

INDIAN SCHOOL AL WADI AL KABIR

Chapter 15: Prevent Accidents and Emergencies

INFORMATION TECHNOLOGY (402)

CLASS X

- Any minor mistake or unexpected event within an organization has the potential to turn into an emergency if it is not handled properly.
- **Accidents and Emergencies**
- An unplanned, uncontrollable, or unexpected event that causes property damage or human injury is called an accident.
- **For example –**
- Person falling down and getting injured

An emergency is a dangerous or urgent situation that requires quick response.

- **For example –**
- Customer having a heart attack
- Sudden outbreak of fire in organization

Every organization follows policies and procedures for managing, reporting, and handling emergencies as well as accidents.

- **Notice and Correctly Identify Accidents and Emergencies**

- The most valuable source of guidance in this area will be the organization's policies and guidelines. These kinds of incidents should be easy to recognize in your company, and you should know how to handle every kind of emergency and disaster.

- **Get help Promptly and in the Most Suitable Way**

- Make sure that you will provide the kind of help and support that are given in the organization policies. Even if you have the best of plans, you should still follow the rules and regulations given from the organization. If the situation requires then professionals may be authorized to make decisions.
- Do not follow your feelings or emotions if someone is hurt. Follow the steps described in the injury management policy of your company.
- Provide help and support within the authorized limit. Only offer the injured person medical assistance if you are qualified to do so.
- Take advice from senior employees who are qualified to deal with certain circumstances.

Types of Accidents

- The following are a few incidents that frequently happen in organizations –
- **Trip and Fall at workplace** – Consumers or staff members may trip on items left in aisles, unsecured cables, or higher thresholds, causing them to fall.
- **Slip and Fall** – Slips are mainly due to wet floors, spilling of liquids or throwing of other slip-causing material on floors.
- **Injuries caused due to Escalators or Elevators** – Injuries can be caused by falling on escalators and getting hurt.
- **Accidents Caused by Falling Goods** – People may get injuries when goods fall from shelves or wall hangings onto them.
- **Accidents due to Moving Objects** – Moving objects, such as trolleys, can also injure people in the organization.

Handling Accidents

- Identify all possible dangers in your company and take steps to eliminate them in order to try to prevent accidents. In the event that an accident results in a colleague's injury, take the following action.
- Attend to the Injured Person Immediately
- Inform your Supervisor
- Assist your Supervisor

Types of Emergencies

You should know how to handle emergencies and what are basic procedures. Here are some general emergency procedures –

- **First Aid** – Must have every essential first aid item necessary to handle common issues.
- **Electrical Safety** – Electrical safety, such as keeping food and drink items away from electrical equipment, routine inspections, fire extinguisher, fire alarm system etc.
- **Evacuation** – Employees must be aware of who has the coordination or decision-making authority in an emergency. The coordinator needs to be responsible for all of the evacuation procedures.

General Evacuation Procedures

- Every organization has its own evacuation procedures and policies every one has to be aware of these policies. Here are some general evacuation policies –
- Immediately move towards the nearest emergency exit.
- Guide others to the emergency exits.
- Help the disabled person make their way to the emergency exit.
- You may carry your hand held belongings as you move towards the emergency exit.
- Avoid escalators or elevators and avoid overcrowding.
- Immediately go to the emergency assembly area.

Fire Hazards in the Workplace

- Unsafe storage of combustible dust or flammable materials is another prevalent cause of workplace fires. Since both are hazardous, they need to be handled and stored carefully.
- Each worker needs to be aware of the locations of the fire extinguishers.
- Fire extinguishers and First Aid stations should be marked with signs.
- Do not use flammable material near electrical panels, switches or near any electrical equipment.
- All equipment is properly grounded where needed.
- Fire extinguishers must be inspected regularly.
- No flammable material is to be placed near the exit door.

Identification of Material and Ignition Sources

- Materials are arranged in accordance with these fire classes, which are based on risk –
- **Class A Material:** materials such as wood, cloth, and paper, which won't ignite on their own but will continue to burn once exposed to a heat source.
- **Class B Material:** all liquid, grease, and gas materials that burn when exposed to ignition sources.
- **Class C Material:** electrical materials and equipment. These materials provide a significant risk of arc flash and start fires very quickly.
- **Class D Material:** any materials that are volatile and able to quickly ignite, such as magnesium, potassium, and sodium.

Fire Extinguisher

- A fire extinguisher is a tool for protection that shuts off flames. It is a pressure vessel that is cylindrical in shape and holds an agent that can be released to put out a fire.

- **First Aid for Electrical Emergencies**

- Electrical accidents can happen anywhere, at any time. One of the main concerns is the quick response and care of victims. A victim of an electrical accident is frequently unable to move or release the electrical conductor as a result of muscle cramps.

- **Electrical Rescue Techniques**

Approaching the accident

- Never rush into an accident situation.
- Call 108 as soon as possible.
- Approach the accident place cautiously

Examining the scene

- Examine the victim visually and check whether they have come into contact with any electrical wire.
- Do not touch the victim or conductive surface.
- Switch off the electrical circuits if possible.



- **Hazards and solutions**

- Be alert from heated surfaces and fire
- Take precaution if you are not able to switch off the power supply.
- Make sure the hands and feet are dry.
- Wear gloves and shoes and stand on dry surface
- Use non conductive material to remove a victim from the conductor.

- **High voltage rescue**

- Special training is required for how to rescue from high voltage.
- Protective equipment like gloves and shoes must be worn

- **First Aid**

- Cardio-Pulmonary Resuscitation (CPR) can be necessary for the victim.
- Provide first aid for injuries and treat shock if the victim is conscious and breathing.
- Make sure the victim receives medical attention as quickly as you can.
- The attending physician needs complete data in order to diagnose and treat the victim correctly.