



**CITIZEN'S HANDBOOK ON FIRE SAFETY  
AND  
DISASTER PREPAREDNESS**



**NATIONAL FIRE SERVICE DAY**

**“FIRE PREVENTION ..... DO IT FOR LIFE”**

**“ आग से सुरक्षा ..... जीवन की रक्षा ”**

Fire prevention Cell  
Directorate of Fire & Emergency Services,  
St. Inez, Panaji – Goa.

## **VISION STATEMENT**

To raise the level of Prevention and Preparedness so as to minimize loss of life and property in the State from fire and non-fire emergencies and to inculcate safety consciousness among the general public.

## **MISSION STATEMENT**

Develop Fire and Emergency Service as a Service Provider for reaching help to the people in distress, for all hazard purpose for community safety and to enrich the members of the profession through training and education for preventing and mitigating the Fire loss to facilitate improved public safety.

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Director

Directorate of Fire & Emergency Services - Goa

## BOARD CLASSIFICATION OF FIRE

### Marking & Classification

### Materials

### Suitable Portable Appliances

#### **Class 'A'**



Fires involving ordinary combustible material (such as Wood, Cloth, Rubber and many plastics) requiring the heat absorbing (cooling) effects of water, water solution, or the coating effects of certain dry chemicals which retard combustion.

Fire appliances expelling water, (Water Gas type fire extinguisher or water stored pressure type.)

#### **Class 'B'**



Fires involving flammable or combustible liquids, flammable gases, greases and similar materials where extinguishment is most readily secured by excluding air (oxygen), inhibiting the release of combustible vapours or interrupting the combustion chain reaction.

Fire extinguisher discharging Foam, Carbon dioxide or Dry Chemical Powder.

#### **Class 'C'**



Fires involving gaseous substances under pressure where it is necessary to dilute the burning gas at a very fast rate with an inert gas or powder.

Fire Extinguisher discharging. Dry Chemical Powder or Carbon Dioxide / Halogenated Extinguishant.

#### **Class 'D'**



Fires involving certain combustible metals (such as Magnesium, Titanium, Zirconium, Sodium, Potassium etc.) requiring a heat absorbing extinguishing medium not reactive with burning metals.

Fire Extinguisher discharging special Dry Chemical Powder.

## HOW TO USE FIRE EXTINGUISHERS

**Pull out safety device of fire extinguisher**



**Pull the pin or safety clip.** This will allow you to discharge the extinguisher.

**Aim nozzle at base of fire**



**Aim at the base of the fire.** If you aim at the flames (which is frequently the temptation), the extinguishing agent will fly right through and do no good. You need to hit the fuel.

**Squeeze top lever of fire extinguisher**



**Squeeze/open the top handle or lever.** This depresses a button that releases the pressurized extinguishing agent in the extinguisher.

**Direct discharge at fire using sweeping motion**



**Sweep from side to side until the fire is completely out.** Start using the extinguisher from a safe distance away, then move forward. Once the fire is out, keep an eye on the area in case it reignites.

## **FIRE SAFETY**

Fires can cause major disaster and loss of lives in buildings such as Offices, Hotels, Shopping Centres, Hospitals, Schools and Homes. Such disaster can be avoided if proper fire safety practice are observed.

The best prevention is to eliminate fire hazards. Therefore as a responsible citizen, you need to know what fire hazards are and what you should do to remove them from your home or work place.

If you discover a fire hazard you may report to Fire Control Room or Call Toll Free Line 101.

**Remember : Readiness is your only Protection**

## TIPS FOR HOME

**Don't leave cooking unattended**



### **When Preparing Food**

- ❖ Do not leave any cooking unattended. Turn off all cooking appliances and unplug them when not in use.
- ❖ Dress appropriately when cooking. Avoid clothes with long loose sleeves when working near heat sources.

**Don't overload plug points**



### **When using Electrical Appliance**

- ❖ Do not overload electrical outlets
- ❖ Check the condition of the wiring (electrical appliances and decorative lights etc.) Frayed or cracked cords should be repaired by licensed technicians.

**Put out burning embers**



### **Housekeeping**

- ❖ Do not throw smouldering charcoal embers into rubbish chutes without extinguishing them first.
- ❖ Keep the stove top clean and clear at all times.
- ❖ Never store combustibles near heat sources.
- ❖ Do not leave unused items outside homes. These should be disposed of, otherwise, they may pose a fire hazard.

**Keep fire hazards away from children**



### **Prevent Children from Starting Fires**

- ❖ Always keep matches, lighters and candles out of young children's reach and do not allow them to play with these items. Instead, educate them on the dangers and hazards of fire.
- ❖ Children playing with sparklers must be supervised by parents/adults.

**Fire protection for homes**



### **Smoke Detectors and Fire Extinguishers**

- ❖ Having smoke detectors and fire extinguishers at home could save lives.
- ❖ The portable battery-operated detector emits a very loud, piercing alarm when smoke is detected and is useful because it gives early warning of any fire.

# BASIC PRECAUTIONS FOR USE OF LPG AT HOME



- Retain safety cap with nylon thread attached to cylinder. Fix the cap on the valve to stop leak, if any. Fix safety cap on the valve, when cylinder is not connected.



- Check Rubber tubes regularly for cracks, if any. Change rubber tube at least once in two years.



- Strike the match first..... Then open the burner knob of your stove.



- Always use cotton apron while cooking. Do not Place cylinder inside a closed compartment.



- Keep cylinder in upright position



- Always Keep the gas stove on a plat form above the cylinder level.



- Self repair is unsafe. Call distributor's mechanic.

## TIPS FOR PUBLIC PREMISES

### Avoid exceeding the permissible occupant load



- As owners, operators and managements of supermarkets, shopping centres and public entertainment premises, you should avoid exceeding the permissible occupant load of your building. Regulate the crowd and sensitise them to the risk of overcrowding.

### Don't remove any fire fighting equipment



- Avoid removing any vital fire fighting equipment like hose reels and fire extinguishers from where they are installed.

### Maintain fire safety equipment regularly



- Service the fire extinguishers and test the voice communication (PA system), fire alarm and other fire safety systems on a regular basis.

### Don't obstruct exit routes at all times



- Avoid stacking goods along common corridors, escape passageways or staircases.
- Do not lock up the exit doors when the premises are occupied/being used.

# WHAT TO DO IF A FIRE BREAKS OUT

## Evacuate premises



- Get everyone out

## Contain fire



- Close the door to contain the fire.

## Turn gas mains off and call for help



- Turn off the gas mains if you can reach it, Call 101.

## Fight fire without endangering self



- Fight the fire if you can, but ONLY do so without endangering yourself or others.

## Escaping through Smoke



- If you have to escape through smoke, keep low by crawling on your hands and knees.
- In a fire, smoke will naturally rise leaving some fresh air about 30 cm to 60 cm off the floor. Crawling keeps your head in this safety zone, a way from the smoke's toxic content.

## IF YOU ARE TRAPPED IN A FIRE

### Move to a safe room



- ❑ Enter a safe room, preferably one that overlooks a road.

### Seal door opening



- ❑ Shut the door behind you. Cover the gap at the bottom of the door with a blanket or rug to prevent smoke from entering the room

### Shout for help



- ❑ Shout for help from the window or other openings to alert passers by. Then wait for rescue to arrive.

### Call 101 and give location & fire details



- ❑ If you have a handphone, call 101 and inform the operator of your location (room number/position), floor level, what is on fire and how many persons are trapped

### Don't panic, help is on the way



- ❑ Do not attempt to jump out of the building. Help will be on the way very soon.

## IF YOUR CLOTHING CATCHES FIRE

In the event that your clothing catches fire, remember to Stop, Drop and Roll.

### Stop



- Stop. Do not panic and run.

### Drop



- Whether indoors or outdoors, drop down immediately, covering your face with your hands.

### Roll



- Roll over and over to put out the flames.
- Rolling smothers the flames by removing the oxygen.
- Covering your face with your hands will prevent the flames from burning your face and help keep fumes and smoke from reaching your lungs and eyes.

## FIRE SAFETY PRECAUTIONS AGAINST ELECTRICITY

About 60% fires are of electric origin on account of electric short circuit, overheating, overloading, use of non-standard appliances, illegal tapping of electrical wires, improper electrical wiring, lack of proper earthing, carelessness and ignorance etc. It can lead to serious fire and fatal accidents, if proper instructions are not followed. Such incidents may be minimized to a great extent if adequate fire precautions are observed. Electrical fires spread rapidly especially in buildings and cause loss of life and property. It is, therefore, necessary to act fast. Raise an alarm for help. Switch off power supply to de-energize the equipment. Use dry sand, CO<sub>2</sub>, dry powder or inert gas (extinguishers).

### Do's

- ☞ Use I.S.I. Certified appliances. The little extra cost can save your life.
- ☞ Use good quality fuses of correct rating, miniature circuit breakers and earth leakage circuit breakers.
- ☞ Use one socket for one appliance.
- ☞ Switch off the electric supply of the fire affected areas.
- ☞ Fuses and Switches should be mounted on metallic cubicles for greater safety against fire.
- ☞ Replace broken plugs and switches.
- ☞ Keep the electrical wires away from hot and wet surfaces.
- ☞ Switch off appliance after use and remove the plug from the socket.
- ☞ Switch off the 'Main' switch when leaving home for a long duration.

### Dont's

- ☞ Don't use substandard fixtures, appliances.
- ☞ Never have temporary or naked joints on wiring.
- ☞ Don't lay wires under carpets, mats or doorways. They get crushed, resulting in short circuiting.
- ☞ Don't allow appliance cords to dangle.
- ☞ Don't place bare wire end in a socket.

## EVACUATION DRILL GUIDELINES FOR HIGH RISE BUILDING

In case of fire in a high-rise building safe evacuation of its occupants may present serious problems unless a plan for orderly and systematic evacuation is prepared in advance and all occupants are well drilled in the operation of such plan. The Fire Exit Drills are absolutely necessary in all public Institutions Hotels, Boarding Houses, Hospitals, Factories and especially in Schools and Colleges. Properly conducted they not only secure the orderly and rapid evacuation of the building but teach self-control as well.

Fire Drills shall be conducted, in accordance with the fire safety plan, at least once every three months for initial two years. Thereafter fire drills shall be conducted once every six months. For School buildings fire drills should be held once per term, preferably at the commencement of each term or school year.

All occupants of the building shall participate in the fire drill. A written record of such drills shall be kept on the premises for three years period and shall be readily available for fire brigade inspection. In case you need assistance or guidance call **Fire Prevention Cell** through **101**.

# FIRE SAFETY FOR DISABLED PEOPLE

## WHAT TO DO IN CASE OF FIRE

- If possible, close the door of the room, where the fire is. Close all the doors behind you as you leave. This will help delay the spread of fire and smoke.
- Before opening a closed door use the back of your hand to touch it.
- Don't open, if you feel hot-the fire will be on the other side.
- Get everyone out, as quickly as possible. Don't try to pick up valuables. Make your way out, as safely as you can and try not to panic. It will help you to plan your escape route now rather than waiting until the fire reaches you.
- Contact the fire brigade. Clearly state the address of the place on fire.
- Never go back into the house until a fire officer has told you it is safe to do so.

## IF YOU ARE CUT OFF BY FIRE

- Try to remain calm.
- If you are unable to use the door because of flames or smoke, close the door and use towel or bed sheet to block any gaps. This will help stop smoke spreading into the room.
- Try to make your way to the window. If the room becomes smoky, crawl along the floor where it is easier to breathe.
- Open the window and try to attract the attention of others who can alert the fire brigade. Help will arrive in a matter of minutes.

## HOW TO PREVENT FIRES

- Unplug all electrical appliances not designed to stay on.
- Make sure no cigarettes are still burning.
- Before emptying ashtrays make sure that the contents are cold.
- Put a guard around open fires.
- Switch off portable room heaters.
- Close the doors of unoccupied rooms.

## FIREWORKS SAFETY

Traditionally Fireworks form an integral part of celebrating Diwali, marriage ceremony and other such happy occasions. But in many cases, happy occasions become gloomy and laughter turns to tears due to indiscriminate use of fireworks without taking safety precautions. Some carefulness and some safety cautiousness could help in saving such odd events to make the celebration more bright and purposeful. Some safety precautions while using Fireworks/Crackers shall be as under :-

### Do's

- ☞ Carefully read the fire safety instructions and precautions written on fireworks.
- ☞ Always keep a bucket of water and sand ready while igniting fireworks.
- ☞ Always immerse the used/exhausted fireworks like sparklers, Rockets into a bucket of water or dry loose sand.
- ☞ Close the windows and openings of your house properly to prevent ingress of lighted flying crackers.
- ☞ Elders supervision is a must when children play with firecrackers.
- ☞ It is safe to play firecrackers in open grounds and open places
- ☞ Rockets, Flowerpots and other flying crackers should not be displayed near thatched house and hay stacks.
- ☞ Wear tight cotton clothes while playing firecrackers.
- ☞ If you receive burn injuries accidentally, pour cold water until pain subsides and consult a doctor.

### Don't's

- ☞ Never allow children to light fire works in absence of elders.
- ☞ Don't re-light fireworks that fail to ignite.
- ☞ Don't light fireworks very close to the buildings.
- ☞ Don't leave lighted oil lamps, agarbattis or candles on the floor or near fireworks.
- ☞ Don't allow fire works display inside the house.
- ☞ Don't hold flowerpots, hand bombs etc. in hand during display.
- ☞ Don't allow children near dangerous and high sounding firecrackers.
- ☞ Don't display fireworks near crackers shop.
- ☞ Don't throw lighted fire crackers indiscriminately into open.

## FIRE SAFETY IN HOTELS

Fire safety in hotels can be achieved by considering the following aspects.

- ❖ **MANAGEMENT RESPONSIBILITY** : This includes issue of written statement of its Policy regarding fire safety to its employees, training staff in handling & operation of First aid fire fighting equipments, assigning responsibilities to its specific persons, planning evacuation drills & practice.
- ❖ **CONTAINMENT OF SMOKE** : This can be achieved by Fire resistant construction & compartmentation.
- ❖ **PROVISION OF SAFETY ESCAPE ROUTES** : By providing continuous & unobstructed way to exit from any point in the hotel to public way or open area or Assembly point.
- ❖ **EMERGENCY POWER SUPPLY & LIGHTING** : Stand by power supply arrangements shall be made to illuminate corridors, staircases, basement, exit signage, operating of fire lifts, fire pump etc.
- ❖ **FIRE SAFETY/FIGHTING EQUIPMENTS** : Adequate number of fire detection & suppression equipments shall be provided in the buildings irrespective of height Viz: Internal Hydrant system, Automatic detection cum Alarm system, portable fire extinguisher etc.

## **IMPORTANCE OF FIRE SAFETY TRAINING IN INDUSTRIES**

Fire safety start with Fire Prevention and for that it is important to have certain basic knowledge of combustion, Fire hazard properties & potentially dangerous processes in area of work. An employee who is present on the spot is the most important Fire Fighter who can prevent & extinguish the fire in the earliest stage thereby minimizing the loss of life and property. But to do so he must have the knowledge and training

### **IMPORTANT FACTORS OF FIRE FIGHTING TRAINING :**

- Build up the right attitude amongst the employees.
- Basic and clear information of the phenomenon of Fire combustion which is useful in tackling Fire surely and safely.
- Information of Fire risks in respective industry / work area.
- Information on the correct Fire Fighting Techniques.
- Information of First Aid and Rescue Techniques.
- Knowledge of the Emergency Plan of the industry which should be known and simulated. Fire Drill should also be planned during training.
- Analysis of case histories of relevant Fire accidents which helps in correlating the importance of fire safety.

The only way to keep the increasing risk of fire under control is to have knowledgeable & safe workers with the right attitude.

## INSTRUCTIONS FOR FIRE SAFETY IN RESPECT OF TEMPORARY STRUCTURES / PANDALS

- ★ The height of the ceiling of the pandal should not be less than 3 meters.
- ★ No synthetic materials or synthetic ropes should be used in such structures.
- ★ Margins of at least 3 meters should be kept on all sides-way from any pre-existing walls or buildings, line.
- ★ No structure should be erected underneath any live electrical line.
- ★ Structure should be erected reasonably away from railway lines, electric sub-stations, furnaces or other hazardous places.
- ★ Exits on all sides of pandals shall be kept sufficiently wide (minimum 1.5 meters).
- ★ First-aid fire extinguishers and water buckets must be installed at strategic points inside and outside of the pandal.
- ★ There should be provision of an emergency standby light.
- ★ No combustible material like wood shavings, straw, flammable and explosive chemicals and similar materials should be permitted to stored in the vicinity or inside the pandal.
- ★ No fireworks display with open flames of any kind should be permitted close to the temporary structure / pandal.
- ★ Kitchen must be segregated by providing separation walls of non-combustible materials (G.I. Sheets) from the remaining area of the temporary structure.

## TRAPPED IN A LIFT

When a lift breaks down with people trapped inside, the greatest danger is from panic.

### Do's

- ☞ Stay calm and try to reassure anyone who shows sign of panic.
- ☞ Instill confidence and explain that you are not in danger, that help can be summoned in several ways, and that there is no possibility of the lift falling out of control down the shaft.
- ☞ Use the alarm button or the telephone inside the lift to call for help.
- ☞ If there is no alarm system, bang on the door and shout for help.
- ☞ Once you contact someone outside, explain what has happened and ask him to get expert help at once.
- ☞ Tell your contact to dial 101 (Fire Brigade).
- ☞ Stay calm and wait, you may get hungry, thirsty and worried, but you will survive.

### Dont's

- ☞ Never try to escape from the lift without help from an expert outside.
- ☞ Do not try to force the inner lift doors open.
- ☞ Do not be tempted to climb out of any hatch there may be in the lift's ceiling.

## FIRST - AID

When a disaster strikes, there will probably be many casualties. The injured will have to go to a hospital, clinic or medical centre for treatment. When a case is non-emergency in nature. Medical advice should be sought from a family doctor or hospital, using your own transport or the public transport system. If you can render first aid on the spot before medical help is available, you will certainly help to alleviate the pain and suffering of the injured.

## HOW TO STOP BLEEDING



Place the palm or fingers over the bleeding point and apply direct pressure

- Bleeding or hemorrhaging is simply blood escaping from its vessels.
- There are varying degrees of seriousness.
- The main method of arresting the blood flow is by applying direct pressure or a tourniquet.

## APPLYING DIRECT PRESSURE



- This is one of the most effective ways of stopping severe bleeding in almost any part of the body.
- Place the palm or fingers over the bleeding point and apply direct pressure.
- The bleeding will usually stop after a while.
- Do not use the method if there is a foreign body in the wound or if a fracture is suspected.
- With this method, there is also a slight risk of introducing germs into the wound. To prevent this, place a clean piece of material like lint or gauze over the wound before applying pressure.

## TREATING BURNS AND SCALDS



Burns and scalds are injuries to body tissue caused by heat, chemicals or radiation.

- Reduce the spread of heat, pain and swelling by placing the burnt area under cold running water or immersing it in cold water for at least 10 minutes.
- Gently remove any rings, watches, belts or constricting clothing from the injured area before it starts to swell.
- Cover the injured area with clean, preferably sterile, non-fluffy material.
- A burnt face may be covered with a gauze mask, with holes cut into it to assist the victim in breathing.

- Do not break blisters or remove anything that is sticking to a burn.

- Do not apply lotions, ointments or fat to the injured area.



## TREATING FRACTURES



### What is Fracture ?

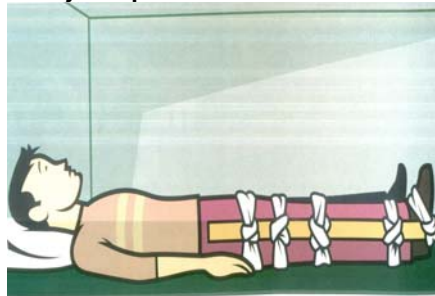
A fracture is a broken or cracked bone. There are a number of signs and symptoms which can indicate that a person has a fracture :

- Pain.
- The injured part cannot be moved normally.
- The injured part may have an unnatural shape or position.
- There is swelling and sometimes bruising.
- There is loss of strength.
- There may be an irregularity or shortening of the affected limb.

### First Aid for Fractures

- Treat severe bleeding and difficulty in breathing first.
- Treat on the spot. Avoid unnecessary movement.
- Immobilise the injured part; splint the joint above and the joint below the injury.

**Treat severe bleeding & breathing difficulties first & only then immobilize the injured part**



## TRANSPORTING CASUALTIES WITHOUT USING A STRETCHER

Where stretchers are not available or cannot be improvised, you may have to transport casualties the 'manual' way. There are several methods you can use depending on the situation :

**Victim can walk with some assistance**



### Human Crutch

This method is used to move victims who are conscious and able to walk with some assistance.

Hold him firmly around the waist and use your shoulders to support his arm, while he rests his body weight on you.

**Victim is lightweight**



### Fireman's lift

This is suitable for victims who are lightweight, either conscious or unconscious.

Stoop low, bend the victim over your shoulders and lift him up. For more stability, wrap your arm around his leg as you hold his arm over your chest.

**Victim is lightweight & conscious**



### Pick-a-back

If the victim is conscious, lightweight and able to hold on using her arms, this is an excellent method to transport her.

You should ensure stability in this position by firmly grasping the victim behind the knees, with her arms held together securely across your chest.

**Victim is a child / lightweight adult**



### Cradle Method

Use this method if the victim is a child or a lightweight adult.

The victim will be in the most comfortable position if you slip your arms under her thighs and shoulders.

## PEACE TIME EMERGENCIES

Emergencies do not come with a warning. To handle emergency situations of any magnitude the community is required to know the basics of various types of emergencies to ensure quick action and safety knowledge and practice of the various types of peace time emergencies would make the community familiar and alert to face any eventuality.

### FLOODS

**Evacuate & move to higher ground**



**If You are at Home**

- Stay put but be ready to evacuate immediately if the Police/Fire Service advise you to do so.
- If you think it is dangerous to remain at home, contact the Police/Fire Service (giving name & address) for assistance and evacuate immediately.
- Move to higher ground away from open areas, streams and storm drains.
- Switch on the portable radio for updates from the State or Dist. authorities.

**Abandon stalled car in rapidly rising waters**



**If You are in a Car**

- Be alert to signs of flooding.
- Do not drive around barricades as they are put up for your safety.
- If your car stalls in rapidly rising waters, abandon it immediately and try to get to higher ground.
- Call the 101 or 100 if help is needed.

## LIGHTNING

When a thunderstorm threatens your area, get inside a home, building or automobile and stay away from metal objects and fixtures.

### Don't talk on corded phones



### If you are at Home :

- Avoid showering or bathing. Plumbing and bathroom fixtures can conduct electricity.
- Avoid using a corded telephone, except for emergencies. Cordless & cell phones are safe to use.
- Unplug appliances and other electrical items such as computers and turn off all air-conditioners. Power surges from lightning can cause serious damage.

### Take shelter



### If You are Outside :

- Take shelter in a building or vehicle.
- In open areas or forests, seek shelter in a low area such as under a thick growth of small trees.
- If you are in an open area, crouch into a ball on the ground.
- In open water, head for shore.
- If you are on a bicycle, motorbike or golf cart, get off.
- People in a group should spread out.

### Get ashore



### Avoid doing these when lightning occurs :

- Using the telephone, electrical appliances and electronic equipment.
- Standing under tall trees.
- Staying in the open or on high ground.
- Holding metal objects.
- Being near metal fences, pipes or rails.

## WHEN A EARTHQUAKE OCCURS

### Be cautious of gas leaks



- Do not use candles, matches or other naked flames during and after the earthquake, as there might be a gas leak.

### Take cover



- Keep calm.
- Take cover under a desk, table or against interior walls. Stay away from windows, doors, walls, display shelves and anything that could fall and hurt you, like lightnings, furniture or fixtures.

### Don't be alarmed by activation of fire safety devices



- Do not be alarmed if the electricity is cut off or fire sprinklers and alarms are activated.

### Keep away from buildings



- If you are outdoors, stay away from buildings and overhead electrical cables.
- Remain in the open until the earthquake stops.

### Stop vehicle and remain inside



- If you are driving, stop as quickly as safety permits. Stay in your vehicle.
- Avoid stopping near or under trees, buildings, bridges, overpasses or overhead electrical cables.

## AFTER THE EARTHQUAKE STOPS

### Leave in an orderly manner



- Do not rush for the exit or it may start a stampede

### Don't touch damaged wiring



- Do not touch any damaged electrical wiring. Also, report any gas leaks.
- Give help to those who are injured or require your assistance. Call the 101 / 100, if necessary.

### Check for structural defects



Check your home for any structural defects and inform Municipality, Panchayat (Local Bodies) for assistance.

## ENHANCING YOURS SURVIVABILITY IF TRAPPED UNDER DEBRIS / RUBBLE

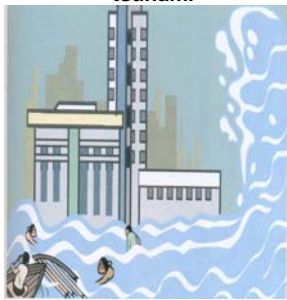


### General Guidelines if You are Trapped :

- ☞ Stay put and protect your head and face from shattered glass or falling objects by grabbing a coat, blanket, newspapers, box etc.
- ☞ Move away from hazardous areas or unstable objects, and if possible, put on a pair of sturdy shoes to protect your feet from broken glass.
- ☞ Brace yourself against walls without glass windows or mounted shelves. Crawl under a sturdy table, desk or bed as that will provide you with air space and protection against falling objects.
- ☞ If you are in a safe area, stay there. Do not attempt to use the stairs or elevators as there are dangers like falling debris, damaged stairways or exits, and power outages in elevators and stairwells.
- ☞ Use a flashlight to attract attention. Do not turn on light switches, or light matches, fires or gas stoves etc. unless you are sure there is no danger of a gas leak.
- ☞ If you are pinned down by debris, periodically move your fingers and toes to ensure blood circulation and prevent blood clots.
- ☞ Maintain a high morale by thinking of your loved ones. This will keep your quest for survival and fighting spirits high.
- ☞ Keep calm, be alert and respond to rescuers' calls. Do not shout unnecessarily as you may weaken yourself.
- ☞ Attract rescuers' attention with a flashlight or by calling out if you are sure someone is around.
- ☞ Consume food and water from the refrigerator if it is near you. If you need to eat and drink from an open source, beware of shattered glass and other debris in it. Moderate your consumption to enable the food to last longer.

# TSUNAMI

## Destructive nature of a tsunami



## What is a Tsunami ?

A tsunami is a series of enormous waves formed in the sea or near the coast generated by violent undersea disturbances such as earthquakes, induced movement of the ocean floor, landslides and underwater volcanic eruptions.

Most tsunamis are caused by earthquakes in the sea that induce movements in the sea floor. From the area where a tsunami originates, waves travel in all directions over great distances. In deep waters the tsunami wave is not noticeable but when it approaches the shore, it increases in height.

All tsunamis are potentially dangerous and can be extremely violent and damaging when they hit the shore.

## Sea recedes suddenly



## Do not stay and investigate



## Warning Signs to Look Out For

- If you are at the beach or near the ocean and feel the earth shake, run immediately to higher ground. Do not wait for a tsunami warning to be given.
- The sudden draw down of the sea level resulting in a receding shoreline, sometimes by a kilometer or more, is a sign of a preceding or in-between crest of tsunami waves. Head for high ground as quickly as possible.
- Do not approach the beach to investigate.
- If you are advised to evacuate, do so immediately.

## WHAT YOU SHOULD DO IF YOU ARE CAUGHT IN A TSUNAMI

### Move quickly to higher ground



- Homes and buildings located in low lying coastal areas are not safe.
- Do not stay in such buildings if there is a tsunami warning.
- Move quickly to higher ground.

### Seek shelter in reinforced buildings



- The upper floors of high multi-storey, reinforced concreted buildings can provide refuge if there is no time to quickly move inland or to higher ground.

### Move out to deeper waters



- If you are on a boat or ship and there is time, move your vessel out to deeper waters.
- If there is severe weather, it may be safer to leave the boat at the pier and move to higher ground.

### Wait for the "ALL CLEAR" signal



- Stay away from the area until it is safe.
- Do not be fooled into thinking that the danger is over after a single wave – a tsunami is NOT a single wave but a series of waves that can vary in size.

## **CYCLONE PREPAREDNESS TIPS**

### **PREVENTION TAKEN BEFORE A CYCLONE HITS:**

- Check that your home is in a sound condition.
- Trim away any tree branches hanging over your roof.
- Clear your property of any loose items (eg. Sheet iron, wood etc.)
- Know your Community Disaster Plan.
- Prepare an Emergency Kit containing:-  
Portable radio, Torch, Fresh water, Canned Food, Matches, Fuel lamp, Cooking Utensils, Portable Stove, Water-proof bags, and First Aid Kit.
- Keep list of emergency phone numbers handy, like Police, Fire, Ambulance, Gas and Electricity.
- Find out how and where to turn off power, gas and water supplies.
- Store you important documents in a fire/water-proof container.
- Get your Household and Contents insured.

### **PREVENTION AT THE TIME WHEN CYCLONE HITS :**

- Store all your loose items inside.
- Find your car and park it under solid cover.
- Close all the Doors, windows and shutters.
- Disconnect all electrical appliances and turn off the Gas.
- Stay inside and shelter inside the strongest part of the building.
- Continue to listen to your portable Radio for updates and advice.
- If wind suddenly drops, don't assume that the cyclone is over, violent winds will soon resume from the opposite direction.
- Wait for the official **ALL-CLEAR SIGNAL**.

### **PREVENTION TAKEN AFTER CYCLONE :**

- Don't go outside until officially advised it is safe to do so.
- Check for any Gas Leaks.
- Don't use electrical appliances if Wet.
- If evacuated, don't return to your home until advised it is safe to do so.
- Beware of fallen Powerlines, damaged bridges, buildings and trees.
- Don't enter flood waters.
- Continue to listen to your local radio for official warnings and advice.

## OPERATIONAL FACTS

### You should know that –

- About 600 litres of water flow through a nozzle in a minute.
- A water tender carries 4500 litres of water only.
- If two nozzles are used to throw water on to the fire. It takes only 4 minutes to empty a water tender.
- No objection certificate from Goa Fire and Emergency Service is not a guarantee against the outbreak of fire.
- Availability of fire fighting equipment in the premise do not prevent out break of fire. They help in minimizing the losses due to fire if maintained and operated immediately, effectively and efficiently.
- Non-informing fire service about the fire incident may keep the risk of fire open. Do report every fire incident to the nearest Fire Station. Call 101.

**In case of fire dial  
101**

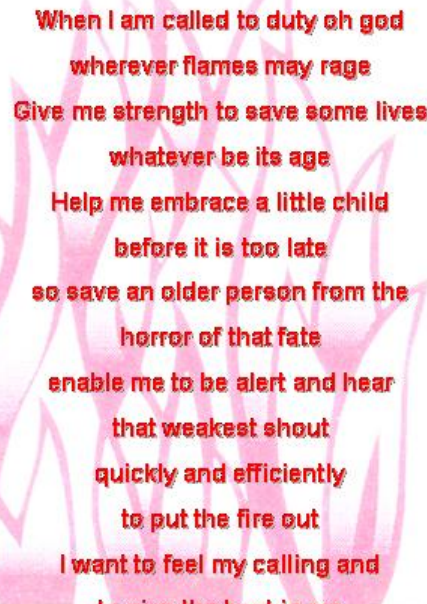
**TELEPHONE NUMBERS OF FIRE  
STATIONS IN THE STATE**

Directorate of Fire & Emergency Services, Panaji-Goa.	2225500, 2227616, 2423101, 2425101
Panaji Fire Station	2425101, 2232902 / 101, 2225500, 2423101
Mapusa Fire Station	2262900, 2263354 / 101
Bicholim Fire Station	2362100, 2361397 / 101
Margao Fire Station	2714600, 2715825 / 101
Ponda Fire Station	2312044, 2315863 / 101
Vasco Fire Station	2513840, 2519068 / 101
Curchorem Fire Station	2650307, 2605345 / 101
Valpoi Fire Station	2374444 / 101
Old Goa Fire Station	2285344
Pernem Fire Station	2201201, 2201393 / 101
Canacona Fire Station	2633311, 2633500 / 101
Verna Fire Station	2887085, 2887122 / 101

**“FIRE PREVENTION ..... DO IT FOR LIFE”**

**“ आग से सुरक्षा ..... जीवन की रक्षा ”**

## **Fireman's Prayer**



**When I am called to duty oh god  
wherever flames may rage  
Give me strength to save some lives  
whatever be its age  
Help me embrace a little child  
before it is too late  
so save an older person from the  
horror of that fate  
enable me to be alert and hear  
that weakest shout  
quickly and efficiently  
to put the fire out  
I want to feel my calling and  
to give the best in me**

**To guard my every neighbour  
and protect his property**

**And if according to my fate**

**I am to loose my life**

**Please bless with your protecting hands**

**My children and my wife.**