

NIOS lesson adaptation project

By EMBRACE Volunteers

(A community initiative of Harchan Foundation Trust)

Chapter 13

Safety at Home

(Printable Version)

- **Simplified Lesson**
- **Previous Year Questions with Answers**
- **Terminal Questions**

This project is aimed at supporting children with different needs. Information provided is adapted to the best of knowledge by the volunteers. For complete information please refer to the NIOS resources in <https://www.nios.ac.in/online-course-material/secondary-courses.aspx>.

LESSON 13

Safety at Home

Common accidents at home

- We can Fall
- We can get Cut
- Fire in house
- Dog Bites
- Electric Shock
- Accidental poisoning
- Burns
- Suffocation and choking

Falls

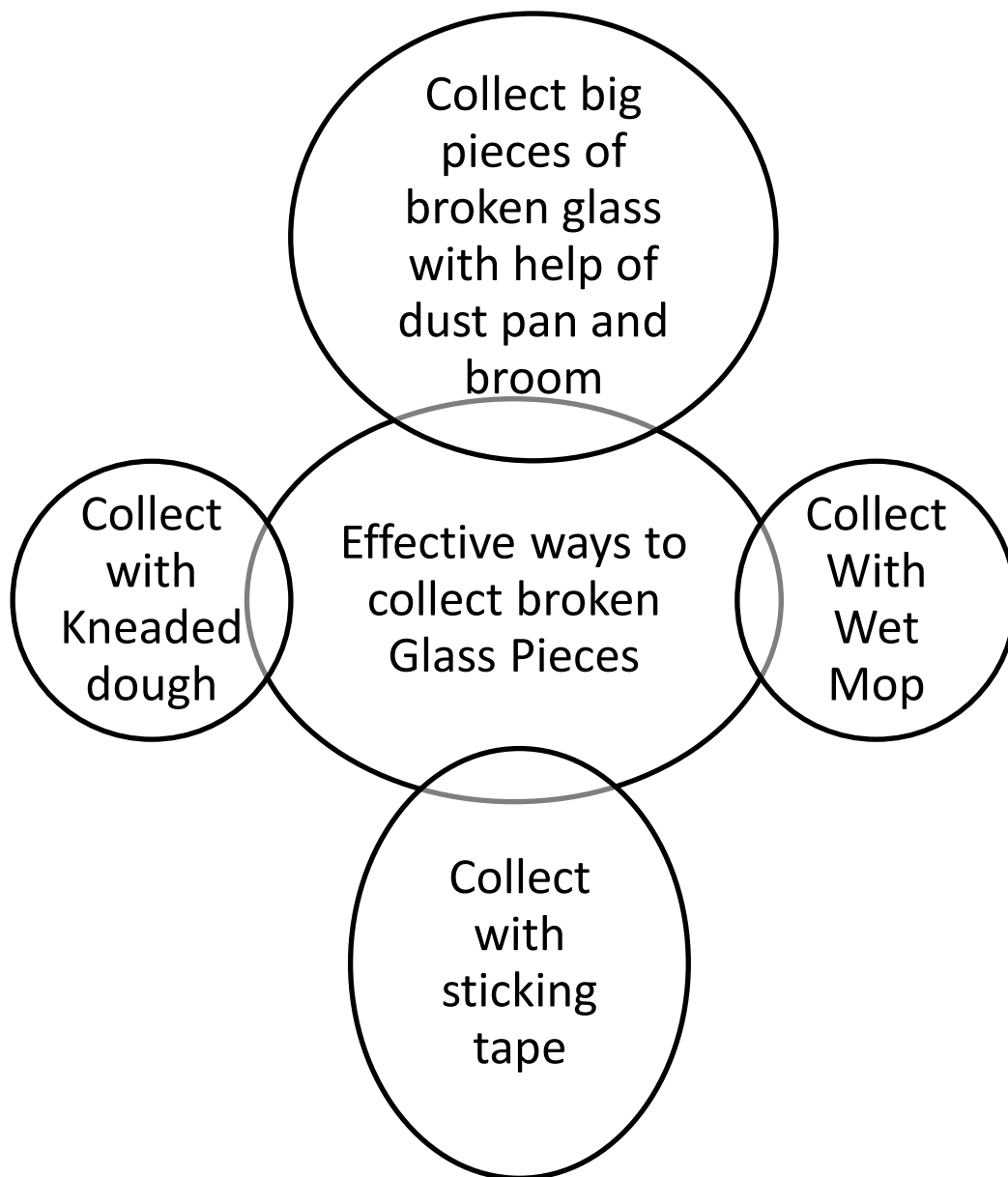
Causes of falls at home	Precautions we should take
Floor clutter with things	Clear floor
Window does not have grill	Window Have grill
Ladder used for climbing is wobbly	Steady ladder
Roof has no boundary wall /no railing	Roof has boundary wall
Stairs are dimly lit	Lights are properly lit
The floor is wet/slippery/soapy	Floor is dry

Cuts

Causes of cuts at home	Precautions we should take
Sharp corners of any furniture	Cover sharp corners of furniture
Cracked or chipped glasses or cups	Throw away cracked or chipped glasses
Knives, stored facing upwards	Knives should be kept downwards
Blades or scissors lying within the reach of children	Blades and scissors should be kept out of reach of children

Effective ways of collecting broken glass:

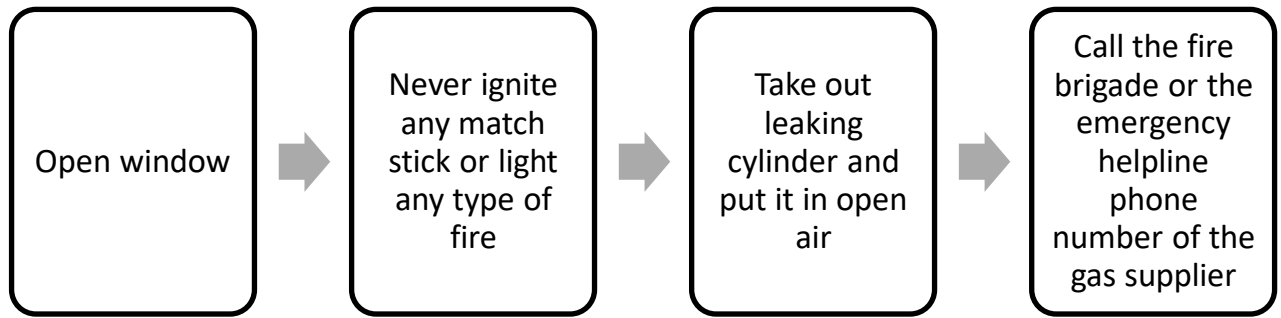
- ✓ Collecting with pan and broom.
- ✓ Collecting with wet mop.
- ✓ Collecting with kneaded dough.
- ✓ Collecting with sticking tape.



Common burn accidents at Home

- Hot tea gets spilt on some one
- Hot oil splashes while frying
- Cloth used to remove utensils from stove catch fire
- Child plays with a match box
- Kerosene oil being filled while the oil stove is lit
- Cooking oil kept near the gas stove
- Inflammable liquids like acids, chemicals not stored properly
- Damaged wires that may lead to short circuit and overheating
- Two or more appliances used in one socket
- Cooking gas cylinder leaks

What do you do in case of cooking gas cylinder leaks?



What do you do in case of fire?

- Put out the flame with sand or water. Do not use water to put off electrical fire
- Never run if your clothes are on fire, it will fan the fire
- To extinguish fire on your clothes on fire, roll on the floor. Or wrap yourself with a woollen blanket and then roll on floor
- Tie a wet cloth around your face
- Crawl along the floor to escape as smoke rises upwards and you can get clean air down.

Ways to avoid accidental poisoning:

All chemicals like household cleaners, detergents, kerosene and expired medicine can cause poisoning.

Over spraying of pesticides on fruits and vegetables can make them poisonous.

Prevention of poisoning at home:

- Label all medicine or bottle
- Read all labels carefully before eating or drinking
- Keep chemicals in original container which is labelled
- Do not store chemicals with food items or in food container
- Keep chemicals locked and away from reach of children
- Before eating wash all fruits and vegetables
- Check expiry date and throw away all the expired medicine.

Bites and stings:

- ❖ The stings of bees and wasps can cause lot of pain and swelling
- ❖ Dog and monkey bites can cause rabies and should not be ignored.
- ❖ Snake bite can be fatal

It is advisable to consult doctor at the earliest when you have bites as stated above.

Electrocution and shock:

Electrocution:

Injury caused to someone by electric shock

Shock:

A shock is a uncomfortable feeling you get when an electric current passes through your body.

Safe use of electricity at home:

- Do not attach too many appliances on a single socket, it can overheat wires and cause short circuit.
- Do not touch any electrical switch or appliance with wet hands, as it can cause shock.
- Wires should not pass through the door frames as constant opening and closing of door can damage the wire.
- Never remove plugs from socket by pulling the wire. Pull out plug itself.
- Old and damaged wires should be changed.
- Buy marked electrical appliances only.
- Train children in the correct use and handling of electrical appliances.
- Get electrical repairs done from a qualified electrician.
- Do not attempt repairs on your own.
- No electric wire should cross any heating device.
- Electrical sockets should not be directly exposed to water to prevent electrocution.

Safety measures to prevent fire:

- Keep matchbox out of reach of children.
- Before sleeping, put off burning candle or any lighted fire.
- Always label inflammable liquids containers.
- Always put only one electrical appliance in one socket.

Suffocation and choking:

Suffocation

Difficulty in breathing.

Choking

To stop breathing which is caused by obstructing windpipe.

Prevention of accident related to choking and suffocation among children

- Adult supervision is must.
- Buy toys which do not have very small detachable parts.
- Keep polythene bags out of reach from the children.

First aid and its rules:

First aid

It is the potential life saving technique which is given initially for any injury until professional medical treatment is available.

Rules:

- Keep a first aid box readily accessible in your house.
- First aid should be given quickly, without wasting time.
- You should remain calm and be resourceful while giving first aid.
- Take the victim to a safe place if needed.
- Reassure the patient.
- Disperse the crowd.
- Attend first to injuries which can be fatal.
- In case of unconsciousness, do not give any liquids.
- Keep emergency helpline numbers handy.
- Call the doctor.
- Know the shortest route to the nearest medical institution and take the victim there.

First Aid for Dog bite

1. Wash the area thoroughly with soap and water
2. Do not put any antiseptic
3. Do not cover the wound
4. Go to the hospital for tetanus and anti-rabies and strictly follow the vaccination schedule
5. Consult a doctor as soon as possible

What to keep in First Aid box

- First aid manual
- Gauze and adhesive bandage of different sizes
- Adhesive tape
- Crepe bandage
- Thermometer
- Torch and new batteries
- Scissors
- Antiseptic Lotion/Ointment
- Sterile cotton
- Alcohol/antiseptic swipes
- Caladryl lotion
- Paracetamol (for fever)
- Burn relief ointment
- Antibiotics for stomach infection
- Antacid

- Isabgol (loose motion/constipation)
- Anti-inflammatory painkiller tablet and balm
- Map of the city indicating hospitals
- You should Check the First aid kit periodically and replace any missing or expired items

First aid for specific Injuries

In case of	What to do?
Sprain	<p>Apply ice bag for at least ½ an hour</p> <p>Put an anti inflammatory ointment and tie a crepe bandage</p> <p>Do not put pressure on the affected body part</p> <p>Do not move the injured part unnecessarily and take rest</p>
Unconsciousness	<ul style="list-style-type: none"> • First Disperse the crowd around the Victim. take the victim out in fresh • Sprinkle water on face • Make the victim lie on his/her side • Loosen any tight clothing • Rub hands feet for circulation
Dog Bite	<p>Wash the area thoroughly with soap and water</p> <p>Do not put any antiseptic</p> <p>Do not cover the wound</p> <p>Go to the hospital for tetanus and anti-rabies and strictly follow the vaccination schedule</p> <p>Consult a doctor as soon as possible</p>

Fracture	<ul style="list-style-type: none"> ▪ Support the injured part with the help of a splint ▪ The splint should cover a joint above and a joint below the fracture. ▪ Protruding bone should not be pushed back. ▪ Do not move the injured part unnecessarily. ▪ Move the injured to the hospital carefully
Bleeding	<ul style="list-style-type: none"> ▪ Press the bleeding part with the help of sterile gauze, for 20 minutes. In case bleeding does not stop, ice bag should be applied on the dressing. ▪ Wash the spot with antiseptic. ▪ In case, blood is flowing in jerks, then tie a bandage tightly on the side, closest to the heart. ▪ In case bleeding continues, raise the bleeding part to slow down the flow of blood and tie the bandage on the side which is away from the heart
Burns	<ul style="list-style-type: none"> ▪ Remove victim away from fire. ▪ Place burnt area under running cold tap water. ▪ Pat dry and apply antibiotic. (silver sulphadiazine) ▪ Put clean gauge and bandage on the burnt part. ▪ For serious burns, rush to the hospital. <p>Home remedy (egg or peeled aloe vera leaf applied on burnt area also helps to prevent blisters and eases pain)</p>

Shock	<ul style="list-style-type: none"> ▪ Make the victim comfortable and lay her down with the legs above the level of the head. ▪ Loosen the clothes and cover with a blanket or a thick cloth to prevent the heat loss from the body. ▪ Do not use hot water bottles to keep the patient warm. ▪ Do not give anything to drink or eat as the victim may vomit and choke. In case thirsty, give a handkerchief soaked in water to suck.
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Important checklist

- ✓ Know your blood group.
- ✓ Know if you suffer from any allergy.
- ✓ Keep important emergency numbers to seek help.
- ✓ Know qualified doctor in your neighbourhood.
- ✓ Know the names of medicines and their dosage prescribed by your doctor
- ✓ Eat medicines prescribed by the doctor only.
- ✓ Keep a file of all your medical investigation test reports, X-ray's, ultrasounds.
- ✓ Check the expiry date while buying medicines and discard all the expired medicines from your medicine cabinet.

PREVIOUS YEARS QUESTIONS

5 Marks Questions

1. What are the five safety measures you can observe to prevent fires in the home?

Answer: Five safety measures we should observe to prevent fire are:

- 1) Keep matchbox out of reach of children
- 2) Before sleeping put off burning candle or any lighted fire.
- 3) Always label inflammable liquids container
- 4) Always put only one electrical appliance in one socket
- 5) Buy only ISI certified appliances and gas Pipes

2. Mention any five precautions you should take while using a mixer (mixie) at home?

Answer: Five precautions we should take while using mixer at home are:

- 1) Mixer should be put on single socket, else it can over heat wires and cause short circuit
- 2) Do not Touch Mixer with wet hands as it can cause shock
- 3) Check the wire of Mixer is not damaged or have cuts
- 4) Never remove plugs from socket by pulling the wire. Pull out plug itself.
- 5) Make sure Mixer has ISI mark

3. What are the five safety measures you can observe at home to prevent accidents due to chemical poisoning?

Answer: Five safety measures to observe at home to prevent accidents due to chemical poisoning are:

- 1) Label all medicine or bottle
- 2) Read all labels carefully before eating or drinking
- 3) Keep chemicals in original container which is labelled
- 4) Do not store chemicals with food items or in food container
- 5) Keep chemicals locked and away from reach of children

5 Marks Questions

1. Your younger brother broke a glass bulb. List any two effective methods of picking up the glass pieces. what first aid will you give immediately if his finger starts bleeding heavily while picking them up?

Answer: Two effective methods to pick up glass pieces are:

- 1) With Wet Mop
- 2) With Kneaded Dough

First aid to his finger will be:

- Wash the spot with antiseptic
- Press the bleeding part with the help of cotton, for 20 minutes. In case bleeding does not stop, Ice bag should be applied on the dressing
- If the cut is deep take him to hospital and get tetanus shots

2. If fire breaks out in your room what will be your action plan?

Answer)

1. Put out the flame with sand or water. Do not use water to put off an electrical fire
2. Never run if your clothes are on fire. It will fan the fire

3. To extinguish fire on your clothes, roll on floor or wrap yourself with a woollen blanket and roll on the floor
4. Tie a wet cloth around the face
5. Crawl along the floor to escape Remember the air at the ground level is cleaner as hot air and smoke rises upwards

2 Marks Questions

1. Suggest four safe ways of picking up broken pieces of glass and disposing them off the kitchen floor?

Answer) Four ways to pick broken pieces of glass are

- 1) With Wet Mop
- 2) With Sticking Tape
- 3) With kneaded Dough
- 4) With dust pan and broom

2. What four things you should do immediately if you suspect LPG cylinder is leaking?

Answer:

- 1) Open windows
- 2) Make sure stove knobs are off
- 3) Do not lit any match stick
- 4) Take out the leaking cylinder and put it in open air

3. While giving first aid to a person with a sprained ankle what four things will you do?

Ans)

- Apply ice bag for at least ½ an hour
- Put an anti-inflammatory ointment and tie a crepe bandage
- Do not put pressure on the affected body part
- Do not move the injured part unnecessarily and take rest

4. What four measures can be adopted to prevent poisoning at home?

Ans)

1. Label all medicine or bottle
2. Read all labels carefully before eating or drinking
3. Keep chemicals in original container which is labelled
4. Do not store chemicals with food items or in food container

5. Your friend has ruptured his muscle after slipping on the road. What four steps of first aid will you adopt?

Ans)

- Apply ice bag for at least ½ an hour
- Put an anti-inflammatory ointment and tie a crepe bandage
- Do not put pressure on the affected body part
- Do not move the injured part unnecessarily and take rest

6. Your younger brother has cut his hand. What four precautions should be adopted to prevent such incidents in future?

Ans)

- Check for sharp corners of furniture
- Don't keep cracked or chipped glasses in house
- Knives should be kept downwards Keep blades or scissors or knives out of reach of children
- Always open window with its handle
- Use sharpener to sharpen pencil and not blade

1 Marks Questions

1. In case you smell cylinder gas leaking in the kitchen what should you do?

- a) Shut all the doors and windows
- b) Switch on the light
- c) Call the neighbor
- d) Open the windows and doors

4 Marks Questions

1. What first aid should be provided to an unconscious person?

Answer)

1. First disperse the crowd around the Victim. Take the victim out in fresh air.
2. Sprinkle water on face
3. Make the victim lie on his/her side
4. Loosen any tight clothing
5. Rub hands feet for circulation

2. Mention any eight precautions you should adopt while using any electrical appliances?

Answer)

Eight precautions we should adopt while using any electrical appliances are:

1. Do not attach too many appliances on a single socket, it can over heat wires and cause short circuit

2. Do not Touch any electrical switch or appliance with wet hands as it can cause shock
3. Wires should not pass through the door frames as constant opening and closing of door can damage the wire
4. Never remove plugs from socket by pulling the wire. Pull out plug itself.
5. Old and damaged wires should be changed
6. Buy ISI marked electrical appliances only
7. Train children in the correct use and handling of electrical appliances
8. Do not attempt repairs on your own.

3. What Rules will you follow while giving first -aid to anyone?

Answer)

Rules to follow while giving first -aid to anyone are:

1. Keep a first aid box readily accessible in your house
2. First aid should be given quickly, without wasting time
3. You should remain calm and be resourceful while giving first aid
4. Take the victim to a safe place if needed
5. Reassure the patient
6. Attend first to injuries which can be fatal

4. What first aid should be given to a person who have been bitten by a dog?

Answer)

Wash the area thoroughly with soap and water

Do not put any antiseptic

Do not cover the wound

Go to the hospital for tetanus and anti-rabies and strictly follow the vaccination schedule

Consult a doctor as soon as possible

TERMINAL QUESTIONS

1. Little Shalu fell off the roof. Her grandmother advised to massage her foot and put some ointment. By the evening her foot had swollen. They waited for a few hours for the pain to subside but there was no relief. Finally, when the pain was unbearable they took her to a doctor. The doctor took an X-ray and informed that she had fractured her foot. If you were Shalu's sister or brother how would you have given her first aid? Analyze the mistakes the family members had made?


Ans: If I was Shalu's sister or brother I would have followed the first aid as below.

- Support the injured part with the help of a splint
- The splint should cover a joint above and a joint below the fracture.
- Protruding bone should not be pushed back.
- Do not move the injured part unnecessarily.
- Move the injured to the hospital carefully

The family made a mistake of massaging her foot and putting some ointment on it. Even though her foot was swollen by evening they waited for few more hours for the pain to subside.

2. Inform your friend about ways to prevent getting an electric shock.

Ans:

- Do not attach too many appliances on a single socket, it can overheat wires and cause short circuit.
- Do not touch any electrical switch or appliance with wet hands, as it can cause shock.
- Wires should not pass through the door frames as constant opening and closing of door can damage the wire.
- Never remove plugs from socket by pulling the wire. Pull out plug itself.
- Old and damaged wires should be changed.
- Buy  marked electrical appliances only.
- Train children in the correct use and handling of electrical appliances.
- Get electrical repairs done from a qualified electrician.
- Do not attempt repairs on your own.
- No electric wire should cross any heating device.
- Electrical sockets should not be directly exposed to water to prevent electrocution.

3. Advise your friends on how to give first-aid treatment in case of (a) bleeding (b) burn.

Ans:

Injury	First Aid
Bleeding	<ul style="list-style-type: none"> ▪ Press the bleeding part with the help of sterile gauze, for 20 minutes. In case bleeding does not stop, ice bag should be applied on the dressing. ▪ Wash the spot with antiseptic. ▪ In case, blood is flowing in jerks, then tie a bandage tightly on

	<p>the side, closest to the heart.</p> <ul style="list-style-type: none"> ▪ In case bleeding continues, raise the bleeding part to slow down the flow of blood and tie the bandage on the side which is away from the heart.
Burns	<ul style="list-style-type: none"> ▪ Remove victim away from fire. ▪ Place burnt area under running cold tap water. ▪ Pat dry and apply antibiotic. (silver sulphadiazine) ▪ Put clean gauze and bandage on the burnt part. ▪ For serious burns, rush to the hospital. ▪ Home remedy (egg or peeled aloe vera leaf applied on burnt area also helps to prevent blisters and eases pain)

4. A lady has dropped hot oil on herself. How will you help her?

Ans:

- Rinse the burnt part with water
- Home remedy (egg or peeled aloe vera leaf applied on burnt area also helps to prevent blisters and eases pain).
- Cover with clean dressing and take the victim to the doctor.

5. Saleem was driving a car at a very high speed when it went out of his control and hit the motor cyclist. The boy became unconscious. Seeing no one around he decided to flee. He thought he was lucky to escape until he came home and realized he had hit his own son, who could have been saved had he got timely medical attention!

- If you were the driver, what would you have done?
 - If you were a passerby would you have taken the victim to the hospital or just looked the other way?
 - Had you been the victim, what would you have expected – To be left lying on the road or to be immediately taken to the hospital?
- a) If I was driver then definitely I would have attended the victim.
- ✓ First disperse the crowd around the victim.

- ✓ Allow the victim to take fresh air.
 - ✓ Sprinkle water on his face.
 - ✓ Make the victim lie on his side.
 - ✓ Loosen any tight clothes
 - ✓ Rub hands and legs for circulation.
- b) If I was passerby, I would have helped the victim to reach hospital.
- c) If was a victim then definitely I would have expected someone to take me hospital immediately.