DISASTER

“A disaster can be defined as any occurrence that cause damage, ecological disruption, loss of human life, deterioration of health and health services on a scale, sufficient to warrant an extraordinary response from outside the affected community or area”.

“A disaster can be defined as an occurrence either nature or manmade that causes human suffering and creates human needs that victims cannot alleviate without assistance”.

“A disaster is a serious disruption of the functioning of a society involving widespread human, material, economic or environmental losses and impacts which exceeds the ability of the affected community or society to cope using its own resources.

TYPES OF DISASTERS

Man-Made Disasters

* Earthquakes
* Floods
* Landslides
* Avalanches
* Cyclones
* Tsunamis
* Heat Waves
* Droughts

Human-Made Disasters

* Nuclear Disasters
* Chemical Disasters
* Biological Disasters
* Accidental or Ignorance Disasters

Natural Disasters: A Natural Disaster is a major adverse event resulting from natural processes of the Earth such as floods, volcanic-eruptions, earthquakes, tsunamis & other geologic processes, such events leads to loss of life & property. The severity of such events depends on the affected population's ability to recover.

EARTHQUAKE:

Earthquakes are usually caused when rock underground suddenly breaks along a fault. This sudden release of energy causes the seismic waves that make the ground shake. When two blocks of rock or two plates are rubbing against each other, they stick a little. They don't just slide smoothly; the rocks catch on each other. The rocks are still pushing against each other, but not moving. After a while, the rocks break because of all the pressure that's built up. When the rocks break, the earthquake occurs. During the earthquake and afterward, the plates or blocks of rock start moving, and they continue to move until they get stuck again. The spot underground where the rock breaks is called the focus of the earthquake. The place right above the focus (on top of the ground) is called the epicenter of the earthquake. Earthquakes are recorded by a device called seismograph. Richter scale is the scale which is used to measure the magnitude of earthquake.

What Should I Do Before, During, And After An Earthquake?

* What to Do Before an Earthquake?
  + Make sure you have a fire extinguisher, first aid kit, a battery-powered radio, a flashlight, and extra batteries at home.
  + Learn first aid.
  + Learn how to turn off the gas, water, and electricity.
  + Make up a plan of where to meet your family after an earthquake.
  + Don't leave heavy objects on shelves (they'll fall during a quake).
  + Anchor heavy furniture, cupboards, and appliances to the walls or floor.
* What to Do During an Earthquake?
  + Stay calm! If you're indoors, stay inside. If you're outside, stay outside.
  + If you're indoors, stand against a wall near the center of the building, stand in a doorway, or crawl under heavy furniture.
  + If you're outdoors, stay in the open away from power lines or anything that might fall. Stay away from buildings (stuff might fall off the building or the building could fall on you).
  + Don't use matches, candles, or any flame. Broken gas lines and fire don't mix.
  + If you're in a car, stop the car and stay inside the car until the earthquake stops.
  + Don't use elevators (they'll probably get stuck anyway).
* What to Do After an Earthquake?
  + Check yourself and others for injuries. Provide first aid for anyone who needs it.
  + Check water, gas, and electric lines for damage. If any are damaged, shut off the valves. Check for the smell of gas. If you smell it, open all the windows and doors, leave immediately, and report it to the authorities (use someone else's phone).
  + Turn on the radio. Don't use the phone unless it's an emergency.
  + Be careful around broken glass and debris. Wear boots or sturdy shoes to keep from cutting your feet.
  + Be careful of chimneys (they may fall on you).
  + Stay away from damaged areas.

Tsunami: A Tsunami also known as seismic sea wave, it is a series of water waves caused by displacement of a large volume of a body of water, generally an ocean or a large lake. Tsunami waves do not resemble normal sea waves as their wavelength is longer. Rather than appearing as a breaking wave. A tsunami may initially resembles a rapidly rising tide & for this reason tsunamis are often referred to as tidal waves.

What should do

* Remain calm.
* Protect yourself if it is accompanied by an earthquake.
* Immediately head inland and to higher ground (at least 60' above sea level) if you experience an earthquake that lasts a minute or more, you are on the beach and the tide suddenly goes way out, or you see a wall of water rushing toward you. If you can’t get inland and up, go up.
* Know whether you are in a tsunami hazard zone or not.
* Know where the nearest tsunami escape route is.
* Have already put together portable emergency survival kits for you  
  and your family.
* Have an emergency radio that automatically turns on in the event of a hazard warning.
* Assemble your family and walk or bicycle to the nearest tsunami.safety zone (unless someone with you is mobility impaired).
* Wait for an official announcement that the danger has passed before returning home or to the beach.
* Have emergency supplies set in at home, since it might take days or weeks for electricity, food, water, and protective services to be restored.

What should avoid-

* Rush to the beach to see the big wave.
* Rush to the beach after the first wave to see what has washed up on shore. (A tsunami may include several waves arriving over a period of hours.)
* Hop in your car to get to higher ground. (Roads may be impassible, you’ll just contribute to the traffic jam, and you may not get to safety. You’ll also make it harder for emergency vehicles to get through.)
* Stop to pack your most cherished possessions to take with you. (You may not have time.)
* Wait for an official warning if you feel an earthquake that lasts a minute or more, are on the beach and the tide suddenly goes out, or you see a wall of water rushing toward you. (By the time a warning is issued, it may be too late.)
* Start to put together an emergency survival kit. (You should already have one prepared.)
* Go back because you don’t remember whether you turned off the oven.
* Brush your teeth and put on your makeup before going out.
* Stop to put on clean underwear because you might have to go to the hospital.
* Live in a tsunami hazard zone.

CYCLONES

Circulatory winds in the lower part of the atmosphere are generally termed as cyclone. They originate over the warm ocean water of tropical and temperate regions. A cyclone occurs when a low pressure region is surrounded by high pressure. Thus, the winds blow at a very high speed near the center. These winds are accompanied by heavy rains.

Precautions against Cyclones

* People should seek the latest information about weather on television and radio and act according to warning during a cyclone alert
* We should remain in our house if it is constructed well and close all windows and doors.
* In case, it is a semi-pakka house or a hut we should leave it quickly to a stronger building.
* When the wind subsides, one should not come out immediately from the house. Wait for proper announcement by the government.

Best Practices

* On 12 November, 1970 a major cyclone hit the coastal belt of Bangladesh at 223 km/hr. with a storm surge of six to nine meters height, killing an estimated 500,000 people.
* Due to the Cyclone Preparedness Program, the April 1991 cyclone with wind speed of 225 km/hr. killed only 138,000 people even though the coastal population had doubled by that time.
* In May 1994, in a similar cyclone with a wind speed of 250 km/hr. only 127 people lost their lives.
* In May 1997, in a cyclone with wind speed of 200 km/hr. only 111 people lost their lives.

FLOOD

Flood occurs when a large amount of water covers an area. It generally occurs due to heavy rainfall. Flood also occurs when a river overflows its water due to heavy rainfall. A flood is dangerous and it causes damage to life and property. Flood water submerges everything when it enters an area. India witnesses numerous floods in a year. The reason behind these flood is the rainy season between June and September.

How to remain safe during Flood?

During a flood

* Seek higher ground. Do not wait for instructions.
* Be aware of flash flood areas such as canals, streams, drainage channels.
* Be ready to evacuate.
* If instructed, turn off utilities at main switches and unplug appliances - do not touch electrical equipment if wet.
* If you must leave your home, do not walk through moving water. Six inches of moving water can knock you off your feet. Use a stick to test depth.
* Do not try to drive over a flooded road. If your car stalls, abandon it immediately and seek an alternate route.

After a flood

* Stay away from flood water - do not attempt to swim, walk or drive through the area
* Be aware of areas where water has receded. Roadways may have weakened and could collapse.
* Avoid downed power lines and muddy waters where power lines may have fallen.
* Do not drink tap water until advised by the Health Unit that the water is safe to drink.

DROUGHT

Drought can be defined as extreme shortage of rainfall or water in a particular area. It directly affects the crops and results in the shortage of food for animals and humans.

Precautions-

* Rain water harvesting should be done in drought prone areas.
* Conservation of water and using it carefully should be done.

LANDSLIDE

A landslide is a geological phenomenon that includes a wide range of ground movements, such as rock falls, deep failure of slopes & shallow debris flows. Landslides can occur in offshore, coastal & onshore environments. Although the action of gravity is the primary driving force for a landslide to occur, a landslide often requires a trigger before being initiated.

AVALANCHE

An avalanche is a rapid flow of snow down a sloping surface. Avalanche is typically triggered in a starting zone from a mechanical failure in the snowpack (slab avalanche) after initiation, avalanches usually accelerate rapidly & grow in mass & volume as they collect more snow.

Human Made Disasters

They are caused because of negligence and mistakes of terrorisms, riots, use of weapons of mass destruction, war, industrial accidents, large fires and collapse of economic and social structures.

DISASTER-EFFECTS

 Deaths  Disability  Increase in communicable disease  Psychological problems  Food shortage  Socio-economic losses  Shortage of drugs and medical supplies.  Environmental disruption