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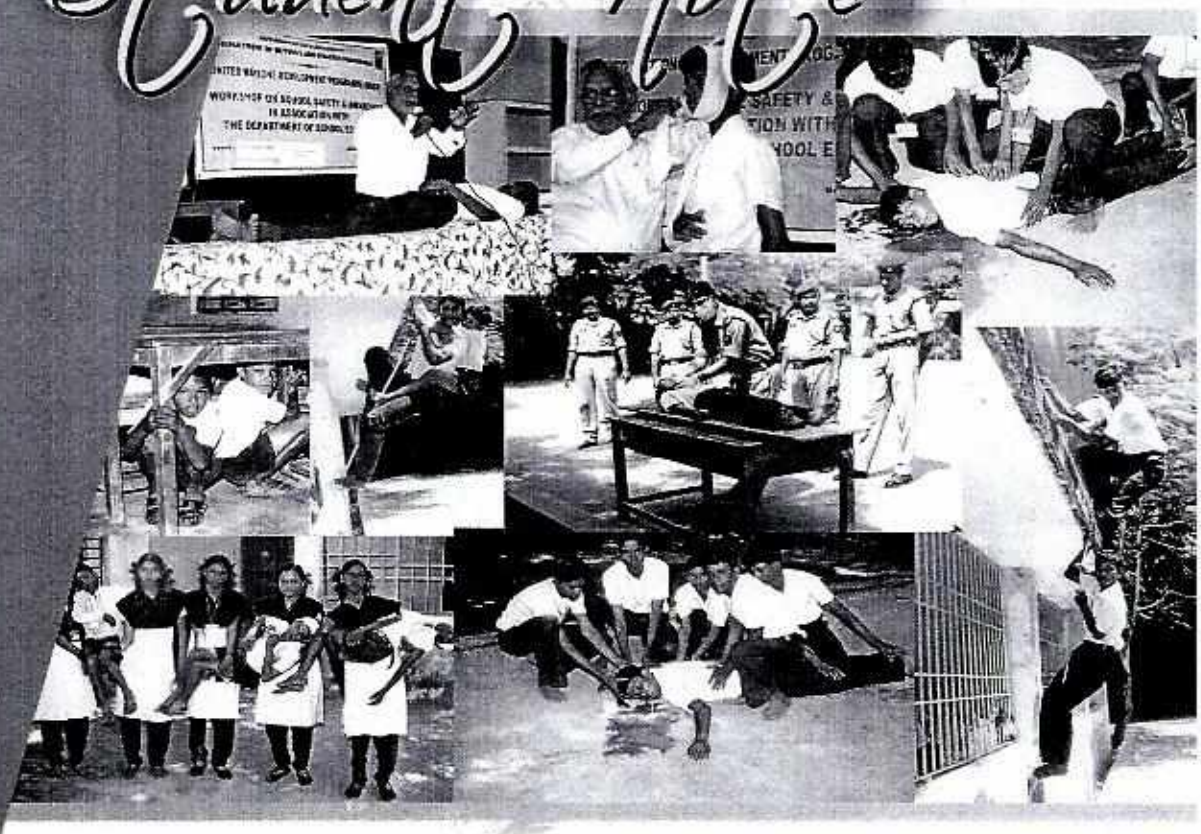
Government of Puducherry

Disaster Risk Management Programme

School Disaster Management

Student Note



Department of Revenue and Disaster Management
Government of Puducherry

Non structural safety

role of students in school safety

evacuation plans

is there a need to train our teachers

need to address safety in schools?

resource inventory

Periodic drills

School safety trainings

structural safety

safety plan preparation

emergency contact numbers

Government of Puducherry

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Why School Safety?

Human beings are exposed to variety of risks everyday. Children being the most vulnerable face added insecurities.

Since most part of a child's growing up years is spent in school, it is imperative schools are turned into safe haven by becoming safe structures and installing the essence of safety in the minds of the children

Why Students?

Children being vulnerable and ill equipped to deal with contingent situations are often caught unaware during disasters. With little or no knowledge of safety measures, a gallery of children housed within the boundaries of a school is at serious risk.

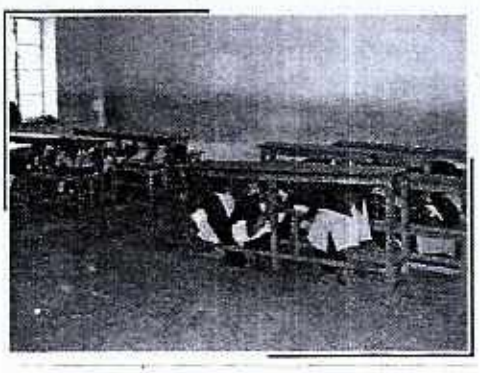
School age being formative time, instilling culture of safety creates a lasting impact in the minds of students. It is moral responsibility of us - the grown ups to enable them,

A well educated and aware student will take this forward within his family and the community thus aiding further spreading of the message of preparedness and safety.

Why Teachers?

Messengers of knowledge are highly placed within the knowledge ladder of a society. With their dedication and association with the students, they wield immense capacities in moulding their minds. In schools, they play the role of parents to hundreds of students, thus having the enormous responsibility of their safety.

One generation of trained teachers ensure training to successive generation to come.



It is the culture of preparedness that distinguishes between a HAZARD and a DISASTER.

Let us all be prepared

What are the schools vulnerable to?

Schools are vulnerable to structural and non structural hazards.

Structural Hazards

School need to be checked for structural validity to withstand disasters like earthquake, flood, cyclone, tsunami or other hazards they are prone to. It needs to be certified by the relevant government authorities on their safety.

Non structural hazards

The school is prone to non structural hazards 'on site' and 'off site'.

Within the school:

- Halls of stairways cluttered with debris, lockers, cabinets, etc
- Smoke in the hallway
- Exit doors and windows that jam and do not open
- Bricks, glass and debris piled up
- Electrical wires on the ground
- Tall bookcases of cabinets not bolted to the wall
- Areas where flammable liquids are stored
- Chemistry labs

Outside the school:

- Power lines
- Trees
- Parapets, roof tiles, chimneys, glass etc.
- Routes past concrete block walls
- Rivers, sea coast, main roads, market place, inflammable goods storehouse, bus stand, railway tracks, etc

It is NECESSARY to build safer schools and strengthen the citadels of education

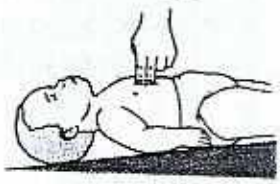
EQUALLY imperative is to inculcate 'culture of safety' among children, youth and teachers

Schools Safety Activities

Natural disasters cannot be prevented, but loss due to them can be reduced by adopting certain simple preventive measures.

Within this preview, this manual aims at equipping the schools with guidelines to be followed for building capacities to over come disasters.

1. School Safety Trainings



First aid training on fundamental first aid skills and cardio pulmonary resuscitation by

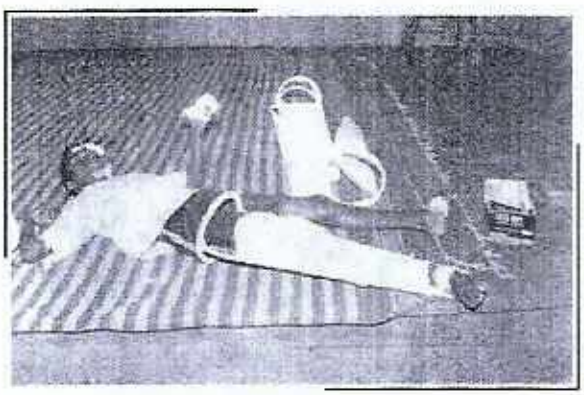
- NSS / NCC, Scouts and Guides master trainers
- professional help from the Red Cross, St John's Ambulance, Thiruvarur & competent NGOs

Search, Rescue and Evacuation training by

- NSS/ NCC master trainers
- Fire and Rescue Services
- Police personnel
- Private agencies, competent NGOs

Suggested methodologies

- A section of students selected and trained by the PET teacher / NCC-NSS master trainer during PET period.
- A group of dedicated students from senior classes and few teachers selected. They could be trained twice a year



The first few minutes are the most crucial in saving lives and reducing losses

Basic first aid knowledge and search and rescue skills can be life saving

2. School Safety Plan Preparation

The school safety plan is a **simple plan** containing

statistical data about the classrooms, number of teachers, students, auditorium, entrance and exit doors

should have **responsibilities marked** clearly for action at the time of disaster

Should have **important phone numbers** well marked and **displayed at prominent places**

simple **first aid methods** as a ready reckoner

should have **multiple members** having responsibility, to avoid indispensable situation

plan should also have special emphasis on **children in the elementary section**

the **needs of the differentially able** should be taken care of

school spatial map clearly marking classrooms, open space exit doors, non structural hazards **within and outside** the school premise.

No plan is a complete document.
Repeated modification brings it to near perfection

Steps in Preparing a School Plan

2-1. Awareness Meeting among School Management and teachers

A awareness meeting during school assembly on hazards, potential risks, disasters; preparedness, evacuation, first aid knowledge

Resource persons - master trainers from NSS/ NCC, retired army officials, health officials, persons with knowledge on Disaster Management from college, NGOs, etc

One teacher, one student should be made responsible for further activities

2-2 Drawing a school map

Drawing a school map consists of two components

1. getting the requisite information to plot on the map
2. pictorial representation

As a first step, information is collected on **hazards,** the school is exposed to and the **resources** available.
The **pictorial representation** of the school is drawn on the **floor in an** open ground and then translated to a **chart paper** and displayed.
Information of the hazards and the resources are to be clearly indicated on the map.
Based on the above an **evacuation plan** is to be drawn indicating the exit routes clearly with arrow. This plan is to be displayed in every classroom, notice boards, assembly hall and other visible areas on a permanent basis

Backwardness coupled with lack of skills: increases vulnerability affect their ability to respond and recover from disasters

2-3. Hazard Identification and safety Assessment

1. **History of incidents** in last 20 years like floods, cyclones.
   Geography of the area - soil condition,
   slope, proximity to river / sea, etc

2. **Hazard within School -**
   laboratories
   school kitchen
   electric pole, electricity / generator room
   dark and cluttered staircase,
   narrow passages
   trees, overhead water tanks, abandoned well
   dilapidated buildings, roof of school building, etc
3. **Hazards outside school**
   narrow way to school, common entrance and exit
   dilapidated compound wall
   electricity transformer, petrol pump
   condition of building surrounding the school, etc
4. Identify **vulnerable groups** - elementary section, physically challenged students, students needing extra care

The identified hazards discussed in class to be classified as high, medium, low risk

Depending on severity, actionable points are to be identified

DISASTERS
-do not discriminate
-Sometimes they come with a warning, sometimes they do not

BUT
If we are prepared, the hazards do not become disasters

2-4. Basic Statistical Information

Number of classrooms, number of girls and boys in each class, number of teachers, number of elementary, middle, high and higher secondary students basic amenities - water tanks, taps, electric poles, toilet, wells, etc hostel details, kitchens

2-5 Resources Available

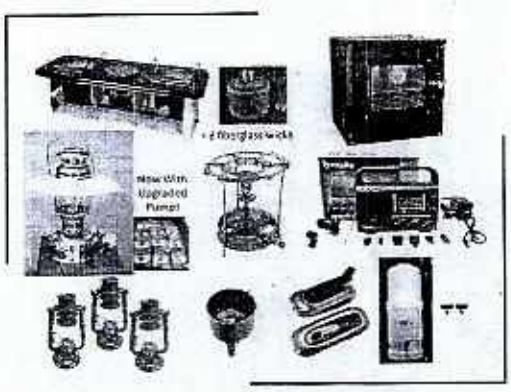
- Teachers, students with knowledge on first aid, rescue and evacuation stretcher, fire extinguishers, water taps, ladders, thick ropes, torch, communication system, first aid box, open space in school, etc
- Critical resources in nearby areas - hospitals, fire stations, police station, bus/ taxi stand, government offices, medical shops
- Open areas where evacuation is possible, stairs and lifts, open verandas, roof tops, auditorium

3. Periodic drills

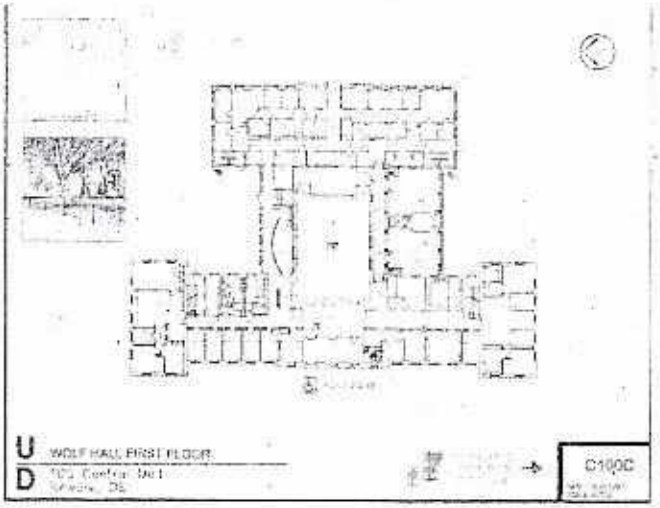
- Drills and exercises are an extremely important part of the preparedness
- familiarize the students and the teachers with the potential disasters
- teach them to take actions in a planned manner
- improve upon the life saving skills
- Fix responsibilities
- evaluate your emergency plan
- evaluate level of staff and students training

4. Display and update emergency numbers including private emergency responders at regular intervals

Prepare an emergency kit containing:



- Portable radio, torch and spare batteries
- Food and drinking water
- Matches, fuel lamp, portable stove, cooking utensils, waterproof bags
- A first aid kit, manual, etc.
- Wood cutter, small saw, axe and rope
- Any other



How to conduct a evacuation drill?

Information given by **school principal** / designated person to evacuate by **ringing the school bell,** blowing the whistle or announcing on mike

Lead by the class teacher or the class leader **students to evacuate into a safe area marked** in the plan or exit the school premises

Evacuation process should be carefully carried out by **avoiding structural and non structural hazard areas**

Based on location of school, drill should be carried out as a **response to a particular type of disaster**

Other **possible disasters should not be ruled out**

Drills to be **conducted repeatedly** to improve the skills

Being prepared is a step forward in attempting to conserve development gains before a disaster strikes

Ready Reckoner in case of few Disasters

Earthquake

- Practice drop, cover, and hold
- Evacuate classroom in less than 1 minute without pushing or falling.
- Evacuate school in less than 4 minutes using different exits.
- Stay away from weak areas.

Fire

- Practice 'stop', 'drop' and 'roll'
- Identify the cause of the fire and act accordingly
- Adopt the suited 'put-off' measures
- Call the fire and rescue service department personnel and give exact location and direction of the accident site for them to reach fast
- Put off electric and gas connections

Cyclone

If the building starts to break up, protect yourself by sheltering under a strong table or bench

- Disconnect all electrical appliances and turn off the gas;

- Listen to your local radio station for official warnings and advice

Do not go outside until officially advised. It is best to wait for an official "all clear"

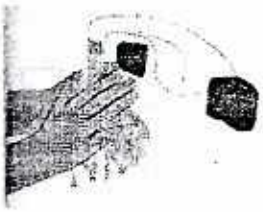
Beware of fallen power lines, damaged bridges, buildings and trees, and don't enter flood waters;

- Follow all warnings and do not go sightseeing;
- Go to the nearest cyclone shelter.
- Do not listen to rumours.

Ready Reckoner for First Aid in case of Burns

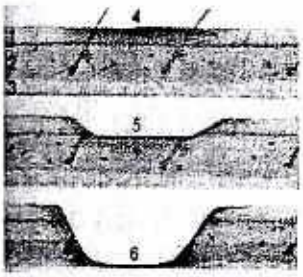
Things to Do

- Examine the extent and depth of the burn
- For extensive but superficial burns, keep dressings clean and dry and change as needed
- In case of infection, increased pain, redness, swelling, drainage from burn, swollen lymph nodes, or red streaks get immediate medical help



First aid for Minor Burns

- If the skin is unbroken, run cool water over the area of the burn or soak it in a cool water bath. keep the area submerged for at least 5 minutes
- Remain calm and reassure the victim
- Cover the burn with a sterile bandage or clean cloth
- Protect the burn from pressure and friction
- Medications may be used to help relieve the pain



In Case of Severe burns

- Seek medical help immediately
- Start cooling the burn immediately under running water for at least 10 minutes
- Make the casualty comfortable
- Do not remove burnt clothing (unless it comes off easily), but do ensure that the victim is not still in contact with smoldering materials
- Continue to monitor the victim's vital signs (pulse, rate of breathing, blood pressure) until medical help arrives

Things NOT to DO

- Do not use lotions, ointments and creams
- Do not use adhesive dressings
- Do not break blisters
- Do not place a pillow under the victim's head if there is an airway burn and he or she is lying down
- Home remedies may cause infection

If clothing is on fire

- Stop the casualty panicking or running - any movement or breeze will fan the flames.
- Drop the casualty to the ground.

  If possible, wrap the casualty tightly in a coat, curtain or blanket (not the nylon or cellular type), rug of other heavy-duty fabric. The best fabric is wool.
- Roll the casualty along the ground until the flames have been smotnered.
- Practice **STOP, DROP** and **ROLL**

Laboratory Safety

- No eating or drinking in the lab
- Handle everything as if it's pathogenic
- Keep flame and flammable solutions far apart
- Keep electrical equipment far from water
- Clean spills from the outside to in. Apply paper towels over the spill, then, carefully starting from the outside
- Always clean glassware before you use be sure that residues are cleaned away. Add at least some water first, before adding any liquid or solid solutes
- Check all water baths with a thermometer before putting your hand into the water
- All needles, razors, pins, toothpicks should be discarded in a sturdy container

Usage of Fire Extinguisher

- Fire extinguishers should be present in every lab and be readily accessible.
- There are three basic types of extinguishers: water, carbon dioxide, and dry chemical, depending on the material burning.
- You cannot use all types of extinguishers safely on all types of fires

Types of fire

Class A Fire - Combustible materials - Paper, plastics, cloths, rubber

Class B Fire - Flammable liquid - oil, gas, paint, etc

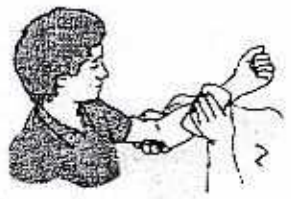
Class C Fire - Electrical equipment - wiring, machining, appliances

Class D Fire - Metals - Sodium, Magnesium

Ready Reckoner for First Aid in case of Wounds and Bleeding

Minor cuts, scratches and grazes

- Wash and dry your own hands
- Cover any cuts on your own hands and put on disposable gloves
- Clean the cut, if dirty, under running water. Pat dry with a sterile dressing of clean lint-free material. If possible, raise affected area above the heart
- Cover the cut temporarily while you clean the surrounding skin with soap and water and pat the surrounding skin dry. Cover the cut completely with a sterile dressing or plaster

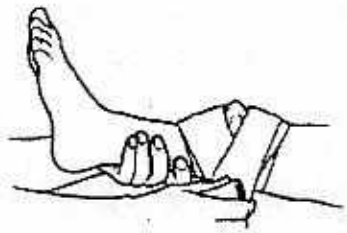


Severe Bleeding

- Apply direct pressure to the wound with a pad (e.g. a clean cloth) or fingers until a sterile dressing is available.
- Apply direct pressure to the wound with a pad
- Raise and support the injured limb. Take particular care if you suspect a bone has been broken.
- Lay the casualty down to treat for shock.
- Bandage the pad or dressing firmly to control bleeding, but not so tightly that it stops the circulation to fingers or toes. If bleeding seeps through first bandage, cover with a second bandage. If bleeding continues to seep through bandage, remove it and reapply

Objects in wounds

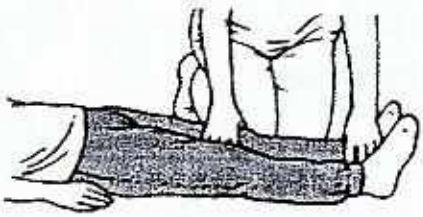
Where possible, swab or wash small objects out of the wound with clean water. If there is a large object embedded:



- Leave it in place.
- Apply firm pressure on either side of the object.
- Raise and support the wounded limb or part.
- Lay the casualty down to treat for shock.
- Gently cover the wound and object with a sterile dressing.
- Build up padding around the object until the padding is higher than the object then bandage over the object without pressing on it.
- Depending on the severity of the bleeding, call for an ambulance or take the casualty to hospital.

Ready Reckoner for First Aid in case of Fractures and Sprains

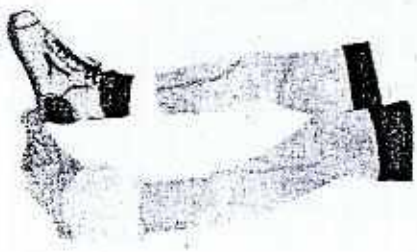
- Give lots of comfort and reassurance and persuade them to stay still.
- Do not move the casualty unless you have to.
- Steady and support the injured limb with your hands to stop any movement.
- If there is bleeding, press a clean pad over the wound to control the flow of blood. Then bandage on and around the wound
- Check for fractures
- Immobilise the fracture



- In case of a broken leg put padding between the knees and ankles. Form a splint (to immobilise the leg further) by gently, but firmly, bandaging the good leg to the bad one at the knees and ankles, then

- If it is an arm that is broken, improvise a sling to support the arm close to the body

Sprains and Strains



Rest - Get person to stop activity
Ice - 20 min on / 40 min off
Compression - With bandage for support
Elevation - Raise part above heart

Ready Reckoner for First Aid in case of Head Injuries

Head Injury

When to see a Doctor

- Loss of consciousness
- Confusion or memory loss quickly following the injury
- Vomiting that persists beyond 15 minutes of the injury
- Severe headache
- Vision or speech difficulty
- Seizure of convulsion
- Numbness on one side

Most head injuries are not serious. They happen when you collide with something or someone.

First aid treatment

- **Quick!** Apply an ice pack to the injured area
- **Stop** any **bleeding** and clean the wound
- Rest and **stay calm** until you know the extent of the injury.

Skull Fracture - roof / wall collapse

- Maintain an **open airway**
- **Transfer** to **hospital** immediately

Treatment

If the casualty is conscious:

- Help them to lie down.
- Do not turn the head
- Control scalp bleeding by applying pressure around the wound
- Dial for an ambulance
- If there is discharge from an ear cover the ear with a sterile dressing
  Do not plug the ear
- Monitor and record vital signs - level of response, pulse, and breathing

To recognise A Skull Fracture

- Wound or bruise on the head.
- Depression on the scalp
- Bruise or swelling behind one ear
- Bruise around one or both eyes
- Clear fluid or blood from nose/ear
- Blood in the white of the eye.
- Distortion of the head or face
- Progressive deterioration in the level of response

Emergency Contact Numbers

Collect important phone numbers that will be useful at the time of emergencies. Three separate sets if phon numbers may be maintanined

Helpline numbers

Like police - 100, fire service - 101 and so on

District numbers

Collector - .....
Director of Education - .....
Superintendent of police - .....
District Education Office - .....
District control room - .....

Local numbers

Fire service officer - .....
Police Station / booth - .....
Hospital - .....
Ambulance - .....
Tahsildar - .....
Village Administrative Officer - .....
Block Development Officer - .....
Local leader - .....
Elected representative - .....
NGO, philanthropist - .....

Any other contacts of importance