresh air. Fan air on the face.
- Look for and treat any injury sustained on falling.
- Check breathing rate, pulse and level of consciousness.
- Reassure him. Gradually raise him to sitting position.
- Do not give anything by mouth till consciousness is regained.
- Shift him to hospital.

**UNCONSCIOUS PATIENT**

- Unconsciousness is due to interference with the functions of the brain.
- Seriousness can be determined by testing the casualty's response to stimuli such as sound or touch.

**Symptoms and signs:**

Levels of Responsiveness

Stage 1: He may respond normally to questions and conversations.

Stage 2: He answers direct questions.

Stage 3: He responds vaguely to questions.

Stage 4: He obeys commands.

Stage 5: He responds to pain only.

Stage 6: He does not respond at all.

**Treatment:**

- Maintain the airway open.
- Loosen any tight clothing around neck, chest and waist.
- If breathing stops, start artificial ventilation immediately.
- Examine the patient for head injury or other causes of unconsciousness.
- Put the patient in lateral position.
- Manage serious wounds and fractures.
- If there is spinal injury do not move the patient.
- Check pulse, breathing and level of responsiveness.
- If he recovers consciousness, reassure him.
- Do not give anything by mouth.
- Do not leave him unattended.

**EPILEPSY**

- Epilepsy occurs due to brief disruption in the normal electricity activity of the brain.
- Epileptic fits may vary from momentary loss of attention without consciousness to muscular spasm and convulsions.
- Epileptic attacks occur suddenly and unexpectedly.

**Symptoms and signs:**

- The victim may have an aura.
- Loss of unconsciousness follows aura with cry.
- He falls to the ground and becomes rigid for a few seconds and breathing may stop. Mouth and lips turn blue due to cyanosis and there will be congestion of face and in the neck.
- Within seconds, the casualty will manifest an arched back and alternating contraction and relaxation of movements in all extremities.
- Breathing may become difficult or noisy through the clenched jaw, froth may appear around the mouth, and blood stains if lips or tongue have been bitten. There may be loss of control of bladder and sometimes the bowel.
- Gradually the clinic phase subsides and the muscles will relax. The attack usually lasts from about 30seconds to five minutes. This is followed by deep sleep with gradually recovery to the state of transient confusion, fatigue, muscular soreness and headache. The She/he should be allowed to rest.

**Treatment:**

- Prevent Her/Him from falling and lay down gently. Protect him from injury.
- Clear the space around him. Maintain airway. Loosen the clothing.
- When the convulsions stop, place him in recovery position(lateral position).
- Inform the doctor or shift the patient to hospital for treatment.
- Allow him to rest,
- Reassure the victim.
- Do not move the patient unless the position is in danger.
- Do not put anything in the mouth or try to open.
- Do not try or wake him.
- Do not give anything to drink.

**STATUS EPILEPTICUS**

- In this condition, the casualty passes from seizure to seizure without gaining consciousness again.
- This one is emergency.

**ANAPHYLACTIC SHOCK**

(SEVERE ALLERGIC REACTIONS)

This is massive allergic reaction, which develops within a few seconds or minutes of an infection of a drug or insect bite or eating some allergen to which the casualty is sensitive i.e. penicillin.

**SYMPTOMS AND SIGNS:**

- Symptoms and signs of shock
- Nausea and vomiting.
- Tightening of chest
- Difficulty in breathing, wheezing, gasping for air.
- Sneezing.
- Swelling around the eyes.
- Rapid pulse.
- Unconsciousness.

**TREATMENT**

- Maintain open airway.
- Place in recovery position.
- Resuscitation.
- If breathing and heart beat stop, begin CPR immediately.

Shift the patient to hospital immediately.

**SNAKE BITE**

- All snake bites are not fatal.
- Only a small quantity of venom may be fatal.
- Most people die from fear and venom is not the point of consideration.

**SYMPTOMS AND SIGNS**

- Pain and numbness at the bite.
- Drowsiness.
- Burning pain at the site.
- Swelling.
- Dimness of vision.
- Difficulty in breathing and speech.
- Area becomes bluish purple after bite in twelve hours.
- Dribbling of saliva, paralysis.
- Convulsions, coma.

**DIAGNOSIS**

- Site may show one or more punctures, a small abrasion and perhaps a linear laceration.
- In non-poisonous snakes bite semi-circular row of teeth marks may be seen.
- Local swelling appearing within few minutes after bite is a sign of poisonous snake bite.
- Respiratory symptoms.
- Paralysis.

**TREATMENT**

- Lay the patient down. Give him complete rest.
- Calm and reassure him.
- Do not make him to walk.
- Apply a tourniquet immediately around a single boned portion of the limb between the bite and the heart, and it should be loosened for a few seconds at a regular interval of about ten minutes.
- Immobilize the affected limb and gently wash the wound with normal saline.
- Ice packs can be applied on the wound.
- Excision of the bitten area is a dubious practice, particularly if the area is on a limb.
- Sucking the poison from the site is controversial practice.
- Treat shock.
- Resuscitation, if there is difficulty in breathing.
- Shift the patient to hospital immediately.

Take the killed snake, if available for identification. This will help the doctors for proper management.

**CHOCKING**

Chocking is a life-threatening medical emergency characterized by the blockage of air passage into the lungs secondary to the inhalation or ingestion of food or another object

***Signs and symptoms:***

- Inability to breathe or talk
- Blue skin
- Cough
- Wheezing

***First aid management:***

- Encourage to cough
- Abdominal thrush
- Back blow
- Loss of consciousness open the airway and check breathing

**DROWNING**

Drowning cause breathing impairment as a result of submersion or immersion in a liquid.

***Signs and symptoms:***

Respiratory distress

Shallow breathing

Altered level of consciousness

Cyanosis

Coughing

***First aid management:***

Check for response, open airway, check for breathing

No response start CPR

If the client is breathing cover him/her with warm clothes or blankets



**ELECTRICAL INJURIES**

- If any part of the body comes in contact with a live wire, which is exposed and not covered by insulator electric shock occurs
- In house, the blowing out of switches or fuses or faulty electrical connections can cause such injury.
- The injury may be quite mild or so severe as to cause immediate death.
- Electrical shock is produced, when an electric current passes through the human body which is in contact with earth. It passes even more quickly, if the part is wet.
- In wet conditions even lower voltage may be dangerous. A very strong current passing to earth through lower limbs may be less dangerous than a weaker current passing through the chest especially when it enters through the hands and arms.

**SYMPTOMS AND SIGNS**

- Fatal paralysis of heart.
- There may be sudden stoppage of breathing due to paralysis of muscles used in breathing.
- Heart may continue to beat while breathing has stopped. There may be blueness of the face.
- There may be superficial or deep burns.

**TREATMENT**

Intelligent and prompt action is required. If the first aider is not caution, he may also receive severe electric shock or even die along with the casualty.

If the casualty is still in contact with the conductor, switch off the current. If the switch is not be found, remove the plug, or cut off the current by breaking the wire. Before cutting off the current, ensure that you stand on a dry piece of wooden board. Do not use scissors or knife.

**PRECAUTIONS**

1. When the current is low voltage the first aider should stand on an insulated material which is dry. (insulating materials are rubber – soled shoes, wooden planks or piles of newspaper). Rubber gloves, if available, should be worn. If not, dry coat, cap, or other clothing may be used. Folded newspaper also gives protection.
2. When the current is of a very high voltage as in the case of overhead (high tension) lines, there is greater danger. The casualty may not be in actual contact with the wire as the current can pass through the gap (causing an arc). The first aider in such circumstances should keep as far away as possible from the electric wires. (the casualty is to be dragged out by means of a non conducting material. A walking stick, dry bamboo pole, wooden plank or a dry rope is to be used).
3. If the casualty is not breathing normally, or heart has stopped beating, give artificial respiration and external cardiac massage for a long time.
4. Treat for shock.
5. Treat for burns, if any.
6. Transfer to a hospital, or seek the help of a medical practitioner, who is nearest.
7. Even when the casualty has recovered fairly well after first aid is given he must be examined by a medical specialist because electric injuries are liable to relapse.

**ELECTRICAL BURNS**

- Burn may occur, when electricity of a sufficiently high current and voltage passes through the body.
- Much damage occurs at point of entry but at exit only small burns may be visible, but damage to the underlying tissues may be considerable.
- Electrical shock can affect both breathing a heart action

**SYMPTOMS AND SIGNS**

- Redness swelling charring of skin at both the entry and exit points.
- Unconsciousness.
- Breathing heart beat may have stopped.
- Symptoms and signs of shock.

**TREATMENT**

- Separate the casualty from the source of injury.
- Place a sterile dressing over the burn.
- Treat shock.
- Start resuscitation, if breathing and heart beat stop.
- If casualty becomes unconscious but is breathing normally place in recovery position.
- Shift him to hospital on stretcher.

DO NOT – Apply lotions or ointments.

DO NOT – Break blisters, remove any loose skin or interfere in injured area.

**KIDNEY EMERGENCY****1. ACUTE RENAL FAILURE**

In this condition passage of urine from the kidney is reduced rapidly.

**CAUSES**

- Infection of kidney
- Drugs
- Haemorrhage, dehydration, shock
- Cardiac failure
- Septicaemia
- Hypertension
- Haemolysis
- Obstruction due to stones

**SYMPTOMS AND SIGNS**

1. OLIGURIC PHASE: Amount of urine decreases. Uraemic symptoms like anorexia, nausea, vomiting, bleeding from intestine, lethargy, stupor or confusion may develop
2. DIURETIC PHASE: increase in the volume of urine. It indicates the beginning of recovery. This is progressive improvement.
3. RECOVERY PHASE: There is progressive improvement.

**TREATMENT**

1. Shift the patient to hospital immediately
2. Retention of urine :  
This condition occurs, when patient is unable to pass urine and it accumulates in bladder.

**CAUSES**

- Infections of urinary tract.
- Obstruction of urinary tract.
- Enlargement of prostate.
- Stone in urethra.

**SYMPTOMS AND SIGNS**

- Pain in lower abdomen
- Severe agony and discomfort
- Swelling in lower abdomen

**TREATMENT**

- Reassure the patient
- Ask him to relax
- Hot fomentation in lower abdomen.
- Shift him to hospital.

**POISONING**

Poisons are the harmful substances and when sufficient doses are taken may kill a person.

They may be consumed

- Accidentally (by mistake or by ignorance)
- For suicidal purpose.
- Intentionally for killing enemies

**ROUTES OF TAKING POISONS**

- Eating or drinking poisonous substances by mouth.
- Inhaling household or industrial gases, chemical vapours, or fumes from fire, and exhaust by lungs.
- By injection into the skin as a result of bites from some animals, insects, snakes or by hypodermics syringes.
- Absorption through the skin by contact with poisonous sprays such as pesticides and insecticides.

**MECHANISM OF ACTION OF POISON**

- Swallowed (ingested) poisons, act directly on the food passages resulting in vomiting, pain and diarrhea.
- Corrosive poisons may severely burn the lips, mouth, gullet and stomach thus causing intense pain.
- Fumes and gases cause choking which may result in difficulty of breathing and unconsciousness.
- Some poisons work in the blood stream, central nervous system and prevent breathing, heart action, and other vital life processes.
- Some poisons act by displacing the oxygen in the blood and preventing its distribution to the tissues.

**GENERAL SYMPTOMS AND SIGNS**

There vary often depending on the nature of the poison and the method of entry into the body.

- General information from casualty or an onlooker suggesting contract with a poison
- See for the container having poison or poisonous plant.

- Casualty may be delirious convulsions without previous history of such conditions
- Symptoms and signs of asphyxia.
- Unconsciousness
- Vomiting or diarrhoea
- Burns on lips, mouth after contact with corrosive poisons

### TREATMENT

1. Patient is to be removed from the offending agent like gaseous atmosphere.
2. Collect information from the surroundings or persons available there, to doctor.
3. Preserve any suspecting material like a bottle containing pills or liquid for information to the treating doctor.
4. If the person has vomited, preserve the vomited material also which can give some clues about the type of poison ingested
5. If the person is conscious and there are no burns on lips of mouth then induce vomiting and preserve vomited material. Vomiting can be induced by fluids giving plenty of fluids, while of an egg or milk and by touching the fauces (inside the mouth).
6. If the lips or mouth show signs of burning, cool them by giving the casualty water or milk to drink. Do not induce vomiting
7. If the casualty is unconscious but breathing normally, place in the recovery position.
8. If breathing and heart beat stop, begin resuscitation immediately.

Shift to hospital immediately

### CHRONIC DISEASES/CONDITIONS/DEFICIENCIES AMONG STUDENTS.

If any disease/condition/deficiency has listed more than 3 months , it is consider to be chronic illness

#### Factors

- Hereditary.
- Life style (stress ,diet , exercise).

#### Role of ANM in management of chronic diseased students.

ANM should maintain complete details of children suffering with chronic disease like ,

- Prescription of the child suffering with chronic disease.
- Complete details of existing treatment.
- Duration of the treatment.
- Past and family history.
- Residential address and two contact numbers.
- Maintaining day to day register containing their medication schedule.
- Frequently visit general practitioner , Followed by diagnostics tests, pharmaceutical prescriptions , consultation with specialist if necessary .
- Updating health command centre to know the outcome/prognosis.

### COUNSELLING THE STUDENT

- To develops self esteem from chronic illness.
- As these children are at risk of developing associated emotional problems.
- To take good personal hygiene.
- Accept the limitations as well as celebrating their strengths.
- Ensure and guide them to know the importance of having their medicines in time.
- Let them know the importance of restricted diet related to their diseases

The below are the few chronic diseases and their management.

### **HYPOTHYROIDISM**

- Hypothyroidism is when the thyroid gland does not produce enough thyroid hormones to meet the needs of the body.
- The thyroid is underactive.
- The opposite Hyperthyroidism, where the thyroid produces too much thyroid hormone.
- The thyroid gland is found in the front of the neck below the larynx, or voice box, and has two lobes, one on each side of the windpipe.
- It is an endocrine gland, made up of special cells that make hormones.
- The production of thyroid hormones is regulated by thyroid-stimulating hormone (TSH), which is made by the pituitary gland.
- This, in turn, is regulated by the hypothalamus, a region of the brain. TSH ensures that enough thyroid hormones are made to meet the needs of the body.
- Symptoms of hypothyroidism commonly include, but are not limited to:
  - fatigue
  - weight gain
  - cold intolerance
  - slowed heart rate, movements, and speech
  - joint and muscle pain, cramps, and weakness
  - constipation
  - dry skin
  - thin, brittle hair or fingernails
  - decreased sweating
  - pins and needles
  - heavy periods, or menorrhagia
  - weakness
  - high cholesterol
  - puffy face, feet, and hands
  - insomnia
  - balance and co-ordination issues
  - loss of libido
  - recurrent urinary and respiratory tract infections
  - anemia
  - depression

**If left untreated, the following symptoms can manifest:**

- hoarseness
- puffiness in the face
- thinned or missing eyebrows
- slow heart rate
- hearing loss

**If it develops in children or teenagers, the signs and symptoms are generally the same as adults.**

- However, they may also experience:
  - poor growth
  - delayed development of teeth
  - poor mental development
  - delayed puberty
- Hypothyroidism develops slowly. Symptoms may go unnoticed for a long time, and they may be vague and general.

- Symptoms vary a great deal between individuals, and they are shared by other conditions. The only way to obtain a concrete diagnosis is through a blood test.

### **Management**

1. Treatment for hypothyroidism focuses on supplementing the thyroid hormone.
2. Daily tablet to be taken without fail in the presence of ANM.
3. Use of iodised Salt in all diets.
4. Avoid Cauliflower and Cabbage.
5. Complete Thyroid profile to be performed every 8 weeks and adjust dosage accordingly with the advice of the Doctor.

### **Epilepsy**

(This information is given in medical emergency material).

### **Asthma**

- Short rapid irregular breathing(SOB).
- Asthma is a condition in which your airways narrow and swell and produce extra mucus.
- This can make breathing difficult and trigger coughing, wheezing and shortness of breath.
- For some, asthma is a minor problem , it can be a major problem that interferes with daily activities and may lead to a life-threatening asthma attack.

#### **Asthma signs and symptoms include:**

- Shortness of breath
- Chest tightness or pain
- Trouble sleeping caused by shortness of breath, coughing or wheezing
- A whistling or wheezing sound when exhaling (wheezing is a common sign of asthma in children)
- Coughing or wheezing attacks that are worsened by a respiratory virus, such as a cold or the flu

#### **Signs that your asthma is probably worsening include:**

- Asthma signs and symptoms that are more frequent and bothersome
- Increasing difficulty breathing (measurable with a peak flow meter, a device used to check how well your lungs are working)
- The need to use a quick-relief inhaler more ofte

#### **Signs of an asthma emergency include:**

- Rapid worsening of shortness of breath or wheezing
- No improvement even after using a quick-relief inhaler, such as albuterol
- Shortness of breath when you are doing minimal physical activity

#### **Asthma trigger**

- Airborne substances.
- Respiratory infections, such as the common cold
- Physical activity (exercise-induced asthma)
- Cold air
- Air pollutants and irritants, such as smoke
- Certain medications.
- Strong emotions and stress.

#### **Complications:**

- Signs and symptoms that interfere with sleep, work or recreational activities

- Permanent narrowing of the bronchial tubes (airway remodeling) that affects how well you can breathe.
- Side effects from long-term use of some medications used to stabilize severe asthma
- Proper treatment makes a big difference in preventing both short-term and long-term complications caused by asthma.

#### **Prevention:**

- Identify and avoid asthma triggers.
- Monitor breathing.
- Identify and treat attacks early.
- Take your medication as prescribed.
- Pay attention to increasing quick-relief inhaler use.
- Avoid, cold foods, drinks, ice creams and any food irritants, dust, pollens, smoke, allergens.
- Do not expose the patient with asthma to cold weather and do not allow cold water baths.
- Restrict heavy cardio exercises such as running/climbing stairs etc.

#### **Protocols to be followed during an attack of asthma:**

1. Take the student to an area of fresh air away from crowd.
2. Give nebulisation with Asthalin ,Budicord.
3. Shift patient immediately to hospital.

#### **ANEMIA**

- Anemia is a condition in which you lack enough healthy red blood cells to carry adequate oxygen to your body's tissues.
- There are many forms of anemia, each with its own cause.
- Anemia can be temporary or long term, and it can range from mild to severe. Sometimes it can be a warning sign of serious illness.
- Treatment for anemia range from taking supplements to undergoing medical procedures. You might be able to prevent some types of anemia by eating a healthy, varied diet.

#### **Types**

1. Aplastic anemia
2. Iron deficiency anemia
3. Sickle cell anemia
4. Thalassemia
5. Vitamin deficiency anemia

#### **Symptoms**

- Anemia signs and symptoms vary depending on the cause.
- Depending on the causes of your anemia, you might have no symptoms. Signs and symptoms, if they do occur, might include:
  - Fatigue
  - Weakness
  - Pale or yellowish skin
  - Irregular heartbeats
  - Shortness of breath
  - Dizziness or lightheadedness
  - Chest pain
  - Cold hands and feet
  - Headaches
- At first, anemia can be so mild that you don't notice

## Causes

Anemia occurs when your blood doesn't have enough red blood cells.

This can happen if:

- Your body doesn't make enough red blood cells
- Bleeding causes you to lose red blood cells more quickly than they can be replaced
- Your body destroys red blood cells

## Different types of anemia have different causes. They include:

- Iron deficiency anemia. This most common type of anemia is caused by a shortage of iron in your body. Your bone marrow needs iron to make haemoglobin. Without adequate iron, your body can't produce enough haemoglobin for red blood cells.
- Vitamin deficiency anemia. Besides iron, your body needs folate and vitamin B-12 to produce enough healthy red blood cells. A diet lacking in these and other key nutrients can cause decreased red blood cell production.
- Also, some people who consume enough B-12 aren't able to absorb the vitamin. This can lead to vitamin deficiency anemia, also known as pernicious anemia.
- Anemia of inflammation. Certain diseases — such as cancer, HIV/AIDS, rheumatoid arthritis, kidney disease, Crohn's disease and other acute or chronic inflammatory diseases — can interfere with the production of red blood cells.
- Aplastic anemia. This rare, life-threatening anemia occurs when your body doesn't produce enough red blood cells. Causes of aplastic anemia include infections, certain medicines, autoimmune diseases and exposure to toxic chemicals.
- Anemias associated with bone marrow disease. A variety of diseases, such as leukaemia and myelofibrosis, can cause anemia by affecting blood production in your bone marrow. The effects of these types of cancer and cancer-like disorders vary from mild to life-threatening.
- Hemolytic anemias. This group of anemias develops when red blood cells are destroyed faster than bone marrow can replace them. Certain blood diseases increase red blood cell destruction. You can inherit a hemolytic anemia, or you can develop it later in life.
- Sickle cell anemia. This inherited and sometimes serious condition is a hemolytic anemia. It's caused by a defective form of hemoglobin that forces red blood cells to assume an abnormal crescent (sickle) shape. These irregular blood cells die prematurely, resulting in a chronic shortage of red blood cells.

## Complications

Left untreated, anemia can cause many health problems, such as:

- Severe fatigue.
- Heart problems. Anemia can lead to a rapid or irregular heartbeat (arrhythmia). When you're anemic your heart must pump more blood to make up for the lack of oxygen in the blood. This can lead to an enlarged heart or heart failure.
- Death. Some inherited anemias, such as sickle cell anemia, can lead to life-threatening complications. Losing a lot of blood quickly results in acute, severe anemia and can be fatal



**Role of ANM in management of ANEMIC Students:**

- Identifying students with Anemia.
- Regular Hb% test and informing same to Health command center and following there instructions.
- Ensuring to provide special diet.
- Monitoring the prognosis of the Anemic students.

**Prevention**

Many types of anemia can't be prevented. But you can avoid iron deficiency anemia and vitamin deficiency anemias by eating a diet that includes a variety of vitamins and minerals, including:

- Iron. Iron-rich foods .
- Folate. This nutrient, and its synthetic form folic acid, can be found in fruits and fruit juices, dark green leafy vegetables, green peas, kidney beans, peanuts, and enriched grain products, such as bread, cereal, pasta and rice.
- Vitamin B-12. Foods rich in vitamin B-12.
- Vitamin C. Foods rich in vitamin C. These also help increase iron absorption.

## 2. MANAGEMENT OF CHRONIC DISEASES.

If any disease/condition/deficiency has listed more than 3 months, it is considered to be chronic illness

Factors

- Hereditary.
- Life style (stress, diet, exercise).

### **Role of ANM in management of chronic diseased students.**

ANM should maintain complete details of children suffering with chronic disease like,

- Prescription of the child suffering with chronic disease.
- Complete details of existing treatment.
- Duration of the treatment.
- Past and family history.
- Residential address and two contact numbers.
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- Frequently visit general practitioner, Followed by diagnostics tests, pharmaceutical prescriptions, consultation with specialist if necessary.
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- slowed heart rate, movements, and speech
- joint and muscle pain, cramps, and weakness
- constipation
- dry skin
- thin, brittle hair or fingernails

- decreased sweating
- pins and needles
- heavy periods, or menorrhagia
- weakness
- high cholesterol
- puffy face, feet, and hands
- insomnia
- balance and co-ordination issues
- loss of libido
- recurrent urinary and respiratory tract infections
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- Folate. This nutrient, and its synthetic form folic acid, can be found in fruits and fruit juices, dark green leafy vegetables, green peas, kidney beans, peanuts, and enriched grain products, such as bread, cereal, pasta and rice.
- Vitamin B-12. Foods rich in vitamin B-12.

## 3. MANAGEMENT OF MEDICAL EMERGENCIES.

### FAINTING

- It is brief loss of consciousness (generally not more than few minutes duration) and caused by temporary reduction in the flow of blood to the brain.
- It has got rapid and full recovery.

Causes:

- Nervous reaction to pain or fright.
- Due to emotional upset, exhaustion or lack of food.
- After long periods of physical inactivity. In this condition large volume of blood collects in lower part of body reducing the total amount of blood available in the circulation.

Symptoms and signs:

- Same as that of shock.
- Slow and weak pulse.
- Casualty looks pale.
- Giddiness.

Treatment:

- Allow She/He to sit down and help him to lean forward with the head between the knees and advise him to take deep breaths.
- If in parade or standing in crowd, advise him to flex the leg muscles and toes to aid circulation.
- If he is unconscious but breathing normally, lay him down with legs raised or place in recovery position. Maintain an open airway.
- Loosen any tight clothing at the neck, chest and waist to assist circulation and breathing.
- Keep him in the open space or in the shade to allow fresh air. Fan air on the face.
- Look for and treat any injury sustained on falling.
- Check breathing rate, pulse and level of consciousness.
- Reassure him. Gradually raise him to sitting position.
- Do not give anything by mouth till consciousness is regained.
- Shift him to hospital.

### UNCONSCIOUS PATIENT

- Unconsciousness is due to interference with the functions of the brain.
- Seriousness can be determined by testing the casualty's response to stimuli such as sound or touch.

Symptoms and signs:

Levels of Responsiveness

Stage 1: He may respond normally to questions and conversations.

Stage 2: He answers direct questions.

Stage 3: He responds vaguely to questions.

Stage 4: He obeys commands.

Stage 5: He responds to pain only.

Stage 6: He does not respond at all.

**Treatment:**

- Maintain the airway open.
- Loosen any tight clothing around neck, chest and waist.
- If breathing stops, start artificial ventilation immediately.
- Examine the patient for head injury or other causes of unconsciousness.
- Put the patient in lateral position.
- Manage serious wounds and fractures.
- If there is spinal injury do not move the patient.
- Check pulse, breathing and level of responsiveness.
- If he recovers consciousness, reassure him.
- Do not give anything by mouth.
- Do not leave him unattended.

**EPILEPSY**

- Epilepsy occurs due to brief disruption in the normal electricity activity of the brain.
- Epileptic fits may vary from momentary loss of attention without consciousness to muscular spasm and convulsions.
- Epileptic attacks occur suddenly and unexpectedly.

**Symptoms and signs:**

- The victim may have an aura.
- Loss of unconsciousness follows aura with cry.
- He falls to the ground and becomes rigid for a few seconds and breathing may stop. Mouth and lips turn blue due to cyanosis and there will be congestion of face and in the neck.
- Within seconds, the casualty will manifest an arched back and alternating contraction and relaxation of movements in all extremities.
- Breathing may become difficult or noisy through the clenched jaw, froth may appear around the mouth, and blood stains if lips or tongue have been bitten. There may be loss of control of bladder and sometimes the bowel.
- Gradually the clinic phase subsides and the muscles will relax. The attack usually lasts from about 30seconds to five minutes. This is followed by deep sleep with gradually recovery to the state of transient confusion, fatigue, muscular soreness and headache. The She/he should be allowed to rest.

**Treatment:**

- Prevent Her/Him from falling and lay down gently. Protect him from injury.
- Clear the space around him. Maintain airway. Loosen the clothing.
- When the convulsions stop, place him in recovery position (lateral position).
- Inform the doctor or shift the patient to hospital for treatment.
- Allow him to rest,
- Reassure the victim.
- Do not move the patient unless the position is in danger.
- Do not put anything in the mouth or try to open.
- Do not try or wake him.
- Do not give anything to drink.



**STATUS EPILEPTICUS**

- In this condition, the casualty passes from seizure to seizure without gaining consciousness again.
- This one is emergency.

**ANAPHYLACTIC SHOCK**

(SEVERE ALLERGIC REACTIONS)

This is massive allergic reaction, which develops within a few seconds or minutes of an infection of a drug or insect bite or eating some allergen to which the casualty is sensitive i.e. penicillin.

**SYMPTOMS AND SIGNS:**

- Symptoms and signs of shock
- Nausea and vomiting.
- Tightening of chest
- Difficulty in breathing, wheezing, gasping for air.
- Sneezing.
- Swelling around the eyes.
- Rapid pulse.
- Unconsciousness.

**TREATMENT**

- Maintain open airway.
- Place in recovery position.
- Resuscitation.
- If breathing and heart beat stop, begin CPR immediately.

Shift the patient to hospital immediately.

**SNAKE BITE**

- All snake bites are not fatal.
- Only a small quantity of venom may be fatal.
- Most people die from fear and venom is not the point of consideration.

**SYMPTOMS AND SIGNS**

- Pain and numbness at the bite.
- Drowsiness.
- Burning pain at the site.
- Swelling.
- Dimness of vision.
- Difficulty in breathing and speech.
- Area becomes bluish purple after bite in twelve hours.
- Dribbling of saliva, paralysis.
- Convulsions, coma.

## DIAGNOSIS

- Site may show one or more punctures, a small abrasion and perhaps a linear laceration.
- In non-poisonous snakes bite semi-circular row of teeth marks may be seen.
- Local swelling appearing within few minutes after bite is a sign of poisonous snake bite.
- Respiratory symptoms.
- Paralysis.

## TREATMENT

- Lay the patient down. Give him complete rest.
- Calm and reassure him.
- Do not make him to walk.
- Apply a tourniquet immediately around a single boned portion of the limb between the bite and the heart, and it should be loosened for a few seconds at a regular interval of about ten minutes.
- Immobilize the affected limb and gently wash the wound with normal saline.
- Ice packs can be applied on the wound.
- Excision of the bitten area is a dubious practice, particularly if the area is on a limb.
- Sucking the poison from the site is controversial practice.
- Treat shock.
- Resuscitation, if there is difficulty in breathing.
- Shift the patient to hospital immediately.

Take the killed snake, if available for identification. This will help the doctors for proper management.

## CHOCKING

Chocking is a life-threatening medical emergency characterized by the blockage of air passage into the lungs secondary to the inhalation or ingestion of food or another object

Signs and symptoms:

- Inability to breathe or talk
- Blue skin
- Cough
- Wheezing

First aid management:

- Encourage to cough
- Abdominal thrush
- Back blow
- Loss of consciousness open the airway and check breathing

## **DROWNING**

Drowning cause breathing impairment as a result of submersion or immersion in a liquid.

Signs and symptoms:

Respiratory distress

Shallow breathing

Altered level of consciousness

Cyanosis

Coughing

First aid management:

Check for response, open airway, check for breathing

No response start CPR

If the client is breathing cover him/her with warm clothes or blankets

## **ELECTRICAL INJURIES**

- If any part of the body comes in contact with a live wire, which is exposed and not covered by insulator electric shock occurs
- In house, the blowing out of switches or fuses or faulty electrical connections can cause such injury.
- The injury may be quite mild or so severe as to cause immediate death.
- Electrical shock is produced, when an electric current pass through the human body which is in contact with earth. It passes even more quickly, if the part is wet.
- In wet conditions even lower voltage may be dangerous. A very strong current passing to earth through lower limbs may be less dangerous than a weaker current passing through the chest especially when it enters through the hands and arms.

## **SYMPTOMS AND SIGNS**

- Fatal paralysis of heart.
- There may be sudden stoppage of breathing due to paralysis of muscles used in breathing.
- Heart may continue to beat while breathing has stopped. There may be blueness of the face.
- There may be superficial or deep burns.

## **TREATMENT**

Intelligent and prompt action is required. If the first aider is not caution, he may also receive severe electric shock or even die along with the casualty.

If the casualty is still in contact with the conductor, switch off the current. If the switch is not be found, remove the plug, or cut off the current by breaking the wire. Before cutting off the current, ensure that you stand on a dry piece of wooden board. Do not use scissors or knife.

## PRECAUTIONS

1. When the current is low voltage the first aider should stand on an insulated material which is dry. (insulating materials are rubber – soled shoes, wooden planks or piles of newspaper). Rubber gloves, if available, should be worn. If not, dry coat, cap, or other clothing may be used. Folded newspaper also gives protection.
2. When the current is of a very high voltage as in the case of overhead (high tension) lines, there is greater danger. The casualty may not be in actual contact with the wire as the current can pass through the gap (causing an arc). The first aider in such circumstances should keep as far away as possible from the electric wires. (the casualty is to be dragged out by means of a non conducting material. A walking stick, dry bamboo pole, wooden plank or a dry rope is to be used).
3. If the casualty is not breathing normally, or heart has stopped beating, give artificial respiration and external cardiac massage for a long time.
4. Treat for shock.
5. Treat for burns, if any.
6. Transfer to a hospital, or seek the help of a medical practitioner, who is nearest.
7. Even when the casualty has recovered fairly well after first aid is given he must be examined by a medical specialist because electric injuries are liable to relapse.

## ELECTRICAL BURNS

- Burn may occur, when electricity of a sufficiently high current and voltage passes through the body.
- Much damage occurs at point of entry but at exit only small burns may be visible, but damage to the underlying tissues may be considerable.
- Electrical shock can affect both breathing and heart action

## SYMPTOMS AND SIGNS

- Redness swelling charring of skin at both the entry and exit points.
- Unconsciousness.
- Breathing heart beat may have stopped.
- Symptoms and signs of shock.

## TREATMENT

- Separate the casualty from the source of injury.
- Place a sterile dressing over the burn.
- Treat shock.
- Start resuscitation, if breathing and heart beat stop.
- If casualty becomes unconscious but is breathing normally place in recovery position.
- Shift him to hospital on stretcher.

DO NOT – Apply lotions or ointments.

DO NOT – Break blisters, remove any loose skin or interfere in injured area.

## KIDNEY EMERGENCY

### 1. ACUTE RENAL FAILURE

In this condition passage of urine from the kidney is reduced rapidly.

#### CAUSES

- Infection of kidney
- Drugs
- Haemorrhage, dehydration, shock
- Cardiac failure
- Septicaemia
- Hypertension
- Haemolysis
- Obstruction due to stones

#### SYMPTOMS AND SIGNS

- OLIGURIC PHASE: Amount of urine decreases. Uraemic symptoms like anorexia, nausea, vomiting, bleeding from intestine, lethargy, stupor or confusion may develop
- DIURETIC PHASE: increase in the volume of urine. It indicates the beginning of recovery. This is progressive improvement.
- RECOVERY PHASE: There is progressive improvement.

#### TREATMENT

- Shift the patient to hospital immediately
- Retention of urine :
- This condition occurs, when patient is unable to pass urine and it accumulates in bladder.

#### CAUSES

- Infections of urinary tract.
- Obstruction of urinary tract.
- Enlargement of prostate.
- Stone in urethra.

#### SYMPTOMS AND SIGNS

- Pain in lower abdomen
- Severe agony and discomfort
- Swelling in lower abdomen

#### TREATMENT

- Reassure the patient
- Ask him to relax
- Hot fomentation in lower abdomen.
- Shift him to hospital.

## POISONING

Poisons are the harmful substances and when sufficient doses are taken may kill a person.

They may be consumed

- Accidentally (by mistake or by ignorance)
- For suicidal purpose.
- Intentionally for killing enemies

### ROUTES OF TAKING POISONS

- Eating or drinking poisonous substances by mouth.
- Inhaling household or industrial gases, chemical vapours, or fumes from fire, and exhaust by lungs.
- By injection into the skin as a result of bites from some animals, insects, snakes or by hypodermics syringes.
- Absorption through the skin by contact with poisonous sprays such as pesticides and insecticides.

### MECHANISM OF ACTION OF POISON

- Swallowed (ingested) poisons, act directly on the food passages resulting in vomiting, pain and diarrhea.
- Corrosive poisons may severely burn the lips, mouth, gullet and stomach thus causing intense pain.
- Fumes and gases cause choking which may result in difficulty of breathing and unconsciousness.
- Some poisons work in the blood stream, central nervous system and prevent breathing, heart action, and other vital life processes.
- Some poisons act by displacing the oxygen in the blood and preventing its distribution to the tissues.

### GENERAL SYMPTOMS AND SIGNS

There vary often depending on the nature of the poison and the method of entry into the body.

- General information from casualty or an onlooker suggesting contact with a poison
- See for the container having poison or poisonous plant.
- Casualty may be delirious convulsions without previous history of such conditions
- Symptoms and signs of asphyxia.
- Unconsciousness
- Vomiting or diarrhoea
- Burns on lips, mouth after contact with corrosive poisons

### TREATMENT

1. Patient is to be removed from the offending agent like gaseous atmosphere.
2. Collect information from the surroundings or persons available there, to doctor.

3. Preserve any suspecting material like a bottle containing pills or liquid for information to the treating doctor.
4. If the person has vomited, preserve the vomited material also which can give some clues about the type of poison ingested
5. If the person is conscious and there are no burns on lips of mouth then induce vomiting and preserve vomited material. Vomiting can be induced by fluids giving plenty of fluids, while of an egg or milk and by touching the fauces (inside the mouth).
6. If the lips or mouth show signs of burning, cool them by giving the casualty water or milk to drink. Do not induce vomiting
7. If the casualty is unconscious but breathing normally, place in the recovery position.
8. If breathing and heart beat stop, begin resuscitation immediately.

Shift to hospital immediately.

## 4. FIRTAID

### General principles:

- Responsibilities and Liabilities:
- Safety
- Make sure the area is safe
- Danger to self
- If any danger to the victim – only then shift
- Any help required? Anyone to help?
- Number of injured and how?
- Nearest contact (telephone; hospital; police)

### Universal precautions:

- Personal Protective Equipment (PPE)
- Gloves (techniques of removing)
- Goggles
- Washing (wash hands after the procedure)
- Waste disposal (as per protocol)

### First aid medical kit

Name of the medicine	Purposes
Tab.Aceclofenac +paracetamol (100mg+325mg)	Body pains
Diclofenac gel	Back pain/Knee pain
Tab. Diclofenacsodium+Serratiopeptidase (50mg+10mg)	Body pains
Tab. Paracetamol (500mg)	Fever/ Body pains
Tab. Paracetamol (650 mg)	Fever/ Body pains
Diclofenac diethylamine,Linceed oil, menthol,methylsalicilate gel	Back pain, Body pains
<b>Antibiotics</b>	
Cap.Ampi + Cloxy( 250mg+250mg)	As per Physician advice
Tab.Cefixime 100mg	As per Physician advice
Tab.Roxithromycin 150mg	As per Physician advice
Tab. Ciprofloxacin 500mg	As per Physician advice
Tab. Norfloxacin+ Tinadazole (400mg+600mg)	As per Physician advice
Tab. Metronidazole – 400mg	Antibiotic
Eye drops ciprofloxacin 0.3% w/v	Eye infection
<b>Antifungal</b>	
Benzyl benzoate 25%w/w – Lotion	Scabies
Beclomethasone + Clotrimazole + Gentamycin(0.025%+1%+0.1%) – cream	Skin infections



Tab. Fluconazole 150mg	Antifungal
Fusidic acid 2% w/v Cream	Skin infection
Silver sulphadiazine 1%w/w cream	Burns
Tab.Albendazole + Ivermectin (400mg+6mg)	Worms
<b>GI tract &amp; Anthelmintics</b>	
Tab.Domperidone 10Mg	Vomitings
Tab. Aluminium hydroxide + Megnesium hydroxide(250mg + 250mg)	Stomach burn
Tab.Lactobacillus sporogenes 60 million spores	Loose motions
Syp.Lactulose 10gm/15ml	Constipation
Dried alumiminius hydroxide 250mg + Mg hydroxide 250mg/5ml suspension+ activated dimethicone 50mg	Stomach burn
Tab. Metronidazole – 400mg	Antibiotic
Tab.Omeprazole- 20mg	Stomach burn
<b>Anti allergics/ Respiratory system</b>	
Tab.Citrizen- 10mg	Running nose
Syp. CPM3mg+A.Ch.110mg+ Na citrate 46mg+Menthol 0.9 mg	Dry cough
Tab.Levo citrizen 5mg	Running nose
Tab.Salbutamol 4mg	Asthama/Wheeze
<b>Anti malarial</b>	
Tab.Chloroquine phosphate 250 mg	Malaria
Tab. Primaquine – 15 mg	Malaria
<b>Electrolytes</b>	
Syp.Disodium hydrogen citrate1.4mg/5ml	Urinary tract infection
Oral rehydration salts citrate IP 21 gm Sachet	Loose motions, vomiting
<b>Corticosteroids</b>	
Tab. Prednisolone10mg	Multiple purposes as per Physician recommendation
Inj. Dexamethasone 4mg	Multiple purposes as per Physician recommendation
<b>Supplements</b>	
Tab. Ferrous ascorbate 100mg with folic acid 1.5 mg	Anaemia
Syp.Appetite enhancer (peptone, minerals, vitamins)	Appetizer
<b>Surgical Items</b>	
Absorbent cotton wool 200gm –non sterile	Dressing
Crepe bandage 15cm x 4m	Swelling/sprains
Crepe bandage 10cm x 4m	Swelling/sprains
Cotton Bandage (non sterile) 10cm X 4 m	Dressing

## BASIC LIFE SUPPORT

### Introduction

- When a person experiences cardiac arrest –
- whether due to heart failure in adults and the elderly or an injury such as near drowning, severe trauma in a child –
- The heart goes from a normal beat to an arrhythmic pattern called ventricular fibrillation, and eventually ceases to beat altogether.
- This prevents oxygen from circulating throughout the body, rapidly killing cells and tissues.
- **Cardio(heart) Pulmonary (lung) Resuscitation** (revive, revitalize) serves as an artificial heartbeat and an artificial respirator.

### Adult CPR

- American Heart Association's guidelines dictate that Adult CPR is performed on any person over the age of approximately 10 to 14 years (or post-adolescence, as defined by the presence of secondary sex characteristics).
- Before you start any rescue efforts, you must remember to check the victim for **responsiveness**.
- If you suspect that the victim has sustained spinal or neck injury, do not move or shake him. Otherwise,

### How to check the response

- shake the victim gently and shout "Are you okay?" to see if there is any response. If the victim is someone you know, call out his name as you shake him.
- **If there is no response, immediately dial 108 and remember C-A-B and immediately assist him with circulation**
- C-A-B (Circulation, Airway, Breathing)
- check the victim for circulation.

### Circulation

- In order to determine if the victim's heart is beating, place two fingertips on his carotid artery, located in the depression between the windpipe and the neck muscles and apply slight pressure for several seconds.
- If there is no pulse then the victim's heart is not beating, and you will have to perform chest compressions.

### Chest Compressions

- When performing chest compressions, proper hand placement is very important.
- To locate the correct hand position place two fingers at the sternum (the spot where the lower ribs meet) then put the heel of your other hand next to your fingers.
- Place one hand on top of the other and interlace the fingers. Lock your elbows and using your body's weight, compress the victim's chest.
- Count aloud as you compress 30 times at the rate of about 3 compressions for every 2 seconds or approximately **100 compressions per minute**.
- The depth of compressions should be at least 2 inches –
- Chest compressions will supply blood flow to the heart and the brain but if victim remains unresponsive you will need to check their airway.
- An infant's pulse is checked at the brachial artery, which is located inside of the upper arm, between the elbow and the shoulder.

### Chest compression in child and infant

- An infant's delicate ribcage is especially susceptible to damage if chest compressions are improperly performed, therefore it is important to use caution when rescuing an infant.
- Chest compressions are performed with heel of the hand or with two fingers as per the body composition and the age

- The compression should be approximately  $\frac{1}{3}$  to  $\frac{1}{2}$  the depth of the infant's chest.
- Count aloud as you perform 5 cycles of 15 compressions and 2 breaths before checking the infant for breathing and pulse

### Airway

- If the victim is unconscious and is unresponsive, you need to make sure that his airway is clear of any obstructions.
- If you determine that the victim is not breathing, then something may be blocking his air passage.
- The tongue is the most common airway obstruction in an unconscious person.

### How to open the airway

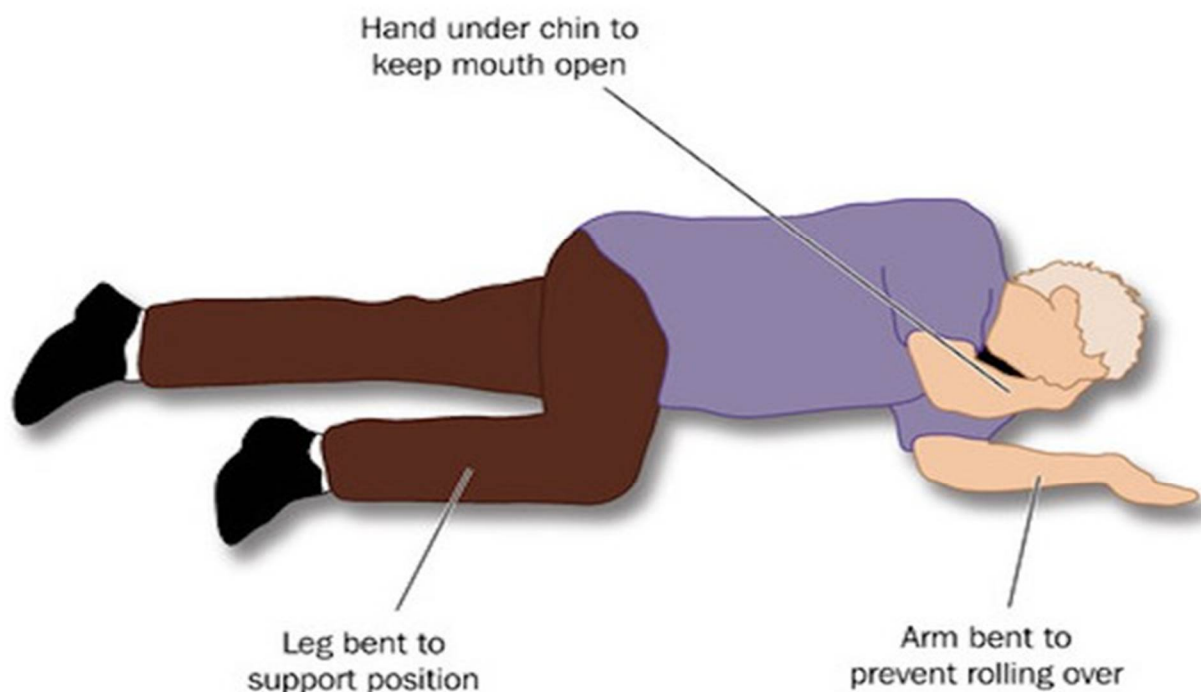
#### Head tilt and chin lift method/jaw thrust method

- With the victim lying flat on his back, place your hand on his forehead and your other hand under the tip of the chin, gently tilt the victim's head backward.
- In this position the weight of the tongue will force it to shift away from the back of the throat, opening the airway.
- If the person is still not breathing on his own after the airway has been cleared, you will have to assist him in breathing.

### Breathing

- carefully **look, listen** and **feel** for breathing, If you find no breathing ....
- Pinch his nose with your fingertips to prevent air from escaping once you begin to ventilate and place your mouth over the victim's, creating a tight seal.
- Give **two** full breaths.
- Between each breath allow the victim's lungs to relax
- If the victim is breathing, place him in recovery position

### How to place victim in recovery position



## VITAL SIGNS

**INTRODUCTION:** Vital signs are measurements of the body's most basic functions.

The four main vital signs routinely monitored by medical professionals and health care providers include the following:

- Body temperature
- Pulse rate
- Respiration rate (rate of breathing)
- Blood pressure
- Oxygen saturation
- General random blood sugar
- Height
- Weight

### BODY TEMPERATURE

- The normal body temperature of a person varies depending on gender, recent activity, food and fluid consumption, time of day, and, in women, the stage of the menstrual cycle.

**Normal body temperature :** 97.8 degrees F

**Equipment:** Mercury thermometer, Digital thermometer, Infrared thermometer

**Sites:**

- Oral :Temperature can be taken by mouth using either the classic glass thermometer.
- Rectal :Temperatures taken rectally (using a glass or digital thermometer).
- Axilla :Temperatures can be taken under the arm using a glass or digital thermometer.
- Mastoid region: Measure the temperature of the ear drum.
- Temporal region: Measure the temperature of the skin on the forehead.

### PULSE

Pulse rate is a measurement of the heart rate, or the number of times the heart beats per minute.

Pulse indicates the heart rhythm.

**Normal value:** 60-100 beats per minute.

**Site:** Radial artery is the most common site to pulse.

**Technique:**

- Place the client in supine position or lying position.
- Using the first and second fingertips, press firmly but gently on the arteries until you feel a pulse.
- Begin counting the pulse when the clock's second hand is on the 12.
- Count your pulse for 60 seconds.
- When counting, do not watch the clock continuously, but concentrate on the beats of the pulse.

### RESPIRATION

- The respiration rate is the number of breaths a person takes per minute.
- Respiration rates may increase with fever, illness, and with other medical conditions.
- When checking respiration, it is important to also note whether a person has any difficulty breathing.
- **Normal respiratory rate:** 12 to 16 breaths per minute.
- **Site:** Chest/Abdomen
- **Technique:** Place the client on supine position or sitting position.
- Place the hand on chest or abdomen and count the breaths for 1 min/60 secs.

### BLOOD PRESSURE

- Blood pressure is the force of the blood pushing against the artery walls during contraction and relaxation of the heart.

**Normal value:** 120/80mmHg.

- Before you measure your blood pressure:

- Don't smoke or drink coffee for 30 minutes before taking your blood pressure.
- Go to the bathroom before the test.
- Relax for 5 minutes before taking the measurement.
- Sit with your back support.

**Equipment:**

- Mercury sphygmomanometer.
- Digital sphygmomanometer.
- Aneroid sphygmomanometer.

**Technique**

- Make the patient relaxed and comfortably seated, under room temperature.
- Make the patient sit on a chair with feet flat on floor.
- Sit upright with back straight.
- The arm cuff should be at the same level as the client's heart.
- Remove tight fitting clothing or tight rolled up sleeve from client's upper arm.
- Do not place the arm cuff over thick clothes.
- Insert the air plug into the air jack securely.
- Put client's arm through the cuff loop. The bottom edge of the arm cuff should be 1-2 cm above the elbow.
- Close the fabric fastener firmly.
- Press the START/ STOP button
- Ask the client to remain still while taking a measurement.
- Remove the arm cuff after the measurement.
- Record the reading
- Press the START / STOP button to turn the monitor off.
- The monitor automatically stores the measurement in its memory. It will automatically turn off after 2 minutes.

**OXYGEN SATURATION**

A pulse oximeter is a non invasive device that estimates a client's arterial blood oxygen saturation (SpO<sub>2</sub>) by means of a sensor attached to the client's finger, toe, nose, earlobe or forehead (or around the hand or foot of a neonate).

**Equipment:** Pulse oximeter

**Site:** Finger tips

**Technique:** Clean the site with an alcohol wipe before applying the sensor

- Place one of the fingers into the rubber opening of the pulse oximeter.
- Press the switch button one time on front panel to turn the pulse oximeter on.
- Keep hands still for the reading. Do not shake the finger during the test.
- Read the data from the display screen.
- Record the readings.

**GENERAL RANDOM BLOOD PRESSURE**

**Definition:** A capillary blood specimen (RBS) is often taken to measure blood glucose.

**Sites:** Finger tips and toes.

**Normal Value:** 70-140mg/dl

- Equipment:
- Blood glucose meter.
- Test strip.
- Disposable gloves.
- Lancet/lancing device.
- Alcohol wipes
- Cotton ball.

**Procedure**

- Prepare the finger to be lanced by having the patient wash hands in warm water and soap. Dry thoroughly. For convenience, an alcohol wipe may be used to cleanse the finger.
- Wear disposable gloves.
- Turn on the glucose meter.
- Prick the patient's finger lateral to the fingertip using lancet/lancing device, obtaining a large, hanging drop of blood.
- Apply the blood carefully to the strip test area (varies by glucose meter model).
- Completing the test - The blood remains on the strip as the meter processes the result. Processing time varies between meters, but the meter will be programmed to display the results at the appropriate time.
- The lanced finger is covered with gauze or a tissue until bleeding subsides. If necessary, an adhesive bandage is then applied.
- Record the readings.
- Replace articles.

**HEIGHT AND WEIGHT**

Although they are not vital signs, weight and height measurements also provide important information about a person's health status. Height is used to calculate a patient's Ideal Body Weight (IBW) and Body Mass Index (BMI).

**Equipment:** Inch tape for height and weighing machine for weight

**Procedure:**

- Wash hands.
- Gather supplies.
- Knock, greet the person and ensure privacy.
- Explain the procedure.
- Adjust equipment for body mechanics and safety.
- Ask the client to stand against the wall facing back towards the wall
- Make sure client's feet is together.
- For Height: Place a scale or hard surface over the head of the client to mark the maximum point.
- Open the tape, Put the beginning point in between the toes of the client, stretch as long as maximum point. And lock the tape.
- Observe the reading on the inch tape.
- For Weight: Place the weighing machine on the floor and ask the client to stand on it.
- Record the readings.

## WOUND DRESSING

### DEFINITION

A loosely woven cotton dressing for incisions made during surgery, a protective covering over the wound done under strict aseptic techniques is termed as surgical dressing.

### EQUIPMENT

#### Dressing kit contains

- Plastic tray-1
- Disposable cups-2
- Cotton swabs-10
- Plastic forceps-1
- Bandage cloth-1
- Wrapping sheet-1
- 1 pair of clean glove
- 1 pair of sterile surgical glove
- Sterile dressing pad
- Hypoallergenic adhesive tape
- Trash bags and Mackintosh.

### TOPICAL AGENTS FOR CLEANING WOUNDS

Normal saline is the preferred cleaning agent. It is physiological and will not harm tissue. **Other**

#### Solutions Such as:

- Povidine Iodine solutions
- Hydrogen peroxide
- Acetic acid solution

### PROCEDURE

- Arrange all articles
- Place mackintosh and towel (incase of surgical dressing required to hands or legs)
- Arrange yellow, red, and black trash bags near by
- Perform hand washing and wear PPE
- Put on safe touch or disposable glove
- Remove the old dressing by loosen the edges of tape and peel the tapes off by pulling the skin by keeping the skin taught by the other end
- Lift the tapes and the dressing off together
- If the dressing sticks to the wound, pour little cleansing solution like normal saline and gently pull the dressing.
- Discard the dressing and plaster in yellow trash bag.
- Note any color, odor, any drainage, redness, swelling, separation of the wound edges, maceration (softening and breaking down of skin resulting from prolonged exposure to moisture), peri incisional area for any blisters, pustules etc.
- Dispose the glove in red trash bag
- Use hand sanitizer
- Open the dressing kit out from the pack

- Remove first & second flips
- Open the surgical glove pack & don glove
- Open the remaining 3rd & 4th flips of the dressing kit
- If assistant is there ask him to pour small amount of cleansing solution (preferably Normal saline) into a bowl with out touching the sterile field
- If no one is there to assist, use non dominant hand to pour solution.
- Pick up cotton swab with disposable plastic forceps dip it in NS and clean the wound from the center to periphery.
- Discard the used swabs after each stroke into yellow trash
- Remove any crust formation by pouring hydrogen peroxide.
- Cover with dressing with betadine gauze or with topical application based on the physician order
- Instruct the attender to open the sterile dressing pad cover and put the dressing pad in sterile field with out touching inside and then apply sterile pad ( If officer is alone, before don the surgical glove, tear the cover and leave the sterile pad over the 3<sup>rd</sup> flip of the dressing kit
- Dispose all remaining supplies into relevant biomedical trash bags.
- Remove glove and secure the dressing site with hypo allergenic plaster.

**AFTER CARE OF THE EQUIPMENT**

- Remove mackintosh and towel, replace bed linen and change the garments if necessary.
- Make the client into comfortable position.
- Reposition the remaining articles back
- Wash hands



## MEDICATION ADMINISTRATION

### MEDICINE

A Medicine is a substance used in the diagnosis, treatment, cure, relief, or prevention of health alteration.

### ROUTES OF ADMINISTRATION:

- Topical Administration (Applied to skin, Rectal, Otic, Optic, Nasal)
- Oral
- Sublingual
- Parenteral : Intramuscular, Intravenous, Intradermal, subcutaneous

### ADMINISTERING OPHTHALMIC MEDICATIONS

**Definition:** Medications are instilled in mucous membranes of eye for various therapeutic effects.

### Procedure:

- Gather equipments like small gauze squares and medication bottle.
- Explain the need.
- Allow the patient to sit with head tilted backward or lie in a supine position.
- **Ask client to look up and explain steps to client.**
- Wash hands
- With dominant hand resting on client's forehead, hold filled medication eye dropper or ophthalmic solution approximately 1-2 cm.
- Pull the lower lid down to expose the conjunctival sac and squeeze the prescribed numbers of drops into the sac.

### EAR (OTIC) INSTILLATION

**Definition:** Instill liquid medication into external auditory canal.

### Procedure:

- Wash Hands
- Gather equipment like 2 or 3 cotton balls, medication
- Before instilling eardrops, have the client lie on his or her side. Then straighten the ear canal to help the medication reach the ear drum. For young children and infant, gently **pull down and back.**

### THE TRANSDERMAL PATCH

- First bend the patch to break the seal
- Remove protective covering and apply to the skin.

## ADMINISTRATION OF ORAL MEDICATION

**Definition:** drugs given by oral route.

- Forms of oral medications: Tablets, Capsules & Syrup

**Procedure:**

- Wash Hands
- Gather equipment like medication tray and glass of water.
- Assist the patient to a comfortable position.
- Administer the medication.
- Remain with the client until he or she has taken all medication.
- Record medication administration.

## INTRAMUSCULAR

Injections into muscle tissue or intramuscular injections are absorbed more quickly than SC due to greater blood supply to the body muscles.

**Amount:**

4 ml for a large muscle (gluteus medius) in a well developed adult

1 to 2 ml for less developed muscles (children, elderly, and thin clients)

**Angle of the needle:** 90 degree

**Sites of IM injection**

- Deltoid site: Upper arm
- Gluteal : Hip/ buttocks
  - Dorsogluteal site
  - ventro gluteal
- Children
- Vastus Lateralis site

**Deltoid**

Place four fingers across the deltoid muscle, with the first finger on the acromion process; the site is three finger breadths below the acromion process.

**Dorsogluteal site**

Position – prone position or a side lying position with the upper knee flexed

Used for adults and for children above 3 years

**Dorsogluteal site – location**

- Palpate the posterior superior iliac spine, and then draw an imaginary line to the greater trochanter of femur.
- This line is lateral to and parallel to the sciatic nerve.
- The injection site is then lateral and superior to this line.
- Divide the buttock in to four quadrants, upper outer quadrant can be identified as the location

**Vastus lateralis site**

- Location- anterior lateral aspect of the thigh.
- It is recommended as the site of choice for infants, 7 months and younger
- Because there are no major blood vessels or nerves in that area it is desirable for infants whose gluteal muscles are poorly developed.

**Vastus lateralis – location**

- It is situated on the anterior lateral aspect of the thigh
- The middle third of the muscle is suggested as the site. It is established by dividing the area between the greater trochanter of femur and the lateral femoral condyle into thirds and selecting the middle third.

**Z – track method**

- Place the client in the prone position then pull the skin to one side, insert the needle at a 90° angle and administer the medication

**Common drug given by Z - track**

- Iron suspensions

**SUBCUTANEOUS INJECTION**

It is used to designate an injection into the subcutaneous tissues by means of a needle.

**Purpose**

- To allow slower absorption of drugs to produce a sustained effect
- The medication is administered by angling the needle 45° (/90 °)
- The amount of medication given varies but should not exceed 1.0 ml
- Rotate the sites

**Patient education (for self injection)**

- Rotate sites regularly.

- keep track of the sites used.
- Subcutaneous tissues are sensitive to irritating medications.
- Hard painful lumps can develop beneath the skin if the sites are not rotated

### **Sites of subcutaneous injection**

- Outer aspect of the upper arms
- Anterior aspect of the thighs.

### **Other areas**

- Abdomen,
- Scapular areas of the upper back,
- Upper ventro gluteal
- Dorsogluteal areas

## **INTRADERMAL INJECTION**

An Intradermal injection is the administration of a drug into the dermal layer of the skin just beneath the epidermis.

Usually a small amount of liquid is used, for example 0.1ml.

### **Sites of intradermal injection**

**Common site:** Inner lower arm

### **Other sites:**

Upper chest and

Back beneath the scapula

### **To be remembered**

- This method of administration is frequently indicated to test for allergy and tuberculin tests and for vaccinations.
- Needle angle: 15 degrees.
- Needle size: #26
- No need for aspiration
- Do not massage as the medication may disperse into the tissue

### **Indication of correct administration**

- a small white blister, wheal, or bleb should be forming (about 6mm to 10 mm in diameter)

**procedure:**

Check the medication order for accuracy

- Explain procedure to the client
- Take the consent
- Wash hands

**Prepare the medication from the vial or ampule**

- Wash hands.
- Select a site free of skin lesions, tenderness, swelling, and one that has not been used frequently.
- Don gloves.
- Clean the site with antiseptic swab. Using a circular motion, start at the center and move outward. Avoid touching the site after cleaning.

**Technique for IM & S.C Injection administration:**

- Pinch up skin to elevate the tissue with non-dominant hand
- With dominant hand, Pierce the skin quickly at a 90 degree angle (for IM) & 45 angle (for S.C), and insert the needle into the tissue. Using the quick motion lessens the client's discomfort.
- Aspirate by holding the barrel of the syringe.
- If blood does not appear, inject the medication steadily and slowly.
- Slowly and steadily withdraw the needle.
- Massage the site unless contraindicated in case of irritant drugs (for IM)
- Press site for a few seconds. **Do not** rub the injection site. (for SC)

**Techniques for intradermal injection**

- Stretch skin slightly with thumb, with non dominant hand
- Place the syringe so the needle is almost flat against the skin, making sure the bevel of the needle is up.
- Insert the needle (at a 15-degree angle) to 1/8" below the skin surface and point of needle is still visible through skin.
- Inject medication slowly. Expect resistance, which means needle is properly placed.
- If needle moves freely, the needle has been inserted too deeply. Withdraw needle slightly and try again.
- While medication is being injected a small white blister, wheal, or bleb should be forming

- Do not massage as the medication may disperse into the tissue.
- Mark the site of injection given if required

**After care**

- Discard used supplies
- If needle has to be recapped, should be done by scoop method with one hand only.
- Document in patient's record:
  - a. Medication administered, dose, time, route, site.
  - b. Instructions given to patient/caregiver
  - c.

**INTRAVENOUS MEDICATION**

- Solutions administered directly into the venous circulation via a syringe or intravenous catheter (tube)

**This route appropriate**

- when a rapid effect is required
- when medications are too irritating to the tissues when given by other routes

**To be remembered...**

- Use distal veins of the arm first.
- Use the client non dominant hand whenever possible.
- Select a vein that is easily palpated and feels soft and full.
- Angle of the needle : 15 – to 30 degree angle with bevel up

**Avoid using veins that are**

- In areas of flexion (e.g., the antecubital fossa)
- Highly visible, because they tend to roll away from the needle
- Damaged by previous use. Phlebitis, infiltration, or sclerosis
- Continually distended with blood, or knotted or tortuous
- In a surgically compromised or injured extremity (e.g., following a mastectomy), because of possible impaired circulation and discomfort for the client

**Venipuncture sites**

- The metacarpal
- Basilic and
- cephalic veins

**TOPICAL MEDICATION**

Topical medications are those that are applied locally to the skin or to mucous membranes in areas such as the eye, external ear canal, nose, vagina and rectum

**Preparation:**

- Applying skin preparations
- Ophthalmic instillations
- Otic instillations
- Nasal instillations

**NASAL INSTILLATION (NOSE DROPS)**

- Position the client in a supine position with the head tilted back
- In children, nasal sprays are given with the head in an upright position to prevent excess spray from being swallowed

**Client instruction:**

- Breathe through the mouth to prevent aspiration of medication into the trachea and bronchi
- Remain for at least 1 minute so that the solution will come into contact with all of the nasal surface
- Avoid blowing the nose for several minutes

**APPLYING SKIN PREPARATION**

- Powder
- Suspension-based lotion
- Creams, ointments, pastes, and oil based lotions
- Aerosol spray
- Transdermal patch

**Powder**

Make sure the skin surface is dry. Spread apart any skin folds, and sprinkle the site until the area is covered with a fine thin layer. Cover the site with a dressing if required.

**Suspension-based lotion**

- Shake the container before use to distribute suspended particles.

Put a little lotion on a small gauze dressing or pad, and apply the lotion to the skin by stroking it evenly in the direction of the hair growth

### **Creams, ointments, pastes, and oil based lotions**

- Warm and soften the skin preparation in the gloved hands to make it easier to apply and to prevent chilling.
- Smear it evenly over the skin using long strokes that follow the direction of the hair growth.
- Explain that the skin may feel little greasy after application.
- Apply a sterile dressing if ordered.

### **RECTAL INSTILLATIONS**

- Provide privacy
- Position: lateral position, with the upper leg flexed.
- Lubricate the suppository
- Insert tapered end first
- After insertion help to remain in the left lateral or supine position for at least 20 min

### **INHALERS**

Metered-dose inhaler (MDI)

Rotahalers

#### **How to use inhaler**

- Shake the inhaler well before use (3 or 4 shakes)
- Remove the cap.
- Breathe out, away from your inhaler.
- Put the mouth piece far enough into the mouth so that the mouth piece extends beyond the teeth. Close the lips tightly around the lips.
- Start to breathe in slowly
- Remove the inhaler from your mouth, and hold your breath for about 10 seconds, then breathe out.
- If another puff is prescribed, wait for 1 to 3 minutes before the next inhalation. Remember to re shake the inhaler.



### How to use rotahaler

1. Hold rotahaler vertically and put capsule (clear end first) into square hole. Make sure top of rotacap is level with top of hole. (If there is a rotacap already in the device this will be pushed into shell)
2. Hold rotahaler horizontally, twist barrel sharply forwards and backwards. This splits capsule into two
3. Breathe out gently. Keep rotahaler level and put mouthpiece between lips and teeth and breathe in the powder quickly and deeply
4. Remove rotahaler from mouth and hold breath for about 5 seconds
5. If any powder is left repeat steps 3 and 4
6. Open the Rotahaler and discard the empty capsule.

### Spacers

- A spacer is a clear plastic container shaped like a tube with a mouthpiece or mask at one end and a hole for an inhaler at the other.
- The medication is 'fired' from the puffer into the spacer device and is then inhaled through the mouthpiece or a face mask.
- Spacers slow down the speed of the medicine coming from the inhaler

## 5. ROLE OF ANM's and HEALTH COMMAND CENTRE

### 1. ప్రతి రోజు చేయవలసిన రనులు:

- ప్రతి రోజు పాఠశాలకు ఉదయం 9 గంటలకు వెళ్ళాలి.
- ప్రధానోపాధ్యాయుణ్ణి కలిసి మొత్తం విద్యార్థుల హాజర్ల మరియు ఆరోగ్య వివరాలు, సేకరించి, ఉదయం 10 గంటల లోపు కమండ్ సెంటర్/CallHealth కి కాల్ చేసి తెలియజేయాలి.
- కాల్ చేయవలసిన నంబర్ **040 - 2331 7331**

### 2. ప్రతి రోజు ఇవవలసిన రిపోర్ట్ వివరాలు :

- పాఠశాలలో మొత్తం విద్యార్థుల సంఖ్య
- పాఠశాలకు హాజరైన విద్యార్థుల సంఖ్య
- పాఠశాలలో మొత్తం అశ్వత్సు పాలైన విద్యార్థుల సంఖ్య
- బికిత్తు కొరకు సమీర ఆరోగ్య కంప్లెక్స్ కి రంబడిన విద్యార్థుల సంఖ్య
- హాస్పిటల్ లో అడ్మిట్ చేయబడిన విద్యార్థుల సంఖ్య

### 3. ఈ -కనసల్టేషన్ :

- ఆసవసుత్కు పాలైన విద్యార్థులకు ప్రధమ బికిత్తు ఇచ్చేటందుకు CallHealth డాక్టర్ ని (కమండ్ సెంటర్ ద్వారా ) సంప్రదించి, డాక్టర్ సలహా మేరకు తగిన చర్య తీసుకోవాలి.
- విద్యార్థులు ఆరోగ్య రిపోర్ట్ గురించి పాఠశాల ప్రధానోపాధ్యాయునికి తెలియ జెయాలి
- కమండ్ సెంటర్/CallHealth కి కాల్ చేసేటప్పుడు విద్యార్థులు మెడికల్ రికార్డు నంబర్ (MRN) ఇవవటం త్రినిసరి
- ఈ -కనసల్టేషన్ నిమిత్తం కమండ్ సెంటర్ /CallHealth కి కాల్ చేయకముందే Vitals/Complaints సేకరించి ఉంచండి

### 4. ఇతర సూచనలు

- రని వేళల మినహా ఇతర సమయాల్లో కూడా మీర్ల ఫోన్ లో అందుబాటులో ఉండాలి
- విద్యార్థుల MRN తో ఒక రిజిస్టర్ ని మంట్నెన్ చెయాలి
- విద్యార్థులు రోజు వారి ఆరోగ్య రిపోర్ట్ కమండ్ సెంటర్/ CallHealthకి తెలియజేయాలి
- విద్యార్థులు హాస్పిటల్ లో చేరినా/ఎమర్జెన్సీ లో ఉన్నా , ఆ వివరాలి కమండ్ సెంటర్/CallHealth కి త్వరగా తెలియజేయాలి.
- కమండ్ సెంటర్/CallHealth డాక్టర్ ని సంప్రదించి అన్ని సలహా మేరకు మమ్మీ మెడిసిన్ ఇవావలి
- మెడిసిన్ ఇచ్చేటందు ఎకసపైరీ తేదీ ని చూసి , ఎకసపైరీ కాన్సు మెడిసిన్ ని మమ్మీ విద్యార్థులకు ఇవావలి.
- ప్రధమ బికిత్తుకు సంబంధించిన మెడిసిన్ స్టాట్ తగిన రిపోర్టు లో ఉండేలా చూసుకోవటం త్రినిసరి. మెడిసిన్ స్టాట్ తగినపుడు మెడిసిన్ ని రిఫిల్ చేయంచాలి

### గిరిబాల ఆరోగ్య రక్ష (స్కూల్ హెల్త్ ప్రోగ్రామ్)

#### హెల్త్ కోఆర్డినేటర్ పాటింఛవలసిన నియమ మరియు నిబంధనలు -

- 1) విద్యార్థుల మెడికల్ చెక్ అప్ సమయం (Health Screening)
- 2) రోజువారీ నివేదిక (Daily Report)
- 3) ఇ-కన్సల్టేషన్ (E-Consultation)

**1.1 మెడికల్ క్యాంపునకు ముందు పాటించవలసిన నియమాలు:**

- మెడికల్ క్యాంపునకు రెండు రోజుల ముందు హెల్త్ కోఆర్డినేటర్ పాఠశాల కు వెళ్లి ప్రధానోపాధ్యాయుడు లేదా సంబంధిత అధికారులను కలిసి మెడికల్ క్యాంపు నిర్వహణ నిర్ధారణ తీసుకుని కాల్ హెల్త్ బృందంనకు సమయం & తేదీ వంటి సమాచారం ఇవ్వవలెను.
- తరువాత వైద్య శిబిర పరిసరాలు పరిశీలన మరియు పర్యవేక్షణ కోసం అనుమతి తీసుకోవాలి
- ప్రధానోపాధ్యాయుడు సహకారంతో వైద్య పరీక్షలు నిర్వహించు దినమున విద్యార్థులు హాజరు 100% ఉండే విధంగా చూసుకోవలయును.
- ప్రధానోపాధ్యాయుడు దగ్గర వైద్య పరీక్షలకు సంబంధించిన విద్యార్థుల అప్లికేషన్ నందు MRN ఉండేలా చూసుకోవాలి మరియు MRN లేని విద్యార్థుల వివరాలు రెండు రోజుల ముందు కాల్ హెల్త్ ఆఫీసర్ కు సమాచారం అందించాలి.
- వైద్య శిబిరం నిర్వహణకు తగిన ప్రాంతం, సరైన కాంతి , ప్రసరణ గురించి ప్రధానోపాధ్యాయునకు తెలియచేయవలయును. అంతేకాకుండా వైద్య బృందమునకు కావలసిన కుర్చీలు, టేబుల్స్, విద్యుత్తు మరియు త్రాగునీటి సరఫరా ఉండే విధంగా చూసుకొనవలయును.

**1.2 మెడికల్ క్యాంపు రోజున పాటించవలసిన నియమాలు:**

- వైద్య శిబిరం రోజున విద్యార్థుల అప్లికేషన్ లో విద్యార్థి యొక్క పేరు, MRN మరియు ఇతర వివరాలు సరిచూసుకొని విద్యార్థులకు అందచేయాలి. విద్యార్థి వైద్య పరీక్షలు పూర్తి చేసిన తరువాత అన్ని విభాగాలలో వైద్య బృందం సంతకం ఉండేలా చూసుకోవాలి .
- బ్లడ్ శాంపుల్ సేకరణ సమయం లో వైద్య బృందం మెడికల్ ప్రోటోకాల్ పాటించేలా పర్యవేక్షించాలి.
- వైద్య పరీక్షల సమయంలో ఎటువంటి విపత్తు మరియు ప్రమాదకర సంఘటనలు (అధిక రక్తస్రావం, మైకము, మరియు సెంటినెల్ మొదలైనవి) చోటుచేసుకోకుండా చూడవలెను. ఏదేని జరిగినచో వెంటనే సంబంధిత కాల్ హెల్త్ మెడికల్ ఆఫీసర్ కి సమాచారం అందించవలెను . సంఘటన వివరాలను లికార్డు లో పొందుపరచవలెను.
- వైద్య శిబిరం లో వినియోగించే వైద్య పరికరాలు ( నీడిల్స్, సిరంజ్ మొదలగు) సరైన పద్ధతిలో విచ్ఛిన్నం చేసేలా చూసుకోవాలి.

**1.3 మెడికల్ క్యాంపు పూర్తయిన తరువాత పాటించవలసిన నియమాలు:**

- మెడికల్ క్యాంపు జరిగిన ప్రతిరోజు పూర్తి అయ్యే సమయానికి పూర్తి అయిన విద్యార్థులు నుండి సేకరించిన అప్లికేషన్ లు మరియు పూర్తికాని వారి సంఖ్య వివరాలు తప్పకుండా కాల్ హెల్త్ ఆఫీసర్ కి సమాచారం ఇవ్వాలి

**2. ప్రతిరోజు చేయవలసిన పనులు :**

- ప్రతిరోజు పాఠశాలకు ఉదయం 9 గం లకు వెళ్ళాలి
- ప్రధానోపాధ్యాయుడి కలిసి మొత్తం విద్యార్థుల హాజరు మరియు ఆరోగ్య వివరాలు సేకరించి ఉదయం 10 గం లోపు కాల్ హెల్త్ ఆఫీసర్ కి Phone call (040-23317331/040-23317178) ద్వారా సమాచారం ఇవ్వవలయును.

**డైలీ రిపోర్ట్ వివరాలు :**

- a. పాఠశాలలో మొత్తం విద్యార్థుల సంఖ్య
- b. పాఠశాలలో హాజరైన మొత్తం విద్యార్థుల సంఖ్య

- c. పాఠశాలలో మొత్తం అనారోగ్య విద్యార్థుల సంఖ్య
- d. చికిత్స కొరకు సమీప ఆరోగ్య కేంద్రమునకు పంపించవలసిన విద్యార్థుల సంఖ్య .
- e. హాస్పిటల్ లో అడ్మిట్ ఉన్న విద్యార్థుల సంఖ్య.

- మెడికల్ రికార్డు లో పైన వివరాలు అన్ని పాండుపర్చాలి.

### 3. ఇ- కన్సల్టేషన్:

- అనారోగ్య విద్యార్థుల ప్రధమ చికిత్స నిమిత్తం హెల్త్ కమాండ్ సెంటర్ వైద్యుడితో కాల్ సెంటర్ ద్వారా సంప్రదించాలి
- హెల్త్ కమాండ్ సెంటర్ వైద్యుడితో కాల్ సంప్రదించే ముందు విద్యార్థి యొక్క మెడికల్ రికార్డు నెంబర్ మరియు వైటల్స్ రికార్డు చేయాలి.
- విద్యార్థి హాస్పిటల్ లో అడ్మిషన్ ఉన్నట్లైతే రోజూ క్రమం తప్పకుండా మెడికల్ కండిషన్ హెల్త్ కమాండ్ సెంటర్ కి తెలియచేయాలి.
- విద్యార్థి ఆరోగ్య పరిస్థితిని పాఠశాల ప్రధానోపాధ్యాయునికి తెలియచేయాలి.
- ప్రతిరోజూ పని వేళల మినహా ఇతర సమయంలో మెడికల్ సపోర్ట్ నిమిత్తం ఫోన్ లో అందుబాటులో ఉండాలి.

Part Time Health Co-ordinator	
అత్యవసరమైతే	అత్యవసరం కాకపోతే
ప్రాథమిక చికిత్స అందించాలి	రిజిస్టరులో వివరాలను నమోదు చేయాలి
వెంటనే హెల్త్ కమాండ్ సెంటర్ కు సమాచారం ఇవ్వాలి	హెల్త్ కమాండ్ సెంటర్ కు సమాచారం ఇవ్వాలి
వైద్యుడి సలహా & సూచనలు పాటించాలి	E-Consultations కొరకు హెల్త్ కమాండ్ సెంటర్ ద్వారా వైద్యుడితో సంప్రదించాలి.
వివరాలు రిజిస్టరులో వివరాలను నమోదు చేయండి	వివరాలు రిజిస్టరులో వివరాలను నమోదు చేయండి

## 6. SANTATION AND PREVENTIVE MEASURES

### **HAND WASHING**

Hand hygiene is a major issue in infection control. It is considered to be the most important infection preventing measures. Many infections are spreading by direct contacts. To prevent contamination, good hand washing techniques must be practised. Hand washing also the least expensive measure to prevent transmission of nosomical infections. Hand washing is just one important way of avoiding transmission of organisms present on the hands.

The purpose of hand washing is to remove dirt and reduce the amount of bacteria present on the hands. Hands like the rest of the skin, carries two types of microbiological flora.

Make a habit to wash your hands

- before and after eating
- after playing outdoors
- after using toilets
- after sneezing or coughing
- before and after being around with someone who is ill

To achieve fully clean hands, these steps should be followed:

**Total time required to wash hands properly: 30 seconds**

**Step 1 - Wet your hands and apply enough soap (coin size).**



**Step 2 - Rub your palms together.**



### **Step 3 - Rub the back of each hand**



### **Step 4 - Rub both your hands while interlocking your fingers**



**Step 5 - Rub the back of your fingers.****Step 5 - Rub the tips of your fingers.****Step 6 - Rub your thumbs and the ends of your wrists.****Step 7 - Rinse both hands properly with water.**



Teaching people about hand washing helps them and their communities stay healthy.

- Hand washing with soap could protect about 1 out of every 3 young children who get sick with diarrhoea and almost 1 out of 5 young children with respiratory infections like pneumonia.
- Hand washing education and access to soap in schools can help improve attendance.
- Good hand washing early in life may help improve child development in some settings.

## **MENSTRUAL HYGIENE**

### **WHY TO TEACH ABOUT MENSTRUAL HYGIENE**

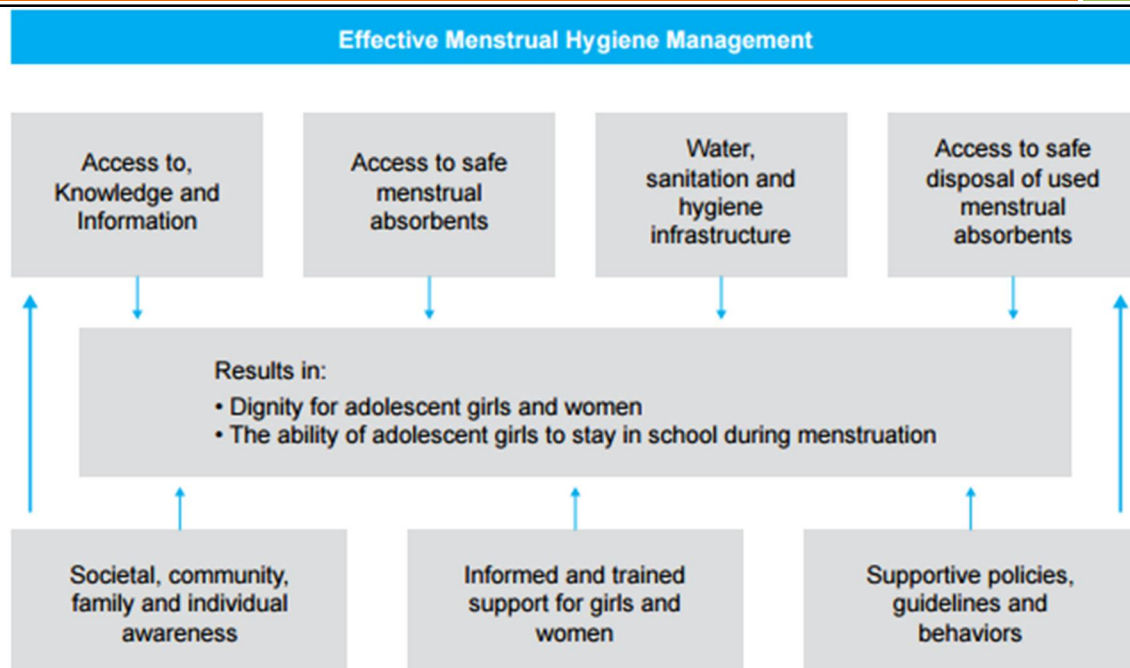
- Menstruation is a normal biological process experienced by all adolescent girls, but it is still a taboo in our students and it is common for people across society to feel uncomfortable about the subject.

- To ensure that adolescent girls have the necessary support and facilities, it is important that the wider society, communities and families break the silence around menstruation.
- It is therefore the responsibility of ANM /Teachers/all other concerned staff , to find appropriate ways to talk about the issue and take necessary action in educating them about:
  - ✓ The use of sanitary napkins for periods is important to reduce risks associated with periods
  - ✓ Changing sanitary napkins every 4 hours and washing hands every time sanitary napkin is changed , are small but significant steps toward ensuring good hygiene during period.
  - ✓ Unsafe use of sanitary napkin can result in serious forms of infections.
  - ✓ Good menstrual hygiene
    - Reduce risk of urinary tract infections.
    - Reduce incidents of rashes in Genitals.
    - Ensures good reproductive health.
    - Minimizes the risk of cervical cancer.
- Head teachers, teachers and school staff because they have a vital role in sensitizing boys and girls, inculcating skills and ensuring they have access to basic water, sanitation and hygiene facilities.
- An early and appropriate intervention by a teacher can make the difference between an adolescent girl staying in school or dropping out at the onset of menarche.

- Girls and women because they spend on average 3000 days of their lives menstruating.
- Men and boys because they need to positively support their sisters, daughters, wives, aunts and mothers.( not to discriminate menstruating adolescent girls and women)
- To become empathetic to girl's challenges and needs.
- To help girls overcome stigma and shame associated with menstruation.

#### RESPONSIBILITY ANM/HWO:

- Provision of adequate sanitary napkins
- Assure clean WASH facilities, operation and maintenance.
- Sustain supply of water and soap.
- Provision for Safe disposal of used menstrual absorbent.
- Talking to parents about menstrual hygiene management in the context of girl's access to education, school completion and access to toilet soap and water at home.



## PREVENTION OF FOOD POISONING

The best way to prevent food poisoning is to ensure maintenance of high standards of personal & food hygiene when storing, handling and preparing food.

- Wash your hands
  - Before preparing & eating food.
  - After using the toilets.
  - After touching dustbins or pesticide.
- High standards of personal hygiene among individuals engaged in handling, preparing and cooking of food is necessary.
- Food handler suffering from any disease should be instructed to refrain from food handling.
- Food handler should be encouraged to maintain personal hygiene.

- Make sure the food is properly sealed and stored.
- Food handling techniques i.e., the time between the food preparation & consumption should be short, start cooking food at the right time so that the cooking is finished at the exact time for consumption.
- Cook meat and eggs thoroughly.
- Avoid egg fry.
- Keep raw foods separate from ready to eat foods, throw them out when in doubt.
- Wash utensils, food surfaces, and work tops particularly after they come in contact with raw food.
- Sanitation of the all work surfaces, utensils, equipment must be insured.
- Do not use anti-bacterial sprays, hot soapy water in fine.
- Wash dish clothes and towels regularly.
- Use separate chopping pads for raw foods and ready to eat foods.
- Respect; use by dates', even if it looks or smells ok.
- Installation of fly catches.
- Keep surfaces dry.

## WASTE MANAGEMENT

<b>PURPOSE :</b>	Removing and destroying or storing damaged, used or other unwanted domestic, agricultural or industrial products and substances properly from its inception to its final disposal.
<b>RESPONSIBILITIES :</b>	<p>The ANM/HWO or (some responsible person) as to have control over:</p> <ul style="list-style-type: none"> <li>• What is being disposed of</li> <li>• Separation of waste and recyclables</li> <li>• Correct use of waste and recycling bins</li> <li>• Use of the waste storage facilities</li> <li>• Use of bins and other equipment.</li> </ul>

STEPS IN WASTE MANAGEMENT :	SEGREGATION, STORAGE & COLLECTION.	DISPOSAL :
	<b>1. WET WASTE:</b> Cooked and uncooked food, plant leaves, compostable materials, meat and poultry waste etc.	
	<b>2. SANITARY WASTE:</b> Sanitary napkins, bandages, etc.	
	<b>3. DRY WASTE (paper):</b> All types of paper, paper plates, tickets, telephone bills, wrappers, leaflets, flyers, etc.	
	<b>4. DRY WASTE (plastic/ glass) :</b> All types of plastic, plastic bags, coke bottles, water bottles, garbage packs, milk packets etc.	
	<b>5. DRY WASTE (hazardous):</b> Used syringes, insecticides and containers, discarded medicines, battery cells, chemicals, electronic equipment etc.	
	<b>6. DRY WASTE (others):</b> Metal items, tetra packs, aluminium foils, , thermocol, bottles, plates, utensils, Garden Waste Plant leaves, dry and wet cut branches Inert Waste All types of construction materials, cement, mud, sweeping dust etc.	



## INTENSIVE TRAINING PROGRAM (ITP-TWD)

### OBJECTIVES :-

At the end of training the PTHCs/ANMs/ Staff Nurse will be able to.....

- **Identifying emergency cases.**
- **Providing treatment for minor health issues.**
- **Maintaining all medical records at institution level.**
- **Management of students suffering from chronic diseases.**
- **Following standard protocol for attending and reporting emergency /admitted cases.**
- **Maintenance of sick room along with required medicines and equipment.**
- **Conducting health education classes.**
- **Identify certain behavioural issues based on Psychological change.**



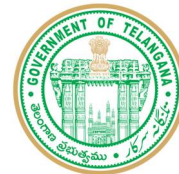
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