NPHCDA

MODULE 13: MANAGEMENT OF EMERGENCIES IN PRIMARY HEALTH CARE

February 2024

Learning Objectives

At the end of this session, Participants will be able to;

1. Identify some common emergencies in PHC settings
2. Define the roles of frontline health workers in emergency response
3. Understand the importance of prompt and effective emergency management in PHC

Overview of Emergency Management in PHC

Sessions	Components
13.1	Basic Management of Trauma Care for Frontline Health Workers
13.2	Emergency Management of Burns
13.3	Management of Rabies in Primary Health Care
13.4	Management of snake bites in Primary Health Care
13.5	Emergency Management of Scorpion Bites
13.6	Emergency Management of Stroke
13.7	Emergency Management of Epilepsy
13.8	Common Home Accidents

Brainstorming

How can frontline health workers handle different emergencies in PHC, making sure they help quickly and in the right way? (*Participants to share opinion*)

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13.8	Common Home Accidents

Learning Objectives

At the end of this session, Participants will be able to;

1. Recognize the causes of traumatic injuries
2. Demonstrate basic first aid techniques for trauma care
3. Understand principles of stabilizing trauma patients before referral

Overview of Basic Management of Trauma Care in Primary Health Care



ABCDE approach to trauma management



Handover and transfer of trauma patients



Skill and practical session

Trauma

Important notes on trauma

Trauma can result from road traffic accidents, domestic accidents, falls from heights, etc.

The major aim of management of trauma and road traffic accidents at the PHC level is to provide first aid and quickly refer to a treatment facility

The priorities include managing airway and breathing emergencies, controlling bleeding, treating shock and immobilizing the spine if needed, and conducting general assessment of the patient

The goal of initial assessment is to **identify life-threatening injuries**

The goal of acute management is to **prevent secondary injury**, control pain and plan ongoing care and referral

REMEMBER ……..

- People who initially appear uninjured may have hidden life-threatening injuries, such as internal bleeding
- It is essential to re-assess trauma patient's multiple times and whenever the patient's condition worsens

ABCDE Approach to Trauma Management



SUSPECT

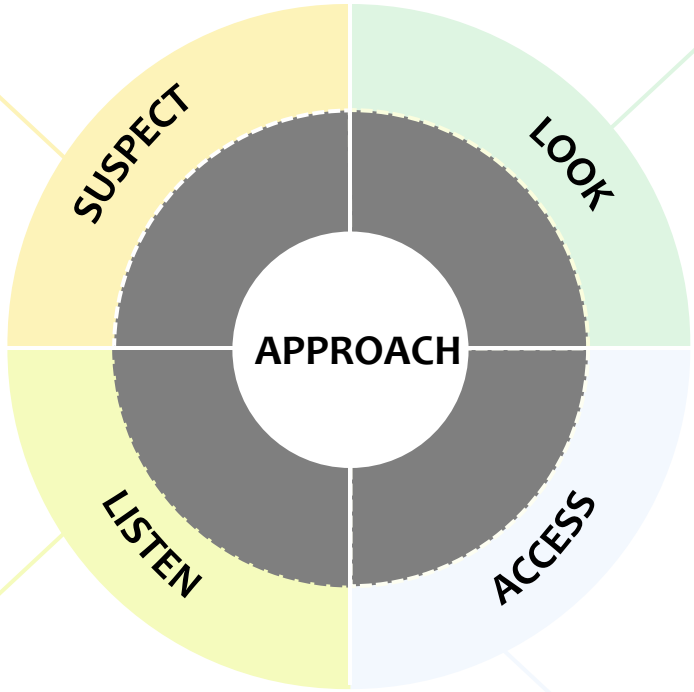
Always **suspect** head and spine injury in a patient with altered mental status **Airway**



LISTEN

Listen for abnormal airway sounds

- Gurgling
- Snoring
- Stridor
- Noisy breathing





LOOK

- **Look** for vomit, tongue or other objects obstructing the airway
- **Look** for burned nasal hairs or soot around the nose or mouth
- **Look** for head or neck injuries
- **Look** for bleeding from the nose and mouth (and ears)
- **Look** for expanding bleeding under the skin of the neck.

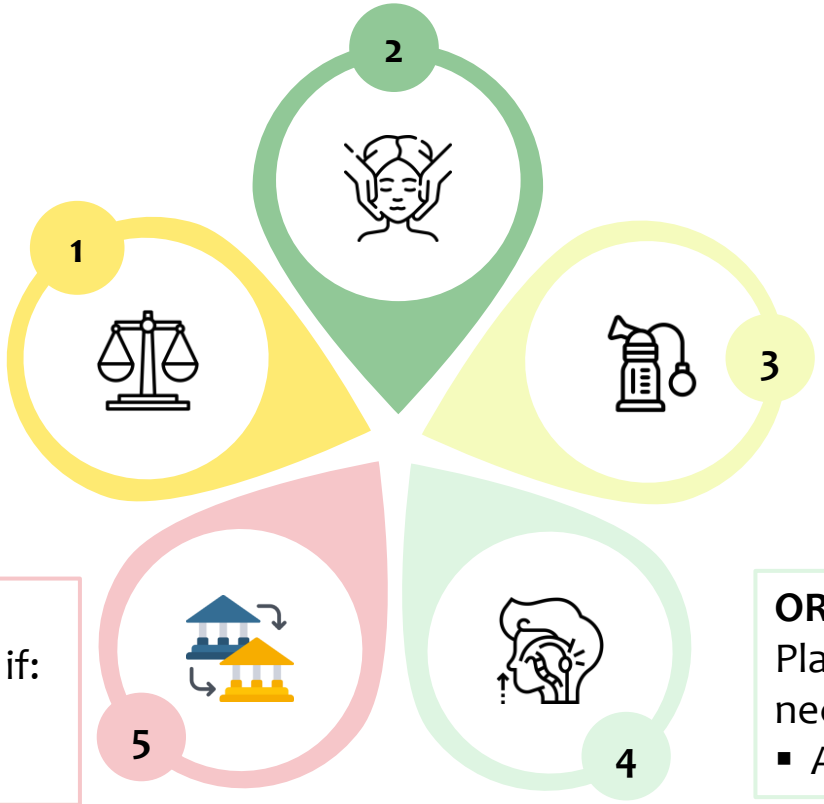


ACCESS

Assess for altered mental status

Airway Management with Cervical Spine Immobilization

JAW THRUST
Open airway using JAW THRUST (not head-tilt-chin lift)



STABILIZE
STABILIZE the cervical spine

SUCTION
SUCTION airway secretions and remove any visible foreign objects

HANDOVER/TRANSFER
Plan for rapid HANDOVER/TRANSFER if:
- Evidence of airway burns
- Expanding neck haematoma

ORAL/NASAL AIRWAY
Place ORAL/NASAL AIRWAY if necessary
- Avoid nasal airway in facial trauma

These interventions should be carried out by doctors or other qualified personnel

Overview of Emergency Management in PHC

Breathing Assessment

Look	Look for difficulty in breathing
	Look for abnormal chest wall movements
	Look for tracheal shift
	Look for sucking chest wounds
	Look for cyanosis
	Look for abrasions, bruising or other signs of injury to chest
	Look for circumferential burns to chest or abdomen
Listen	Listen for absent/decreased breath sounds
	Listen for dull sounds or hyperresonance with percussion
Feel 	Feel for crepitus, cracking and popping with palpation

Breathing Management

- Give OXYGEN
- NEEDLE DECOMPRESSION, OXYGEN and IV FLUIDS for tension pneumothorax
- THREE-SIDED DRESSING for sucking chest wound
- If breathing is not adequate or patient is hypoxic on oxygen, assist breathing with BAG-VALVE-MASK VENTILATION
- For chest or abdomen burns restricting breathing, plan for rapid HANDOVER/TRANSFER to a general or specialist hospital

- These interventions should be carried out by doctors or other qualified personnel
- Refer Urgently

Overview of Emergency Management in PHC

Circulation Assessment

Look 	Look for capillary refill greater than 3 seconds
	Look for pale extremities
	Look for distended neck veins
	Look for external and internal bleeding Common sites: chest, abdomen, pelvis, femur, amputations, large external wounds, burns
	Look for burns (size and depth)
Feel 	Feel for cold extremities
	Feel for weak pulse or tachycardia

*These interventions should be carried out by doctors or other qualified personnel
*Refer Urgently

Circulation Management

- Apply DIRECT PRESSURE or DEEP WOUND PACKING to control active bleeding
- Apply TOURNIQUET to amputated limbs or uncontrolled bleeding
- Start IV and plan for urgent TRANSFER to a surgical unit
- For ongoing blood loss/poor perfusion, start 2 large IVs and give IV FLUID
- If burn injury, start IV FLUIDS according to burn size
- SPLINT suspected femur fracture
- BIND suspected pelvic fracture
- LEAVE penetrating objects; stabilize the object and prepare for TRANSFER
- Place pregnant patients on left side while maintaining spinal immobilization

Overview of Emergency Management in PHC

Disability Assessment

Look	Look for confusion, lethargy or agitation
	Look for seizures/convulsions
	Look for unequal or poorly reactive pupils
	Look for deformities of the skull
	Look for blood or fluid from ears or nose
	Look for abrasions, bruising or other signs of injury to chest
	Look for circumferential burns to chest or abdomen
Check	Check AVPU or GCS
	Check movement and sensation in all extremities
	Check blood glucose in the confused or unconscious patient

Disability Management

- If GCS < 9 (or children AVPU score P or U) plan for rapid HANDOVER/TRANSFER
- If patient is lethargic or unconscious, RE-ASSESS airway frequently
- THINK spine injury or closed head injury in any trauma patient with altered mental status
- Give OXYGEN
- If low blood glucose or unable to check, give GLUCOSE
- In case of seizures, give a BENZODIAZEPINE

GCS= Glasgow Coma Scale

*These interventions should be carried out by doctors or other qualified personnel
*Refer Urgently

Overview of Emergency Management in PHC

Exposure Assessment

1	Remove all clothing
2	Examine entire body for evidence of injury, including back, groin and underarms
3	Assess the patient's back and spine using the log-roll maneuver

*These interventions should be carried out by doctors or other qualified personnel
*Refer Urgently

Exposure Management

- If spinal injury is suspected, perform log roll manoeuvre to examine the back
- Remove restrictive clothing and all jewelry
- Remove any wet clothes and dry patient thoroughly
- Cover the patient as soon as possible to prevent hypothermia
- Respect the patient and protect modesty during exposure

Handover and Transfer of Trauma Patients

- SBAR is a structured method for communicating critical information between providers
- SBAR improves communication between providers and ensures safety of patients
- SBAR has 4 steps;

1 | SITUATION

2 | BACKGROUND



3 | ASSESSMENT

4 | RECOMMENDATION

Notes on SBAR

SBAR reduces the barrier to effective communication across different disciplines and levels of care

It creates a shared mental model around all patient handovers and situations and critical exchange of information

It is a memory prompt, easy to remember and encourages prior preparation for communication

SBAR reduces the incidence of missed communications

Handover and Transfer (SBAR)

S - SITUATION	B-BACKGROUND	A - ASSESSMENT	RECOMMENDATION
▪ Identify yourself ▪ Identify the patient by name, sex, age Chief complaint (patient's initial description of problem) ▪ Goal is to describe the specific situation including the patient's name, patient location (and severe vital sign abnormality).	▪ Give the patient's reason for transfer ▪ Explain significant medical history 2-4 most important and relevant aspects of the case elements from history, physical exam, testing results ▪ Include any important findings / interventions ▪ Include vital signs	▪ What do you think is wrong with the patient ▪ Reason for transfer ▪ Includes Clinical impressions, concerns, etc.	▪ Next steps in treatment plan Potential worsening of the patient's condition (for example, need for close airway observation). ▪ Caution regarding previous therapies (last adrenaline dose, 3-way dressing monitoring)

Exercise 1 (Case study on Hand Over and Transfer)





- A 22-year-old man was riding a motorcycle when he crashed into another vehicle at high speed. He was thrown from his motorcycle and was not wearing a helmet
- His airway is open; he has normal breath sounds on both sides of his chest; his pulses are strong and around 90 beats per minute; he is only responsive to pain and has a femur fracture with bone visible in an open wound; there are abrasions on his forehead.
- You and your colleague have transported him from the scene of injury and are handing him over to a hospital provider
- Use the SBAR approach to prepare a referral notes

Skill and Practical Session

HEAD-TILT/CHIN-LIFT manoeuvre

IJAW-THRUST manoeuvre

AIRWAY DEVICE insertion - Oropharyngeal airway; Nasopharyngeal airway

Suction skills:

- BAG-VALVE-MASK-VENTILATION with OXYGEN and follow CPR PROTOCOLS
- Apply BINDER for pelvic fracture or SPLINT for femur fracture

AVPU and GCS

Recovery position

Log roll

Burn area estimation

Needle decompression

Key messages

1. Proficiency in basic first aid is crucial for frontline health workers in providing immediate care to trauma patients

2. Recognizing and understanding various types of injuries equips you to respond appropriately in different trauma scenarios

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13.7	Emergency Management of Epilepsy
13.8	Common Home Accidents

Learning Objectives

At the end of this session, Participants will be able to;

1. Classify burns based on severity and depth
2. Administer appropriate first aid for burns
3. Identify signs and complications in burn patients and take appropriate actions

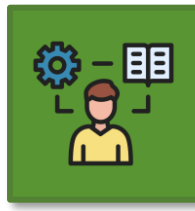
Overview of Emergency Management of Burns



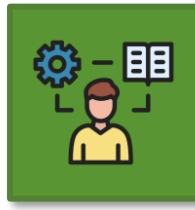
Types of common burns



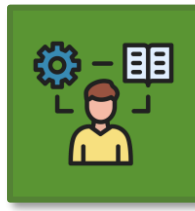
Clinical signs and symptoms



Diagnosis



Control and management of burn injuries



Prevention of Burns

Brainstorming

How can frontline health workers identify signs and complications in individuals with burns? (Participants to share opinion)

Burns

A burn can be defined as an injury caused by exposure to heat, chemicals, sunlight, electricity or radiation which damages skin tissue.

Burn wounds and injuries cause morbidity and mortality in our communities.

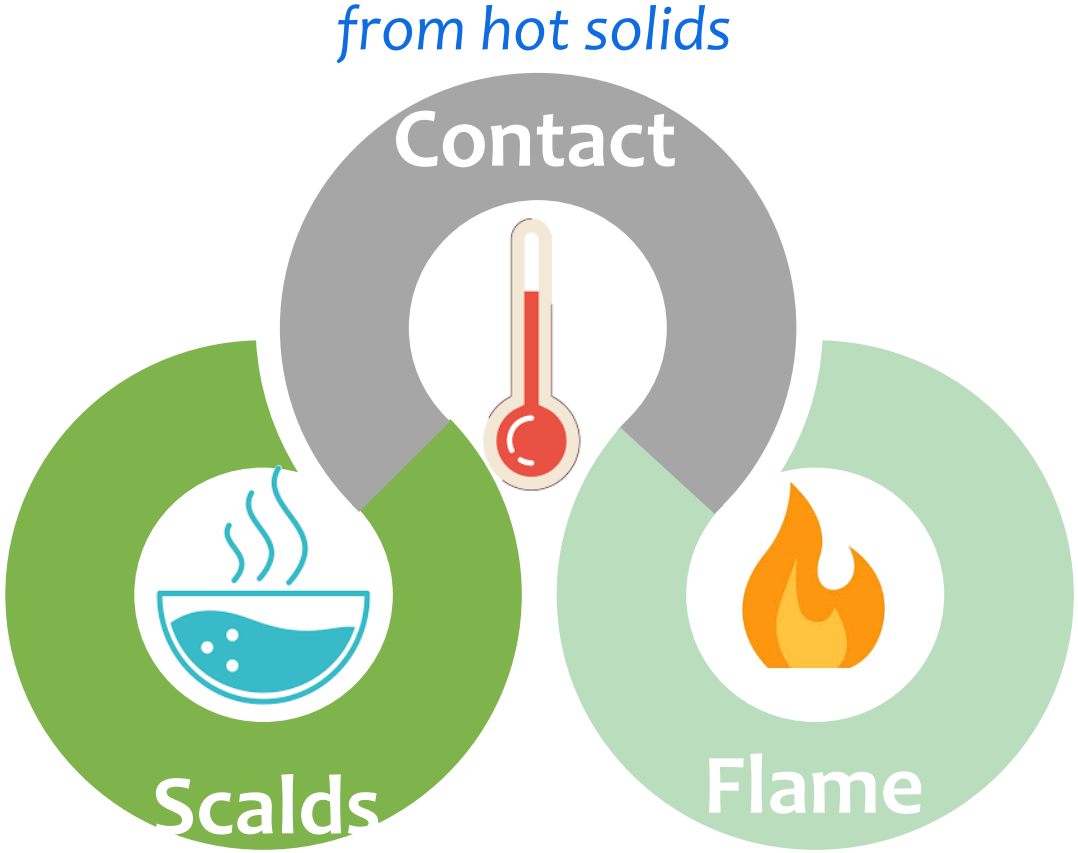
Burn Incidence

- The Numbers
  - How often?
  - How many injuries?
  - How many hospitalizations?
  - How many “major” injuries?
  - How many deaths?



Burns

The majority of burns occur in the home and workplace,
3 types of common burns:



Who's at risk?

Burns are most common in children and adult women. According to its data,
Burns are the 5th most common cause of non-fatal childhood injuries.

Clinical Signs and Symptoms

1. Blisters/ redness
2. Pain (painful to touch)
3. Swelling.
4. White or charred (black) skin.
5. Dry, peeling skin
6. Signs of inhalation injury include soot (ash) or signed (burned) nasal hairs, swelling of lips or mouth and voice changes
7. Shock in severe cases (fainting, collapsing)

Types of Burns

1



First-degree burns (minor): these are mild like sunburns. The top layer of skin (epidermis) turns red and is painful

2



Second degree burns (moderate): affect the skin's top and lower layers (dermis). It causes pain, redness, swelling and blistering

3



Third degree burns (severe): affect all three layers of the skin- epidermis, dermis and inner layer (fat). The burn also destroys hair follicles and sweat glands. Because third-degree burns damage nerve endings, there may be no pain in the burn area itself, but there will be pain adjacent to it. Burned skin may be black, white or red with a leather-like appearance

First-Degree Burns



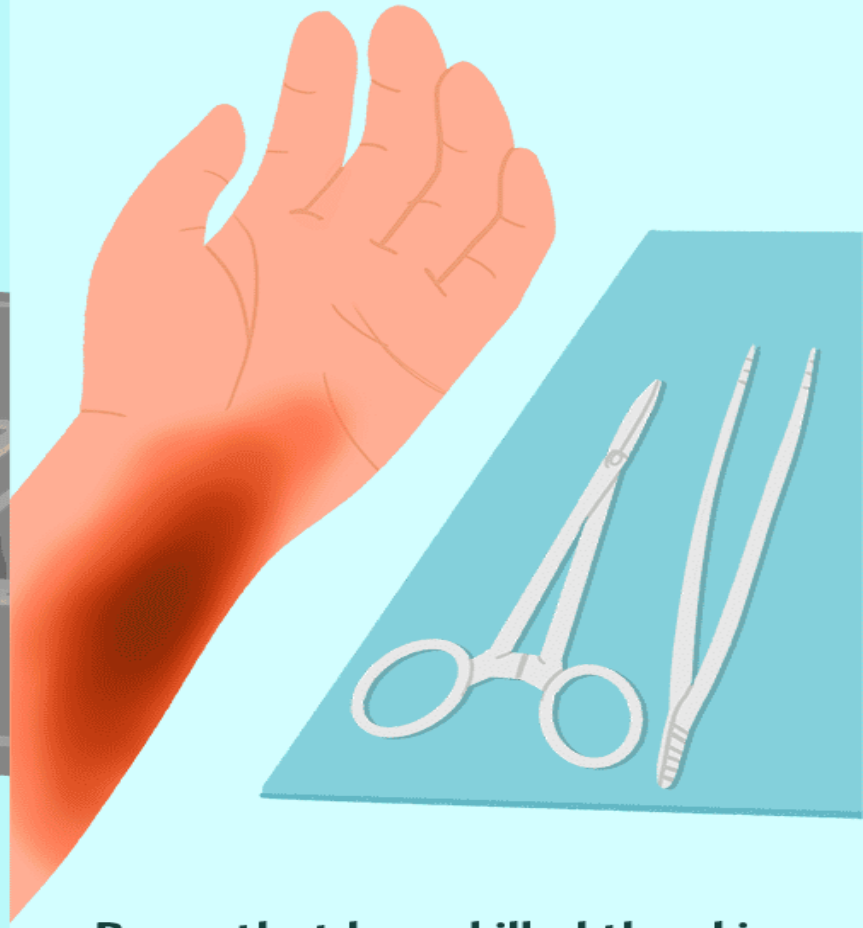
Superficial burns that only affect the skin surface

Second-Degree Burns



Burns that affect the outermost and second skin layer

Third-Degree Burns



Burns that have killed the skin all the way to the fatty tissue

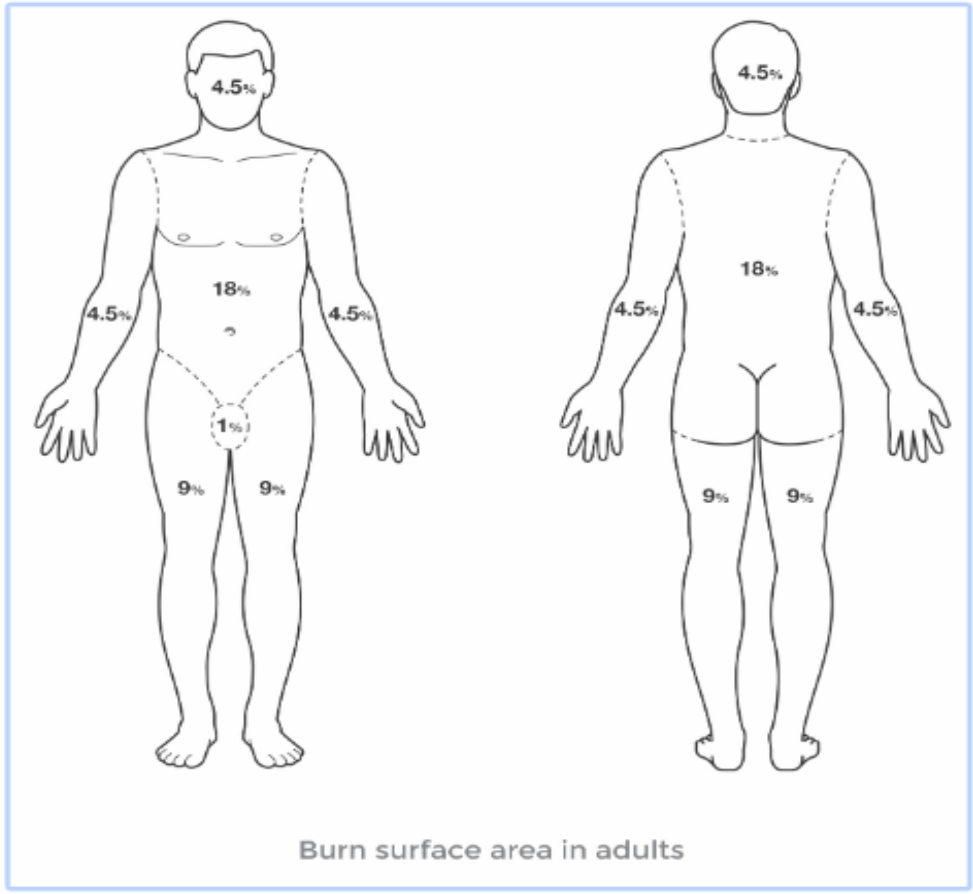
verywell

Diagnosis

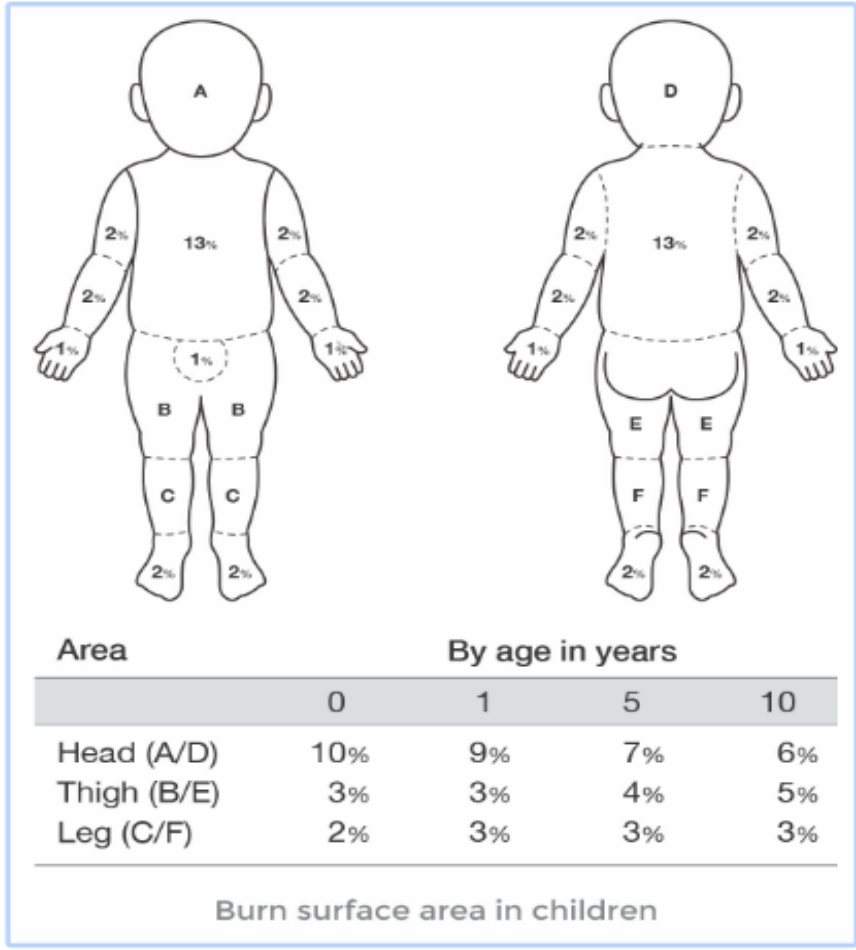
1. The healthcare provider will assess the burn wound depth and extent.
2. For people with large burns, blood pressure, heart rate, and urine volume should be measured frequently to help assess the extent of dehydration.
3. Soot (ash) or signed (burned) nasal hairs, swelling of lips or mouth and voice changes may indicate inhalation injuries
4. Severe burn cases should be referred to secondary facilities



Burn Area Calculation



Burn surface area in adults



Area	By age in years			
	0	1	5	10
Head (A/D)	10%	9%	7%	6%
Thigh (B/E)	3%	3%	4%	5%
Leg (C/F)	2%	3%	3%	3%

Burn surface area in children

Control and Management of Burn Injuries

First and second degree burn	▪ cool the affected area (e.g. run under cool water) and cover with clean cloth. Antibiotic creams and pain relievers can also be applied
Third degree burn	▪ 3rd degree burn cases are must be referred to secondary facilities
All burns	▪ Continue to check wounds for signs of infection, long-term complications like scarring, tightening of the skin over joints and muscles (contractures) which makes movement difficult, etc. ▪ MONITOR for airway obstruction ▪ Give IV FLUIDS according to burn area and depth ▪ Give ANTI-TETANUS TOXOID ▪ Give PAIN RELIEF ▪ Remove all jewelry ▪ CLEAN and DRESS all wounds carefully ▪ Burns are high risk for infection

Plan for rapid HANDOVER/ TRANSFER in case of the following:

- Serious burns to more than 15% of the body
- Burns to hands, face, groin, joints or circumferential burns
- Inhalation injury
- Burns with other trauma
- Burns in very young or elderly
- Significant pre-burn illness

Prevention of Burns

1	Community education on burns prevention
2	Always test the water in a shower or bath before getting in or bathing, including bathing a child
3	Keep chemicals, lighters and matches out of reach of children
4	Use back burners of stoves and cookers as much as possible and turn handles of pots and pans inwards to prevent people bumping into it and never leave the stove unattended
5	Do not hold a child when near hot objects like
6	Set safeguards around a fireplace and never leave a child unattended
7	Every home, office and facility must have fire extinguishers and also know how to use them
8	All electrical outlets must be covered
9	Don’t leave food cooking on the stove unattended
10	Don’t leave hot coffee or tea sitting out
11	Keep matches and lighters
12	Adjust your water heater so that the faucet produces water no hotter than 120 degrees Fahrenheit
13	Test bathtub temperatures before bathing children

Exercise 3

Why is early cooling important in the control and management of burn patient?

(Participants to share opinion)

Key messages

1. Early cooling is a crucial step in the first aid for burns, significantly impacting the outcomes for the affected individuals.

2. Vigilance for signs of complications in burn patients allows for timely intervention and improved patient care

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Learning Objectives

At the end of this Session, Participants will be able to

1. Recognize signs and symptoms of rabies
2. Understand the strategies for management of rabies at PHC level
3. Educate communities on preventive measures against rabies

Overview of Management of Rabies in Primary Health Care

- Transmission
- Incubation period
- Signs and Symptoms
- Diagnosis
- Management of dog bite
- Strategies for management of Rabies at PHC level
- Prevention and Control
- Prevention and Control

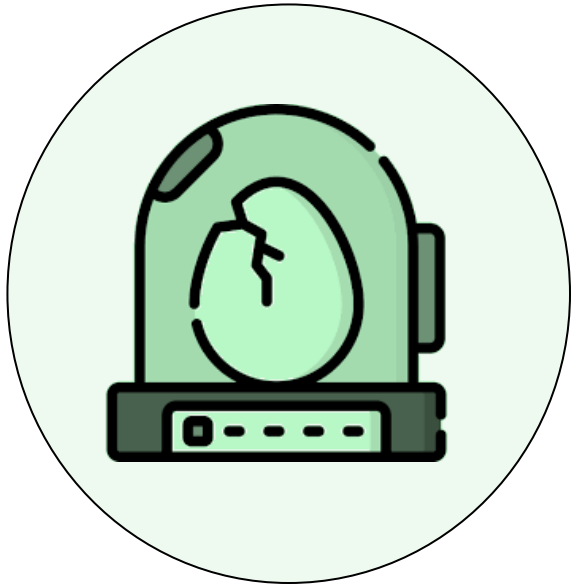
Brainstorming

What are the signs and symptoms that might indicate a potential rabies exposure? (Participants to share opinion)

Rabies

- Rabies is one of the most important Zoonotic diseases affecting both humans and animals.
- It is one of the prioritized zoonotic and notifiable diseases in Nigeria.
- Dog mediated rabies is caused by a lyssa virus, found in saliva, and affects the brain and spinal cord of animal or man.
- It is 100% preventable by vaccination, but can be fatal if vaccination is not accessed timely\
- Recently, there are increasing cases of dog bite from Nigeria, with 6cases diagnosed in Gombe in 2022 and other states.
- So, there is need to increase supply of vaccines to states reporting dog bites.
- Rabies programme was established in 2007 to ensure that rabies strategies are implemented correctly until elimination is achieved.
- Rabies was integrated into Nigeria's One Health Program in 2017

Incubation Period

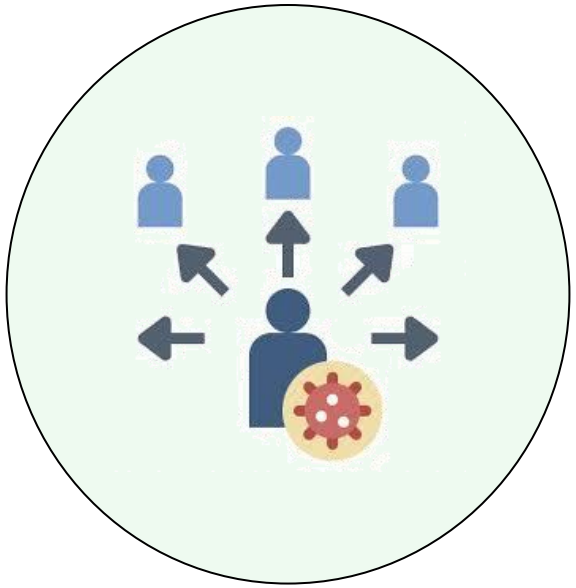


- This is the time from exposure to a disease until the development of clinical signs and symptoms.
- The incubation period of rabies is longer and more variable among different species and individuals than in other viral diseases.
- The incubation period for rabies depends on the virus variant, susceptibility of the exposed host, the location and amount of inoculum, and post exposure management.
- However, 10 days is recommended for quarantine of a dog after biting,
- Thereafter if no signs appear in the host, the dog should be released.
- For humans signs can appear after 2-8weeks.

Transmission

- Rabies can be transmitted when infected saliva, central nervous system tissue, or cerebral spinal fluid penetrates the skin or mucosa of a susceptible mammal. Rabies is usually transmitted by bite wounds but may involve saliva contact with mucous membranes or a fresh break in the skin.

- Rabies is not transmitted by contact with blood, urine, faeces, petting or touching fur, or being sprayed by a skunk and the incubation period is



Signs and Symptoms

- Hydrophobia
- Hallucination
- Coma
- Death



- Prickling or itching at the bite site
- Nausea
- Vomiting
- Irritability

Note: Do not wait for signs and symptoms, once they appear it is late to manage

Diagnosis of Rabies



Management Dog Bites

1. Wash the bite site with soap and water for at least 10-15 minutes using gloves
2. Seek medical attention after bite or scratch
3. Get vaccine to prevent infection

Strategies for Management of Rabies at PHC Level

1. Awareness creation and community sensitization
2. Administration of Post exposure prophylaxis (PEP) for humans
3. Dog vaccination by Veterinary Department
4. Dog population management
5. Diagnosis
6. Integrated Bite Case Management (IBCM) at the referral center

Prevention and Control of Rabies

1. Anyone exposed should seek medical attention
2. If PEP is commenced complete the doses
3. Vaccinate all dogs annually
4. Carry out dog population management
5. Issue dog importation and exportation license
6. Quarantine any dog without permit for 10 days
7. Reduce dog aggregation points
8. Regulate dog sales and markets
9. Issue license to dog breeders and regulate their activities
10. Keep your vaccinated dog from meeting unvaccinated dogs
11. Surveillance activities, case search, monitoring, supervision at all levels

CASE BASE REPORTING FORM

	LGA:	WARD:	VILLAGE/SETTLEMENT	LOCATION	Patient Address	Name of Hospital/Clinic
Reporting Health Facility:	Name of Patient	Sex	Date of last vaccination		Date of next vaccination	
HCW						
Community implementer						
Patient						
Relation/Friend						
Others						
Date of next vaccination	Bite History				Date of Bite	

Dog Identity: Health/Sick		Vaccination Status	Date reported/Health facility
Category of Bite: I, II, III	PEP Administered: Yes/No	Previous exposure to ARV: Yes/No	Develop clinical features of Rabies: Yes/N

Date of onset of signs/symptoms	Outcome: Alive/Dead	Lab specimen collected: Yes/No
Final classiffication: Not confirmed Rabies/Confirmed Rabies		
Remarks		
Name of the Reporting Officer:	GSM NO:	E-MAIL ADRESS:
Signature of Reporting Officer:		

Monthly Facility Summary

State: LGA: Name of facility: Type of facility:					
Date covered in the report period	Month		Year		
No of reported dog bites reported					
No of dog bites investigated					
No of people who started PEP					
No of people who completed PEP					
No of deaths due to Human rabies					
No of vaccines doses used					
No of community implementers who sent in reports					
No of active case search done					

Facility Based Form

Name of Facility		LGA		STATE		
MONTH		YEAR				
S/NO	Name of patient	Age	Sex	Received PEP	Alive/Dead	Remarks
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Diagnosis at treatment centers (Secondary and tertiary levels)

Test are performed on samples of saliva taken at 3-4 hours

Biopsied nerve tissue

Corneal smear

PCR

Test should be performed even if a patient present with neurological signs without history of bite.

Exercise 4

How can frontline health workers contribute to community education on preventing rabies? (Participants to share opinion)

Key messages

1. Proper wound care for potential rabies exposure is a key preventive step in the management of rabies in PHC facilities

2. Educating communities on preventive measures against rabies empowers them to reduce the risk of exposure and transmission

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Learning Objectives

At the end of this Session, Participants will be able to

1. Identify some snake bite treatment facilities in Nigeria
2. Identify common venomous snakes in Nigeria
3. Administer appropriate first aid measures for snake bites

Overview of Snake Bites Management in Primary Health Care

- Snake Bite Prevalence by State
- Most Dangerous Venomous Snakes in Nigeria
- Clinical Signs and Symptoms of Snake Bite
- Diagnosis of Snake Bites
- Control and First Aid
- Prevention of Snake Bites
- Snakebite Treatment Facilities
- Definitive Treatment of snake bites

Exercise

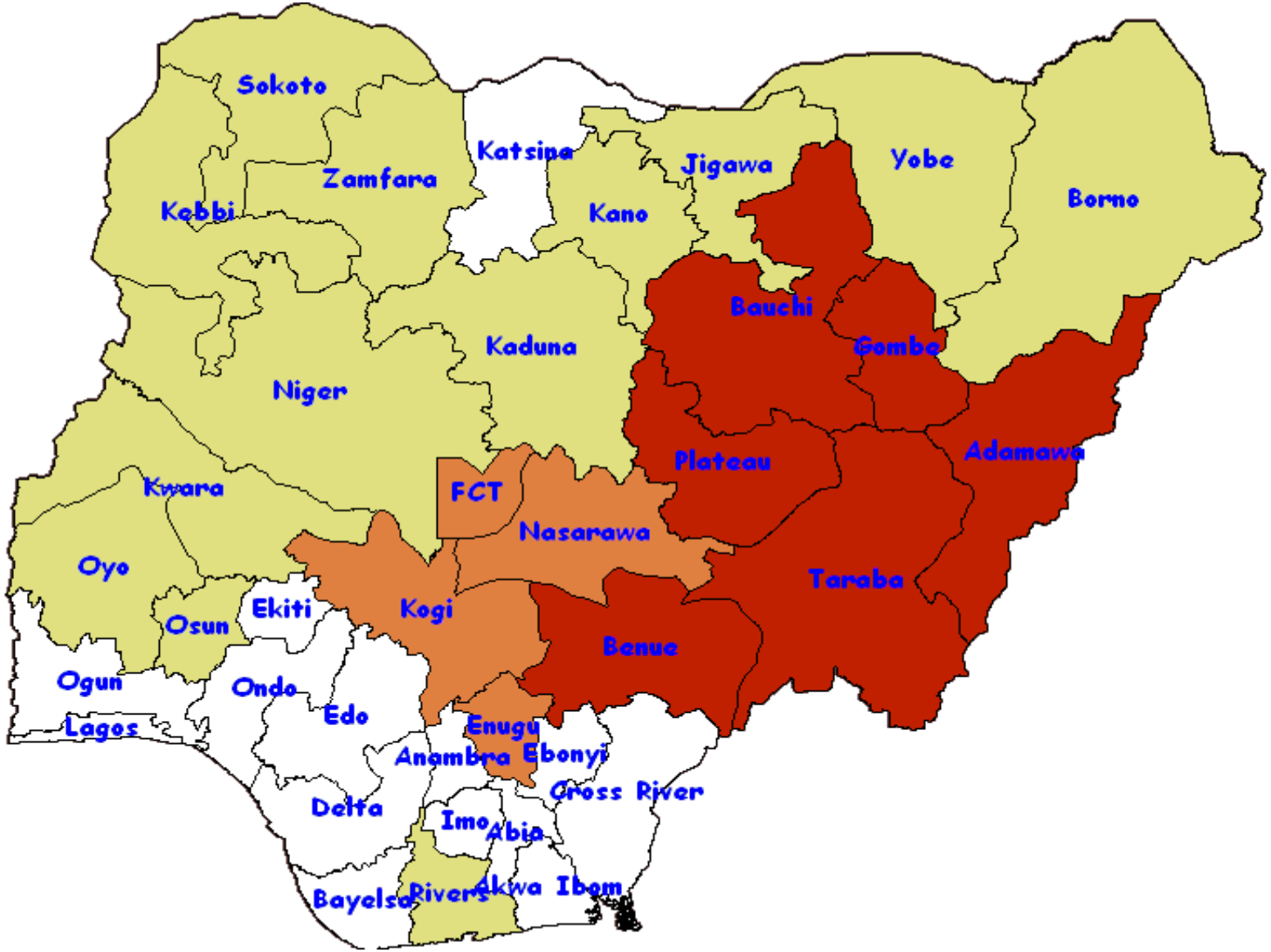
What are some common venomous snakes in Nigeria, and how can they be identified? (Participants to share opinion)

Snake Bite

- Snake bite is a neglected public problem in rural communities globally, including Nigeria.
- It is also a major medical problem especially in rural communities of the Savannah Region of West Africa.
- Countries in West Africa mostly affected include Nigeria, Senegal, Ghana, Togo, Benin, Burkina-Faso, Niger, Mali and Cameron.
- The three most medically important snakes in Nigeria are **Naja nigricolis** (**Cobra**), **Bitis arietans** (**Puff Adder**) and **Echis ocellatus** (**Carpet Viper**) which is the world's most dangerous snake.
- The Carpet viper causes more deaths than any other snake on the African continent
- An estimated 500,000 cases occur annually resulting in high mortality and morbidity (Chipaux, 1998a; Theakston et al., 2003; Warrell and Arnet, 1976).
- Most recent estimated incidence of snakebites in Nigeria is 497/100,000 humans/year according to a 2013 epidemiological survey (Habib et al., 2013).
- Most of the victims are Women, Children/Pupils, Peasant Farmers, Herdsmen and Hunters.
- The Carpet Viper is responsible for 90% of bites and 60% of deaths.



Nigeria: Snake bite Prevalence by States



States with no reported case

Low Prevalent States

Semi-high Prevalent States

High Prevalent States

Most Dangerous Venomous Snakes in Nigeria

Echis- Ocellatus (carpet vipers)





Most Dangerous Venomous Snakes in Nigeria

Bitis Arietans (Puff-Adder)





Most Dangerous Venomous Snakes in Nigeria

Naja Nigricolis (Common Cobra, Spitting cobra)





Clinical Signs and Symptoms of Snake Bite



1. Puncture marks at the wound site
2. Redness, swelling, bruising, bleeding, or blistering around the bite
3. Severe pain and tenderness at the site of the bite
4. Nausea, vomiting and/or diarrhea
5. Laboured breathing in extreme cases
6. Rapid Heart rate, weak pulse, low blood pressure
7. Disturbed vision

Diagnosis of Snake Bites

Step 1	Identify the type of snake bite for proper treatment
Step 2	Evaluate the symptoms and injury, including venom, if present to determine the course of care
Step 3	Identification of the snake and clinical manifestations
Step 4	Detailed history is important and must include; *time of bite, description of snake (pictures are helpful), type of field therapy, underlying medical conditions, allergies including allergy to sheep or horse products*
Step 5	Keep any clothing that may have venom on it as it may aid diagnosis
Step 6	Complete and detailed physical examination is required; *use marker to indicate the edges of the swelling on the affected limb or area and record time of the marking*
Step 7	Always seek emergency medical treatment for all snake bites as they may be life threatening

Control and First Aid

Main Goal of control	▪ Ensure early diagnosis and first aid, provide better overall care, as well as quick referral to reduce or prevent deaths and disability from snake bites.
The strategies to achieve main goal at the PHC level	▪ Enlighten and engage communities (advocacy & mobilization; Awareness creation; training and capacity building) ▪ Prompt and effective first aid treatment ▪ Prompt referral to treatment centers for definitive treatment
First Aid should include:	▪ Take detailed history ▪ Examine ▪ Set intravenous line ▪ Refer to a treatment facility

Prevention of Snake Bites

Prevention of snake bites includes but not limited to:

1	Avoid places where snakes may live – (tall grass, rocky areas, fallen logs, swamps and marshes, deep holes in the ground), etc.
2	Poke at the ground in front of you with a long stick to scare away snakes when moving through bush or tall grass
3	Watch where you sit and step when outdoors
4	Shine a torchlight on your path when walking outside at night
5	Wear long trousers and thick leather or rubber boots in the bush or farm
6	Never handle a snake, even if you think it is dead (recently killed snakes may still bite by reflex)

Snakebite Treatment Facilities

List of Facilities in Nigeria that offer snake bite treatment

- JUTH Comprehensive Health Centre in Zamko, Plateau State
- University of Ilorin Teaching Hospital, Kwara State
- UNN Medical Centre, Nsukka, Enugu State
- University of Abuja Teaching Hospital, Gwagwalada FCT
- University of Uyo Teaching Hospital, Uyo, Akwa-Ibom State
- Kaltungo General Hospital, Gombe State
- FMC Yola, in Adamawa State
- General Hospital, Bambur in Taraba State
- FMC Gusau, Zamfara State
- University College Hospital, Ibadan
- General Hospital, Zuru, Kebbi State
- Comprehensive Health Care, Isanlu, Kogi State
- FMC Keffi, Nassarawa State
- FMC Birni Kebbi, Kebbi State
- FMC Lokoja, Kogi State
- Yerima Bakura Specialists Hospital, Gusau, Zamfara State
- ECWA Hospital Egbe, Kogi State
- IKA Christian Hospital, Ankpa, Kogi State.
- Comprehensive Health Centre, Sepeteri, Oyo State
- General Hospital, Saki
- General Hospital, Yauri
- National hospital, Abuja

Snakebite Treatment Register

SNAKEBITE TREATMENT REGISTER

STATE..... LGA..... NAME OF HEALTH FACILITY.....

REPORTING PERIOD..... FORM 001

DAILY REPORTING

SN	Hospital Number	Age	Sex	Occupation	Date of Incidence	Place of Incidence	State of Incidence	Village Name/Present Contact Address	LGA of Resident	State of Resident	Telephone Number	Quantity of ASV used	Balance of ASV use (In stock)	Date of Discharge	Treatment Outcome			Deformation	Date of SUPPLY	ASV NEW SUPPLY	Type of ASV (whether Gov/privately procured)
															S	A	D	DF			

Summary reporting form

WEEKLY/MONTHLY/QUARTERLY SUMMARY REPORTING FORM FORM 002

STATE..... LGA..... NAME OF HEALTH FACILITY.....

REPORTING PERIOD.....

WEEKLY SUMMARY

	Dates	No of Cases	No of Deaths	No of Survivals	No with Deformity	No Amputated	Total ASV used	ASV Balance	ASV NEW SUPPLY
WEEK 1									

Control and First Aid

- History (whole events)–elicit site of bite, circumstance of bite, time of bite, type of snake, severity of bite, time before arrival, first aid done, local features, systemic features, etc
- Examination –severity and nature of local injury (extent and girth of swollen limb. Incision'.
- Investigate: 20WBCT. PCV, Hb
- Intravenous fluids should be given to patients especially those which with hypotension or shock. Infusion of dopamine may be considered in refractory shock.

Systemic envenoming

- Hypotension, shock, or other sings of cardiotoxicity
- Spontaneous systemic bleeding
- Non clotting blood (which is define using the simple 20-min whole blood clotting test [WBCT20])
- Rhabdomyolysis (breakdown of muscle cells)
- Impaired consciousness
- eurotoxicity = ptosis,

NB

- -Make sure the A.S.V is clear, -
- Store in a cool place (fridge) 2-8°/c
- A.S.V= Registered – Genuine.
- Give all A.S.V. ivi slowly, iml per min

Exercise 5

What immediate first aid measures should be taken for snake bites in a Primary Health Care?

KEY MESSAGES

1. Knowing the common venomous snakes in Nigeria is crucial for timely and effective response to snake bites

2. Immediate and correct first aid measures can make a significant difference in the outcome for individuals bitten by snakes

Overview of Emergency Management in PHC

Sessions	Components
13.1	Basic Management of Trauma Care for Frontline Health Workers
13.2	Emergency Management of Burns
13.3	Management of Rabies in Primary Health Care
13.4	Management of snake bites in Primary Health Care
13.5	**Emergency Management of Scorpion Bites**
13.6	Emergency Management of Stroke
13.7	Emergency Management of Epilepsy
13.8	Common Home Accidents

Learning Objectives

At the end of this Session, Participants will be able to

1. Administer first aid for scorpion bites
2. Recognize signs and systemic envenomation and take appropriate actions
3. Educate communities on preventive measures against scorpion bites

Overview of Emergency Management of Burns



Signs and Symptoms of Scorpion Bite



Management of Scorpion Bite



Prevention of Scorpion Bites

Brainstorming

What are the steps in the management of scorpion bite?
(Participants to share opinion)

Scorpion Bite

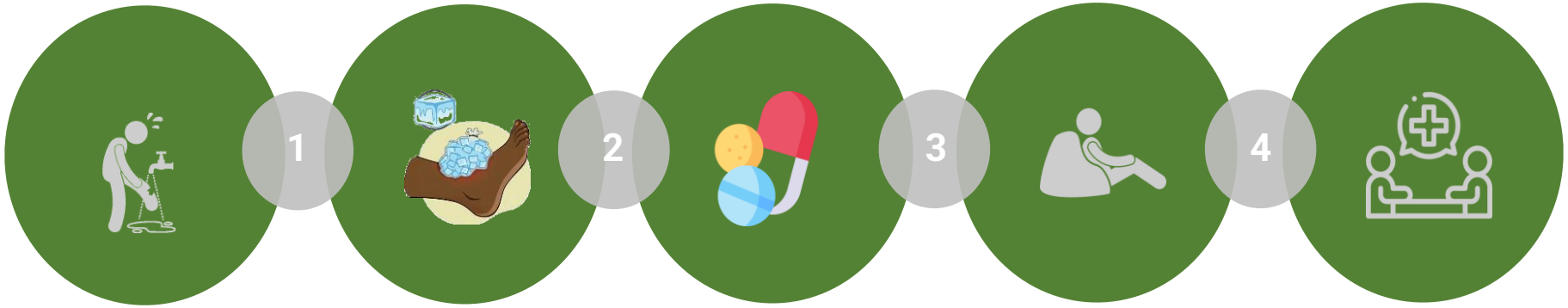
- Causes severe pain at the site and sometimes shock
- Shock may be severe and death can occur in small children and those stung a second time
- A doctor usually needs the patient's history and symptoms to make a diagnosis.
- If the symptoms are serious then a blood test may be needed.



Clinical Signs and Symptoms

1. Breathing difficulty.
2. Muscle twitching
3. Unusual head, neck and eye movements.
4. Drooling
5. Sweating
6. Slurred speech
7. Nausea and vomiting.
8. High blood pressure (hypertension).
9. Fast heart rate (tachycardia).
10. Restlessness or excitability, or persistent crying in children that can't be comforted.

Management of Scorpion Bite



Clean the wound with mild soap and water

Apply ice or cold compress the site

Give aspirin for pain

If stung on an arm or leg, rest the affected limb

Shock treatment like anti-histamine can be given

Scorpion sting is dangerous to children under 5 years and adults stung for the second time. These cases should be referred to a doctor urgently

Prevention of Scorpion Bites

1. Remove piles of rocks or wood around the house
2. Do not store firewood against the house or inside the house
3. Keep grass heaps away, and prune bushes and overhanging tree branches to avoid creating a path to your roof
4. Repair cracks and torn screens, broken windows and doors
5. Inspect and shake out gardening gloves, clothing and boots that have not been used for a while
6. Always wear shoes when in areas where scorpions are common, especially if you're camping or staying in rustic accommodations
7. Shake clothing, bedding, gear and packages often

Exercise 6

What preventive measure can be shared with communities to reduce scorpion bites? (*Participants to share opinion*)

Key messages

1. Proficiency in providing first aid for scorpion bites is crucial to mitigate the effects of venom and improve patient outcomes

2. Community education on preventive measures against scorpion bites is key to reducing incidents and promoting safety

Overview of Emergency Management in PHC

Sessions	Components
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13.3	Management of Rabies in Primary Health Care
13.4	Management of snake bites in Primary Health Care
13.5	Emergency Management of Scorpion Bites
13.6	**Emergency Management of Stroke**
13.7	Emergency Management of Epilepsy
13.8	Common Home Accidents

Learning Objectives

At the end of this Session, Participants will be able to

1. Recognize signs and symptoms of a stroke
2. Implement rapid assessment and early intervention for stroke patients
3. Educate the community on stroke risk factors and prevention

Overview of Emergency Management of Stroke in Primary Health Care

1	Signs and symptoms of stroke
2	Diagnosis
3	Management of Stroke at PHC Level
4	Prevention

Brainstorming

What signs should frontline health workers look for to recognize a potential stroke? (*Participants to share opinion*)

Stroke

A stroke/brain attack or cardiovascular accident occurs when blood flow from the brain is disrupted, leading to potentially severe consequences

1. It occurs when blood supply to some parts of the brain is blocked or when a blood vessel in the brain bursts
2. In either case, parts of the brain become damaged or die.
3. A stroke can cause lasting brain damage, long-term disability, or even death

Signs and Symptoms:

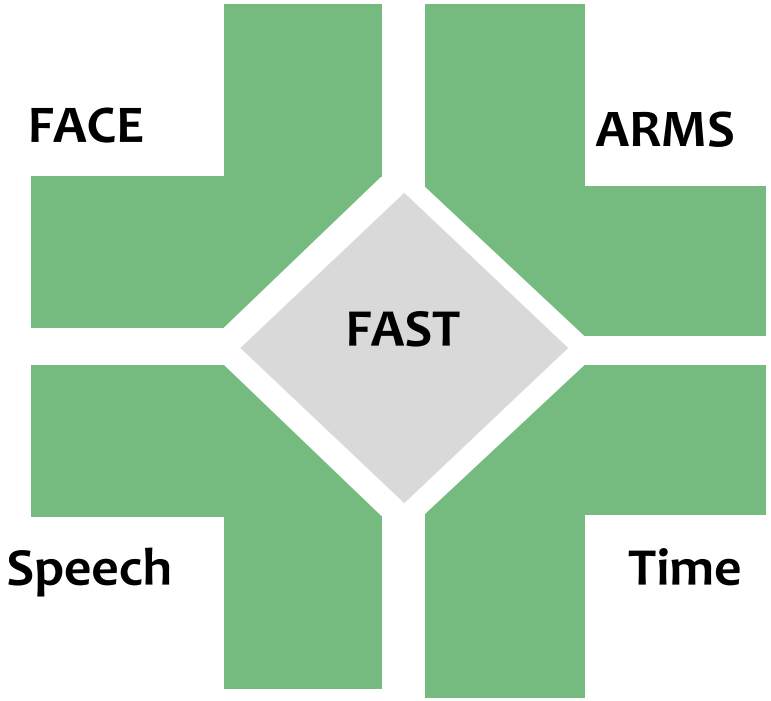
- **Trouble speaking and understanding what others are saying** - confusion, slurred words or difficulty with understanding speech.
- **Paralysis or numbness of the face, arm or leg** - sudden numbness, weakness or paralysis in the face, arm or leg.
- often affects just one side of the body including the mouth
- **Problems seeing in one or both eyes.** There may suddenly be blurred or blackened vision in one or both eyes, or the patient may suddenly have double vision.
- **Headache** - sudden, severe headache which may be accompanied by vomiting, dizziness or altered consciousness
- **Difficulty in walking** - stumbling or loss of balance, sudden dizziness or a loss of coordination.

Stroke

Patients must seek immediate medical attention if they notice any signs or symptoms of stroke, even if they come and go (Transient Ischaemic attack) or even disappear completely.

Stroke can be identified using the "F.A.S.T" acronym to identify facial drooping, arms weakness, speech difficulties and prompt action on time:

Ask the person to smile - Does one side of the face droop?



Ask the person to raise both arms - Does one arm drop downward? Or is one arm unable to rise?

Ask the person to repeat a simple phrase. Is his or her speech slurred or strange?

Ask them for the time of the day

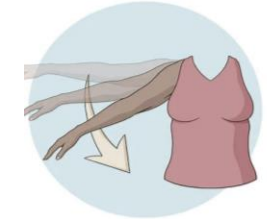
Stroke

To recognize the warning signs of stroke, remember to think FAST

F is for face
Ask the person to smile.
Look for a droop on one or both sides of the face.



A is for arm.
Ask the person to raise their arms. Look for one arm to drop downward



S is for speech.
Ask the person to speak.
Listen for slurred speech or trouble choosing works.



T is for time.
Call 911 immediately.
Look at the time so you call tell medical personnel when symptoms started.



Management of Stroke in Primary Health Care

1	Strokes should not be treated at the PHC level.
2	Stroke patients should be referred to secondary health facilities

Prevention

Prevention of snake bites includes but not limited to:

1	Promote a healthy lifestyle in the community including regular physical activity, adequate rest, balanced diet and stress management
2	Educate community members about the risk factors and warning signs of stroke
3	Encourage regular check ups and adherence to treatment
4	Encourage hypertensive and diabetic patients to comply with their routine drugs and check ups
5	Advocate for the establishment of a stroke unit in health facilities
6	Encourage the development of stroke support networks for survivors and their families

Exercise 7

Why is rapid assessment and early intervention crucial in managing stroke patients?

Key messages

1. Frontline health workers should be able to recognize early signs of a stroke for prompt and effective intervention

2. Rapid assessment and timely intervention are critical components in managing stroke patients and improving their chance of recovery

Overview of Emergency Management in PHC

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13.5	Emergency Management of Scorpion Bites
13.6	Emergency Management of Stroke
13.7	**Emergency Management of Epilepsy**
13.8	Common Home Accidents

Learning Objectives

At the end of this Session, Participants will be able to

1. Recognize the clinical signs and symptoms of epilepsy
2. Provide appropriate first aid during a seizure episode
3. Educate communities on epilepsy awareness and stigma reduction

Overview of Emergency Management of Epilepsy in Primary Health Care

1. Clinical signs and symptoms
2. Diagnosis
3. First Aid Management of Epilepsy
4. Management of epilepsy
4. Prevention

Brainstorming

How can frontline health workers provide effective first aid during a seizure episode?

(*Participants to share opinion*)

Epilepsy

- Epilepsy refers to a neurological disorder that causes recurrent seizures.
- It causes involuntary rhythmic movements of muscles and unconsciousness
- Epileptic attacks are called fits and can occur at any time. In between fits, someone with epilepsy seems normal and healthy
- Epileptic patients are otherwise normal and should never be stigmatized

Clinical signs and symptoms

- In minor epilepsy:
  - A person suddenly becomes unconscious for some seconds with their eyes fixed and staring.
  - After having a minor fit, the patient can carry on their normal activities as if nothing happened.
- In major epilepsy/a major epileptic:

a patient has several symptoms including; headache, restlessness, unconsciousness, eyes turning upwards, stiffness of the body, muscle twitching/jerking, convulsions, heavy breathing, foaming at the mouth, clenching of teeth, etc.

The patient may act in a strange manner not knowing what is happening to them.

Diagnosis

CONFIRM	HISTORY	PHYSICAL EXAMINATION	BASIC LABORATORY TESTS
▪ The first task is to confirm if the event is really epilepsy or some other condition, such as fainting which may mimic it..	▪ Take a history of the facts surrounding the event. Eyewitness accounts will be helpful. Family history, social history, and past medical history are all important. ▪ Inspection of all medicine containers including prescription drugs of the patient will help the diagnosis.	▪ General Medical Examination- Temperature, Pulse and Respiration ▪ Assess the airway and breathing to rule out breathing difficulties and obstruction ▪ Recheck the pulse, colour and temperature of extremities ▪ Check for confusion, dilated or constricted pupils, ▪ Rule out bleeding from orifices (ear, nose, mouth, etc) ▪ Check for movement and sensation in the extremities, etc	▪ This might include blood or urine glucose levels.

First Aid Management of Epilepsy

If you are with someone having a seizure (where the body stiffens, followed by general muscle jerking), try to:

1

CALM

Stay calm and remain with the person.

2

SAFE

Keep them safe and protect them from injury.

3

SUPPORT

Place something soft under their head and loosen any tight clothing.

4

POSITION

After the seizure is over, roll them on their side

5

REASSURE

Reassure the person until they recover.

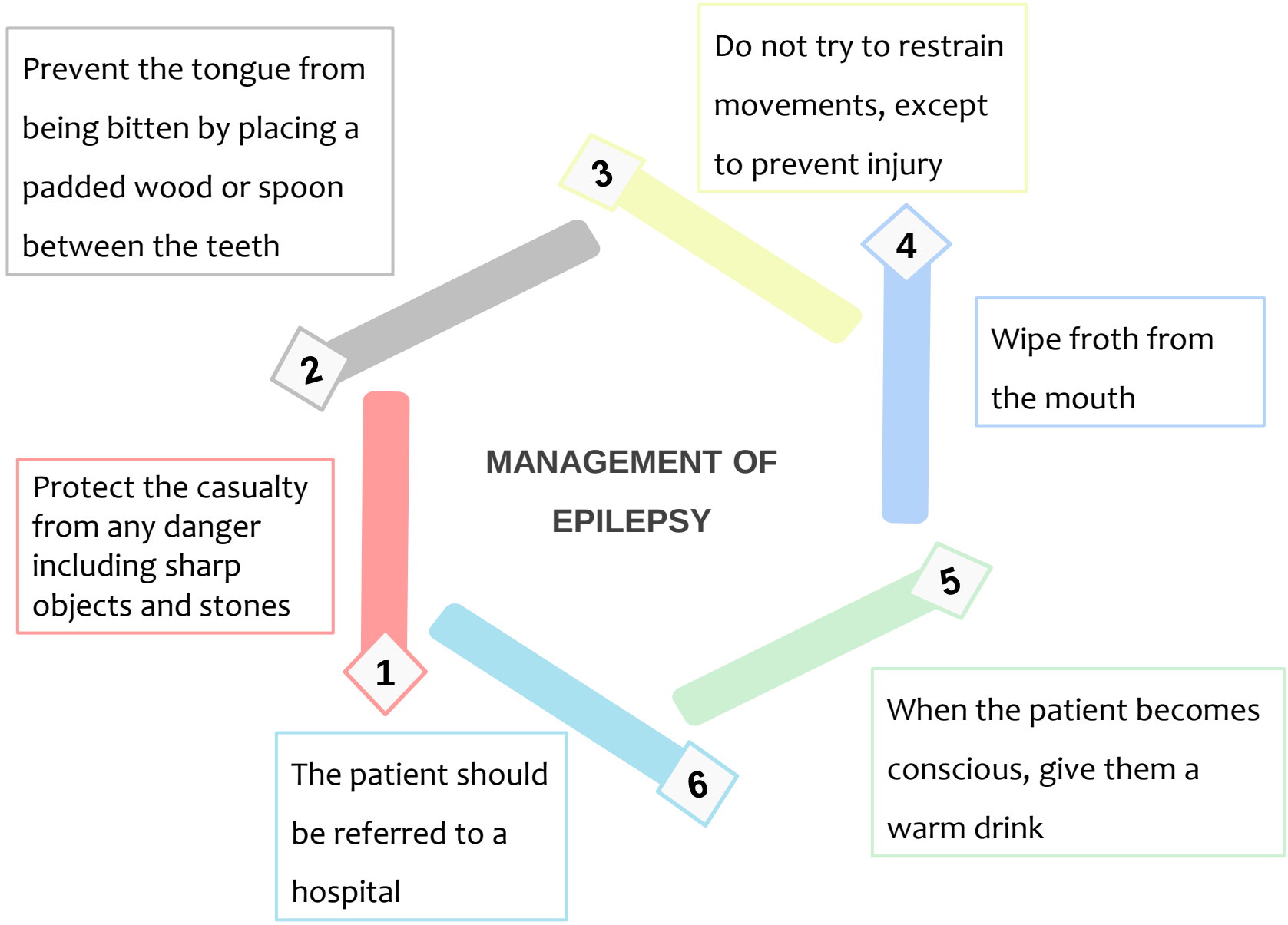
6

TIME

Time the seizure, if you can.

Do not put anything into their mouth or restrain or move the person, unless they are in danger.

Management of epilepsy



Prevention

How to prevent it?
The primary prevention of epilepsy should include:
The use of safety precautions to prevent injury during pregnancy
Early detection of high risk mothers to prevent complications during delivery and labour.
Community health education on epilepsy
Skilled attendants at births by visiting facilities during antenatal
Avoiding drugs in pregnancy except where they are essential

Exercise 8



Why is it important to educate communities about epilepsy to reduce stigma?

Key Messages

1. Proficiency in providing effective first aid during a seizure is essential for ensuring safety and well-being of individuals with epilepsy

2. Educating communities about epilepsy reduces stigma, fosters understanding, and promotes support for individuals living with the condition

Overview of Emergency Management in PHC

Sessions	Components
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13.6	Emergency Management of Stroke
13.7	Emergency Management of Epilepsy
13.8	**Common Home Accidents**

Overview of Emergency Management in PHC

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13.6	Emergency Management of Stroke
13.7	Emergency Management of Epilepsy
13.8	**Common Home Accidents**

Learning Objectives

At the end of this session, Participants will be able to;

1. Identify common home accident scenarios
2. Implement preventive measures to reduce home accidents
3. Provide first aid for common injuries in a home settings
4. Educate communities on safety practices within the home environment

Overview of Common Home Accidents

- Poisoning 
- Fall 
- Chocking 
- Falls and Slip 
- Cuts and Lacerations 
- Strangulation 
- Fires 
- Drowning 

Brainstorming

What are common home scenarios leading to home accidents that frontline health workers might encounter? (Participants to share opinion)

A. Poisoning

52,000 people died in their home from poisoning in 2017





Household poisoning prevention is largely geared towards children, which makes sense.

Prevention of poisoning

- Keeping all medicines, detergents, and cleaning solutions in their original packages and secured in areas where children cannot reach them.
- Programing Poison Control's number in your phone - 1-800-222-1222.
- Reading the label on all medications before taking or administering to your children.
- Disposing of all expired or unneeded medicines. This even includes over-the-counter drugs as well as vitamins and supplements.

Furthermore, equip your home with up-to-date carbon monoxide dispensers and test them regularly to make sure they're functioning properly.

B. Falls

How to prevent it?
Safety tips to avoid product instability injuries:
Anchor furniture to the walls
Keep TVs on sturdy, low surfaces
Don’t leave toys and snacks on TV stands or furniture surfaces
Tuck away TV and electronic cords
Install anti-tip brackets into freestanding stoves and kitchen ranges

C. Choking

Choking is a leading factor in household injuries and fatalities, with children and the elderly most at risk.

Who's at risk?

It is the biggest cause of unintentional deaths for children under 1 year old, and the 4th leading cause for children between 1-9 and the elderly

Food types and consumption habits can lead to choking in anybody, but those who live alone are more at risk due to lack of immediate assistance.

Prevention of choking

- Teach kids to sit up straight while they eat
- Teach kids to chew and swallow before speaking
- Be cautious with hard, smooth foods, especially for kids under 4 years old. Examples include:
  - Nuts, Sunflower seeds, Raw carrots, peas, and celery, Popcorn, Hard candy
- Be cautious with these soft foods:
  - Cheese cubes, Hot dogs, Grapes, Caramels, Peanut butter, Chewing gum
- Diligently check the floors, playrooms, and common areas for non-edible choking hazards such as:
  - Coins, Balloons, Marbles and small balls, Small office supplies (paperclips, tacks, etc),Batteries

D. Falls and Slips

Falls are one of the most common household accidents and occur most frequently with the elderly.

Stairways are common locations for falls to occur, but wet surfaces like showers and bathroom floors, slick hardwood, and icy driveways and sidewalks also contribute.

Falls and Slips Cont'd

While age is the biggest risk factor in household falls, they are other factors:

Who's at risk?

- **Poverty**
- **Overcrowded housing**
- **Medical conditions such as neurological issues**
- **Alcohol and substance abuse.**

Interestingly, the WHO reports that males are more likely to die from falls, but females are more likely to suffer non-fatal falls.

Prevention of falls

- Keep walkways, bedrooms, bathrooms, and halls well-lit
- Keep high-traffic areas free of furniture and clutter
- Secure loose rugs with double-faced tape, tacks or a slip-resistant backing
- Install handrails on stairways and grab bars in the shower or tub
- Use non-slip mats in the bathtub or shower, and have a bath seat in the shower for sitting

E. Cuts and Lacerations

Cuts are a common occurrence in the home and can range in severity from everyday scrapes to emergency lacerations.

Who's at risk?

Adults frequently suffer cuts while shaving or cooking, though household repairs are also common instances.

Children's cuts often stem from everyday accidents, though exposure to dangerous utensils is common as well.

Cuts can and do happen to people of all ages.

Prevention of cuts and lacerations

- Scissors, sharp kitchen utensils, and razors, should always be stored in childproof drawers or cabinets. Arts, crafts and school supply cabinets, which often store scissors, sewing needles, protractors, etc. should be kept away from children.
- Dishwashers should have safety latches since sharp cutlery and glassware are kept inside
- Toolboxes should be kept out of reach of children
- Attics, basements, garages, home exteriors, out-of-use appliances and old machinery, raw construction materials should be protected
- First-aid kits with up-to-date materials like band-aids/bandages, cleaning solutions, sterile equipment, etc. should be in every home, school and facility

G. Strangulation

Strangulation is a less-common but no-less-serious hazard that can occur in a variety of ways

Unintentional strangulation in the home occurs most frequently with:
Toddlers
Children
Special needs children

Prevention of Strangulation

SOLUTIONS	PREVENTIONS
▪ Replacing all corded blinds with cordless blinds or blinds with inaccessible cords ▪ Use interior window shutters, draperies, or curtains instead ▪ Move cribs, couches, and furniture away from the blinds so children cannot climb up and access the cords ▪ Other causes of strangulation and suffocation include plastic bags, large boxes and chests, straps, ribbons, and cords connected to articles of clothing.	▪ Keep plastic bags out of reach. Tie them in a knot before storing or disposing ▪ Make sure all large containers and toy chests have easily removable lids ▪ Poke air holes in toy chests and large containers ▪ Make sure washing and drying machines and other large appliances are always closed and secured

H. Fires

Who's at risk?

House fires endanger people of all ages.

Fires are the 3rd leading cause of death in children aged 1-14,

Cooking incidents caused more than half of all house fires (51.6%) then heating (9.1%), electrical malfunctions (6.5%), and open flames (4.3%).

Prevention of Fire

- Install smoke alarms and check them regularly.
- Consider fire sprinkler systems or fire extinguishers in your home
- Keep your home heating sources cleaned and regular maintained
- Check electrical wiring regularly
- Avoid overloading outlets and extension cords
- Don’t store combustible materials near heat sources
- Don’t run wiring under rugs, around nails, or in high-traffic areas

Drowning

- Drowning is the leading cause of death for children ages 1-4
- Drowning cases occur most often when there's a pool or lake on the grounds, drowning also occurs with some frequency in the bathtub.

Who's at risk?

Children

Teenagers

Prevention of drowning

- Never leave your child in the bath unattended.
- If you're running a bath, make sure to keep your child out of the bathroom until you're ready to bathe them.
- If you have a pool or hot tub, it's recommended that you:
  - Surround the pool or hot tub with 4-sided isolation fencing and self-closing and self-latching gates
  - Secure, lock, or remove the steps or ladders leading up to an above-the-ground pool
  - Do not rely on floatation toys such as water wings or noodles to keep your child safe
  - Learn to perform CPR

Firearm Accidents

- Almost 40% of unintentional shootings among children ages 11-14 occur in the home of a friend.
- Currently there are around 22 million children living in homes with guns.

Who's at risk?

Children and young adults suffer the most injuries and fatalities from household firearm accidents.

Adolescents are also at a higher risk of suicide when there's a gun inside the home.

Prevention of Firearm Accidents

Parents that want to keep guns in their homes should leave all firearms
Locked up
Unloaded
Seperated from ammunition
Stored in a place where children have no access to them.

Exercise 9

In what ways can frontline health workers educate communities on home safety practices? (Participants to share opinion)

Key messages

Recognizing common scenarios leading to home accidents allows frontline health workers to implement preventive measure effectively

Implementing preventive measures at home significantly reduces the risk of accidents, enhancing overall safety for individuals and families.


Thank
you