



# Emergency Conditions arising out of NCDs For FLW



# LEARNING OBJECTIVES



1. Recognizing General Signs in relation to emergencies arising out of NCDs
2. Management Protocol -General
3. Management protocol - Specific measures for Stroke, Heart Attack, and Diabetic emergencies
4. Safe Transport and Referral
5. Follow-up Care
6. Prevention and Awareness Generation at Community Level



# RECOGNISING LIFE THREATENING SITUATIONS- NCDs

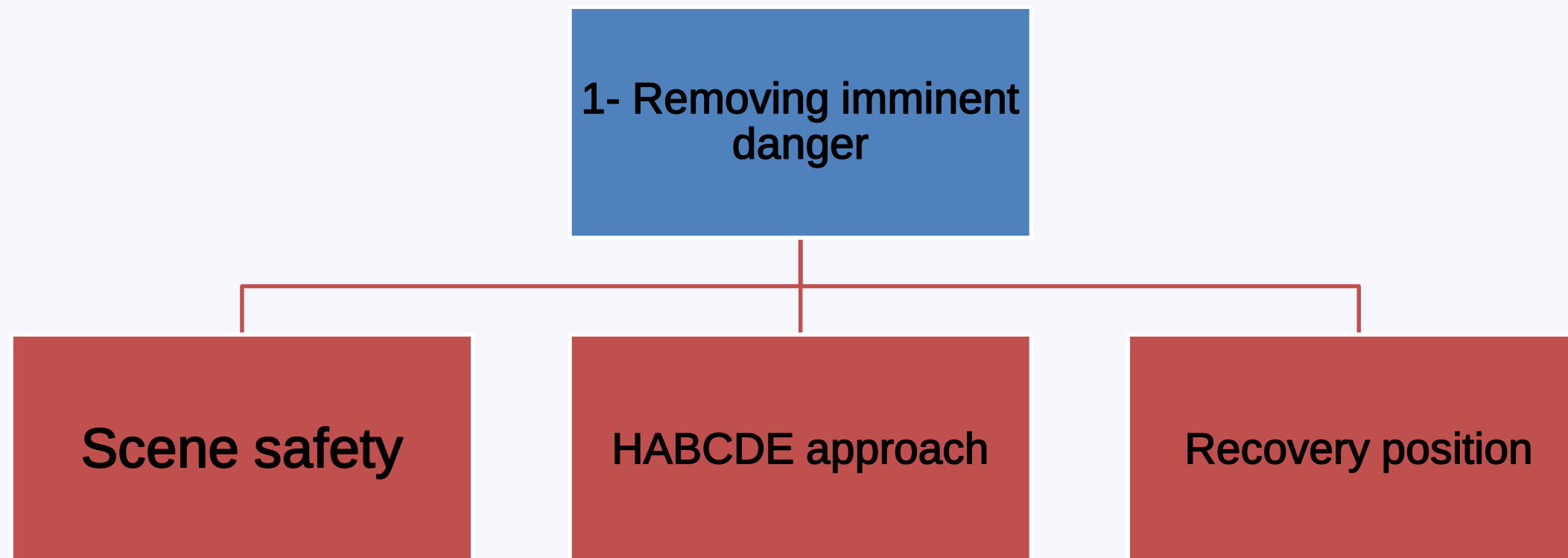


1. Sudden weakness in arms or legs (usually affects one side of the body)
2. Sudden drooping or weakness in one side of the face
3. Sudden loss of balance, headache, dizziness, or loss of consciousness
4. Sudden blurring of vision
5. Sudden difficulty in speech/inability to speak
6. Sudden pain in the chest
7. Diabetic emergencies (Low blood sugar level and High blood sugar level)



# MANAGEMENT PROTOCOL- GENERAL MEASURES

- Call the Ambulance (102)
- Inform the CHO and MO about the situation
- Stabilise the victim till transferred to the health facility - Two Approach



2- Specific measures for stabilization



# BUT IN CASE OF CARDIAC EMERGENCIES



CAB instead of HABCDE protocol

To allow blood to be pumped by the heart

## Compression. Airway. Breathing



### Compressions

Push hard and fast  
on the center of  
the victim's chest



### Airway

Tilt the victim's head  
back and lift the chin  
to open the airway



### Breathing

Give mouth-to-mouth  
rescue breaths



# SPECIFIC MEASURES

- The two most common NCDs – hypertension and diabetes – can lead to emergencies if not controlled.
- They are- Stroke, heart Attack/Cardiac Arrest, Diabetic emergencies.
- In NCD related emergency conditions, the most important step you must take is planning a proper referral. Apart from that, sometimes when you find no pulse, you will be needed to perform CPR (Cardio-Pulmonary Resuscitation).



# DIABETIC EMERGENCIES



## Low sugar problems: *more dangerous than high sugar levels*

- Tired, sweating, confusion, seizures, unconscious
- May be confused with stroke
- Give Sugar by mouth
- If no improvement rush to the hospital



## High sugar problems:

- Increased urination, thirst, severe dehydration, nausea, abdominal discomfort
- Seek medical care urgently

If a person who has a known history of diabetes shows any of these symptoms, refer him/her immediately to the nearest appropriate health facility.

# STROKE



## Signs:

1. Sudden weakness in arms or legs (usually affects one side of the body)
2. Sudden drooping or weakness in one side of face
3. Sudden loss of balance, headache, dizziness or loss of consciousness
4. Sudden blurring of vision
5. Sudden difficulty in speech/inability to speak

**A case of stroke must be immediately transferred to a tertiary care hospital**



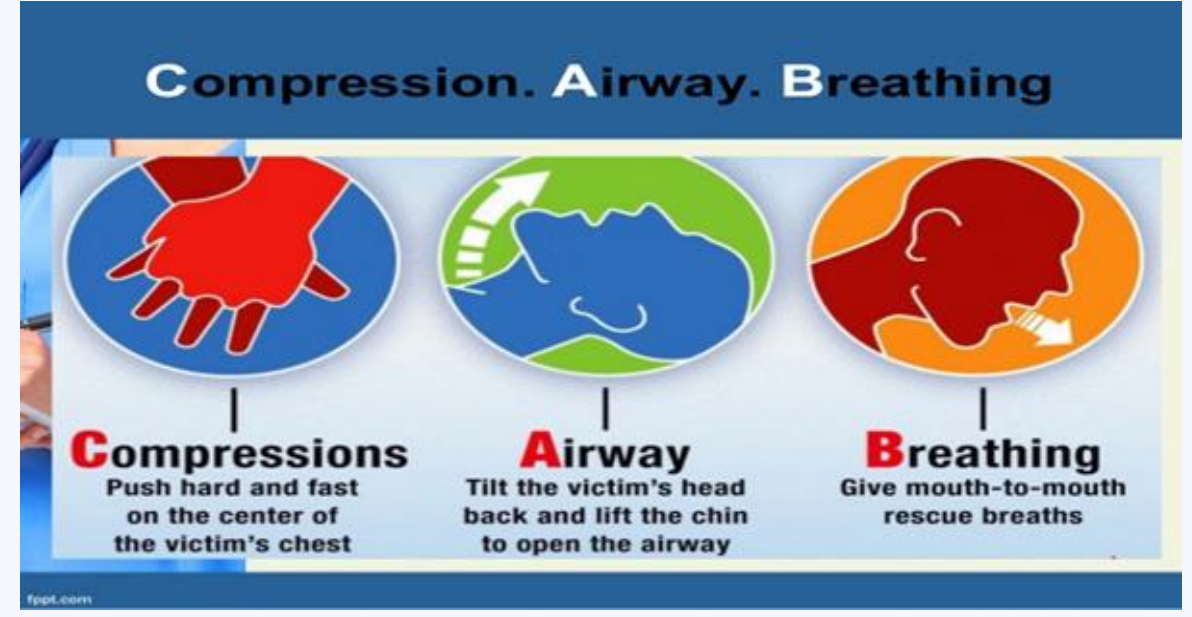
# HEART ATTACK / CARDIAC ARREST



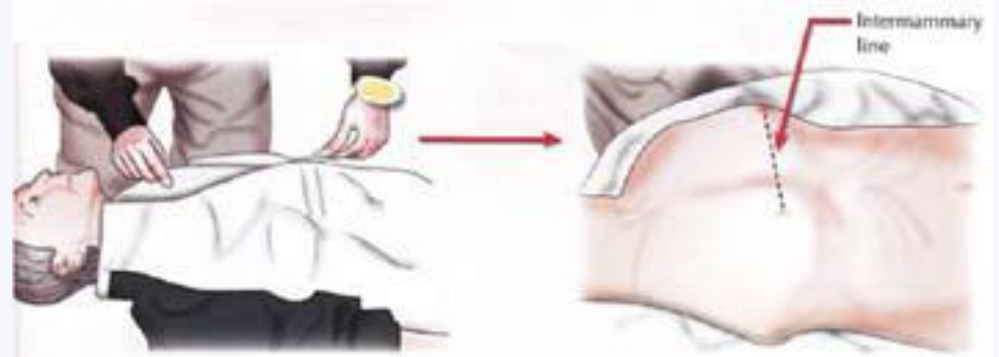
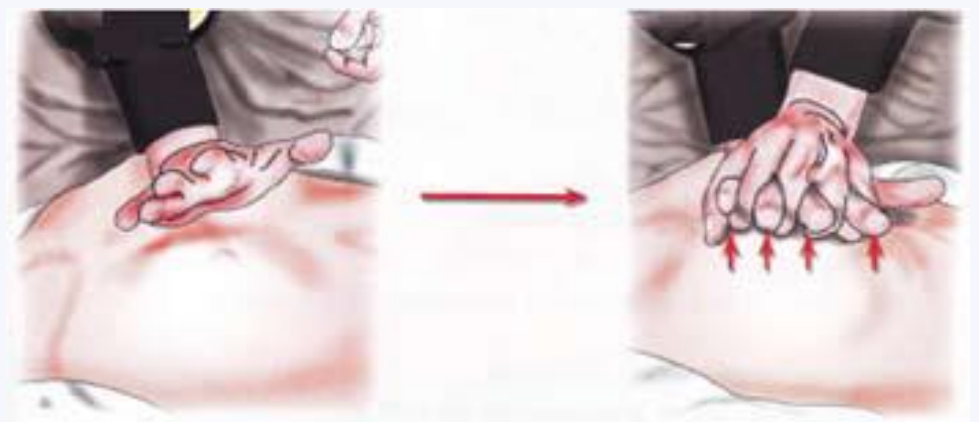
## Signs:



- Sudden pain in the chest which may spread to left arm,
- Difficulty in breathing and loss of consciousness.
- Sometimes a heart attack may present only as sweating, nausea, tiredness, tingling and numbness in the extremities.

A case of heart attack must immediately be taken to the nearest health facility. They may require Cardio-Pulmonary Resuscitation (CPR). (Remember to follow CAB and not ABC.)





<b>Step 1</b>	Kneel by the side of the victim	
<b>Step 2</b>	Place the heel of one hand in the centre of victim's chest.	
<b>Step 3</b>	Place the heel of your other hand on top of the first hand.	

<b>Step 4</b>	Interlock the fingers of your hands and ensure that pressure is not applied over the victim's ribs.	
<b>Step 5</b>	Position yourself vertically above the victim's chest and with your arms straight, <b>press down on the sternum 4-5 cm</b>	

# CPR

<b>Step 6</b>	After each compression release all the pressure on the chest without losing contact between your hands and sternum.
<b>Step 7</b>	Repeat at the rate of minimum <b>100 compressions per minute</b> (a little less than 2 compression a second).
<b>Step 8</b>	Compression and Release should take equal amount of time.



# CPR IN ADULTS

## Adults (Masks on)

- 100 per minute
- Continuous for 2 minutes
- Heel of one hand in the center of the chest on the lower half of sternum with the other hand on top
- Straight arms, locked elbows and shoulders in line with patient's midline
- Extend your back





## COMBINE CHEST COMPRESSIONS WITH RESCUE BREATHS

- After 30 compressions give mouth to mouth breathing to the victim.
- Continue with chest compression and rescue breaths in a ratio of 30:2.
- Stop to recheck the victim only if he starts breathing normally; otherwise do not interrupt resuscitation.

### Only CPR:

- If you are unable or not willing to give rescue breaths, give CPR only.
- If chest compressions only are given these should be continuous at the rate of 100 per minute.
- Stop to recheck the victim only if s/he starts breathing normally; otherwise do not interrupt resuscitation.



# TWO PERSON CPR

- Person 1 (leader) does scene safety ensures infection control, assess patient and start CPR
- Person 2 calls for help and then assumes hovering position
- Person 2 swaps with Person 1 continuing CPR
- Swap compression provider every 2 minutes
- Faces Covered!

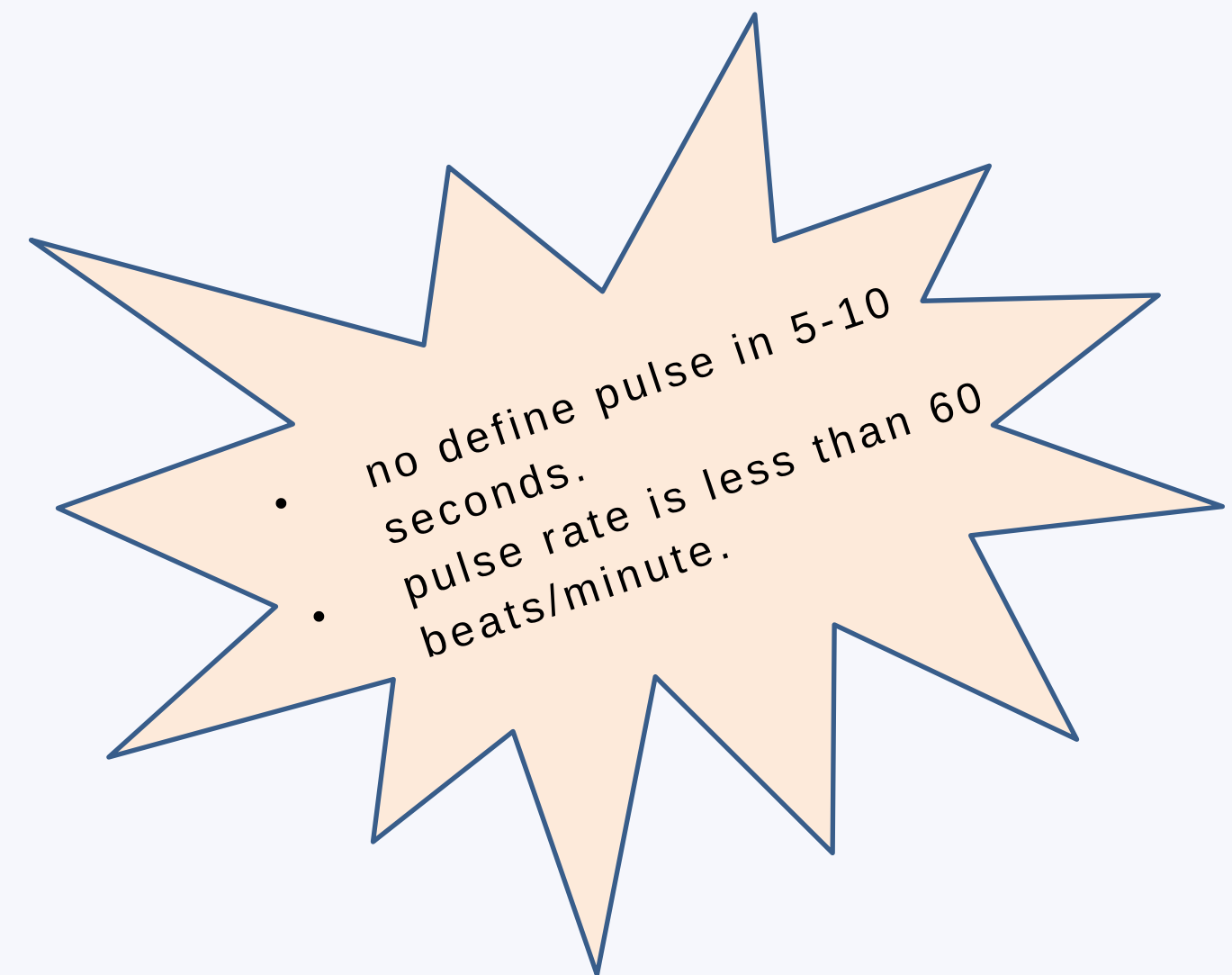


# CPR IN CHILDREN

1. Give initial rescue breaths before starting chest compressions.
2. Compression (about 2 inches) at the rate of at least 120 per minute, at the center of the chest (lower half of the sternum).
3. Tilt the head back and listen for breathing.
4. If not breathing normally, pinch nose and cover the mouth with yours and blow until you see the chest rise. Each breath should take 1 second.

**Caution: Breaths can be omitted during pandemic times and hands-only CPR may be performed.**

Chest compression and rescue breaths in a ratio of **30:2**



# CPR IN INFANTS

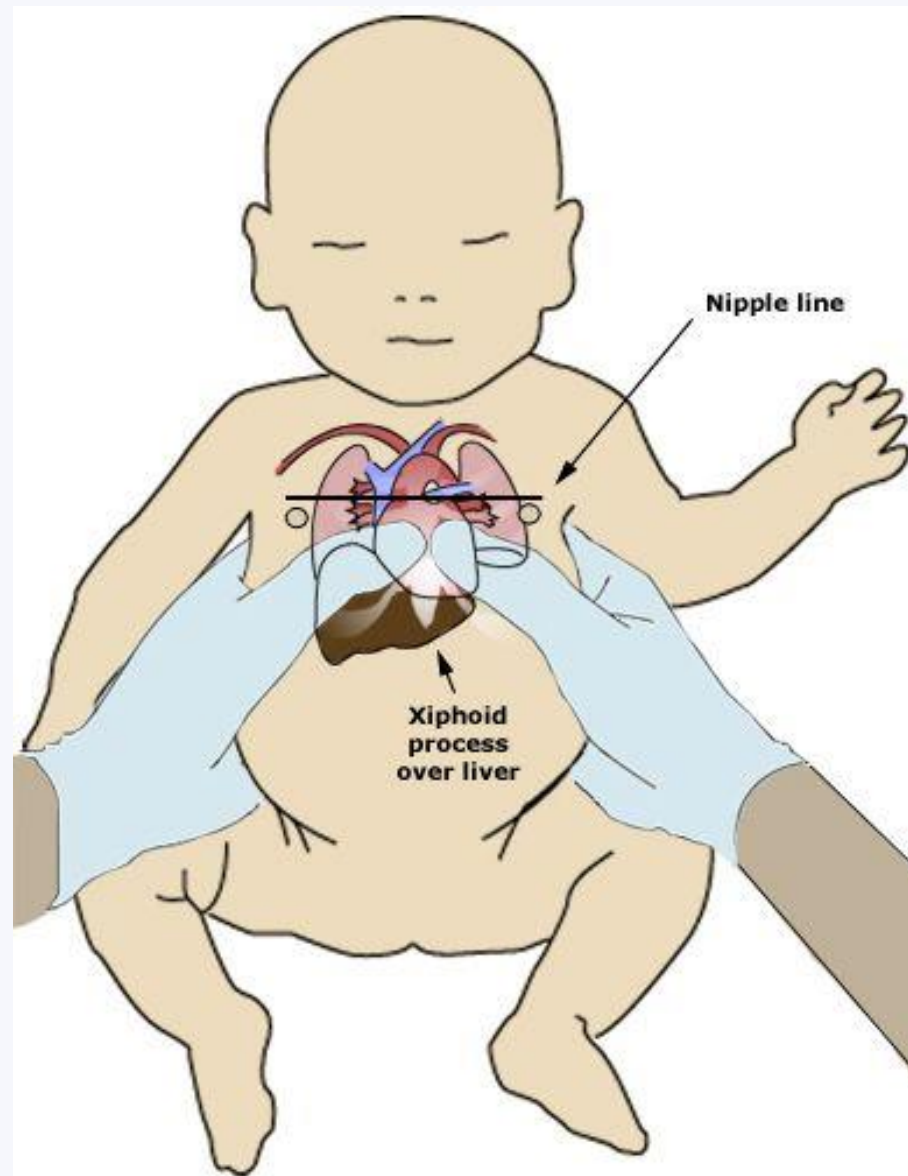
Check for brachial pulse is preferred –CPR even if HR is less than 60.

1. Identify inter-mammary line




2. Press with two fingers just below the centre of the inter-mammary line.

3. Compress chest by  $\frac{1}{3}$  to  $\frac{1}{2}$  of the depth of the chest (about one and a half inches).

4. Give 15 gentle chest compressions at the rate of at least 120 per minute.



# CPR AT A GLANCE

	ADULT	CHILD	INFANT
<b>C-COMPRESSIONS</b>	<ul style="list-style-type: none"> <li>press down on the sternum 4-5 cm.</li> <li>100 per minute,</li> <li>Continues for 2 minutes</li> </ul>	<ul style="list-style-type: none"> <li>centre of the chest (lower half of the sternum).</li> <li>2 inches down</li> <li>120 per minute</li> </ul>	<ul style="list-style-type: none"> <li>centre of the inter-mammary line.</li> <li>1/3 to 1/2 of the depth of the chest (about one and a half inches).</li> <li>15 gentle chest compressions at the rate of at least 120 per minute.</li> </ul>
<i>(Compress location)</i>			







# REFERRAL ANNEXURE

## HWC-SC (CHO)

- Simple Burns
- Fresh scratches / superficial wounds
- Animal/insect bites
- Chest Pain (only for first aid)
- Uncomplicated choking

## HWC-PHC (MO)

- Fever with altered mental status
- Fever with Headache/ chest Pain/ Jaundice
- Chest pain
- Choking
- Simple burn injuries including chemical and acid burn
- Convulsions, Epileptic Seizures
- Headache
- Unconsciousness/ Fainting, Disorientation
- Breathing problems (difficult breathing, shortness of breath),
- Hanging / Drowning/ Electrocutation/ Stroke
- Abnormal bleeding Per Vagina
- Ongoing bleeding (Blood in vomitus, Blood in cough, Blood in urine, Nose bleeding etc)
- Acute abdominal pain,
- Drug overdose, Poisoning- with stable vital signs
- Severe allergic reactions
- Minor Head Injury and other Musculo skeletal injuries
- Suspected spine Injury (any)
- Injury to a pregnant woman

## FRU/DH/Tertiary Care Centre (Specialist/MO)

- Chest pain
- Cardiac problems (e.g.: Heart block, CHF, rhythm disturbances)
- Breathing problems (difficult breathing, shortness of breath),
- Choking
- Unconsciousness/ Fainting, Disorientation/Stroke
- Shock (including due to blood loss, dehydration etc.)
- Uncontrollable bleeding, e.g.: nose bleed, hematuria
- Painful Bleeding P/R
- Cyanosed infant/child, (e.g.: Foreign Body inhalation)
- Convulsions, Epileptic Seizures,
- Diabetic emergencies
- Animal bites, snake bites/Scorpion bite
- Drowning
- Poisoning -unstable vitals
- Acute abdominal pain (severe),
- Burns and inhalational injuries (including steam, acid attack and smoke inhalation)
- Musculo skeletal injuries (e.g.: Road Traffic Injuries, fall from height etc.)
- Injuries due to weapons (e.g.: gunshot wound, Stab wounds etc.)
- Injuries due to violence (e.g.: Suspected sexual assault, domestic violence)
- Any other life threatening condition



# FOLLOW UP CARE

- Ensuring regular check-ups of the patient
- Educating him/her regarding strict adherence to- DLM
  - dietary modifications advice
  - lifestyle modification advice
  - Medications advice



# PREVENTION & AWARENESS GENERATION



## Key messages:

- All hypertensive and diabetic patients should get their:
  1. blood pressure and blood sugar checked regularly,
  2. take medicines as prescribed,
  3. follow dietary advice,
  4. maintain healthy lifestyle and
  5. visit the doctor regularly.
- Pregnant women with hypertension and other co-morbidities should undergo periodic monitoring of their vitals and keep family and you informed.





# EVALUATION

- What is 'C' in C A B?
- What should be given to patient of diabetic emergency with low blood sugar level?
- Combine chest compression is-
  1. CPR by team of two persons
  2. Compressions with rescue breaths
  3. Mouth to mouth





# ANSWERS



- Chest Compressions
- Sugar by mouth
- Compressions with rescue breaths





# Thank You

