

Prevention and First Aid In Road Traffic Accidents in Hilly Areas

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- **HOW TO PREVENT ROAD TRAFFIC ACCIDENTS – THIS CAN BE BROADLY DIVIDED INTO THREE CATEGORIES:–**

.1-VEHICLE ESSENTIALS

.2-DRIVER AND DRIVING ESSENTIALS

.3-OTHER ESSENTIALS

- **1-VEHICLE ESSENTIALS**

Before starting a journey in hilly areas, the vehicle must be properly inspected



Essential vehicle checks:

- Ensure **brakes** are functioning properly
- Check **headlights** and **fog lights** for visibility
- Confirm proper functioning of **windshield wipers**
- Maintain proper **tyre pressure** and its condition
- Keep the **fuel tank** sufficiently filled
- Avoid travelling in **old** or poorly maintained vehicles



These precautions help prevent mechanical failures on steep roads.

- **2-DRIVER AND DRIVING ESSENTIALS**
- **Alcohol** consumption while driving in any form to be condemned and prohibited
- Maintain **slow and steady speed**
- Stay fully alert and **focused**
- **Avoid mobile phone** and making of reels
- Use **lower gears** while climbing/Descending
- **Never** drive in **neutral gear**
- Always use engine in switch on mode
- Give priority to vehicles going uphill
- **Avoid overtaking** on curves and bends



- **3-OTHER ESSENTIALS**

- **Avoid** Night driving whenever possible
- **Do not overload** vehicles



- **Use horn** at blind turns
- **Maintain safe distance** from other vehicles
- **Stay alert** for falling rocks, landslides.

- **FIRST AID IN CASE OF MISHAP/ACCIDENT HAPPENS**
- *If an accident happens:-*
- **Stop the vehicle immediately** and park at a safe location.
- **Turn on hazards light** to alert other vehicles.
- **Place warning triangles** or reflective signs behind the vehicle.
- **Ensure the area is safe** before assisting injured person
- Early warning helps prevent secondary accidents

- ***Assess Potential Dangers :-***
- ***After an accident, quickly assess hazards like:-***
- **Fire risk** from damaged vehicle
- **Fuel leakage**



- **Vehicle sliding** on slopes
- **Risk of landslides** or falling rock
- If any major hazard exists, move away to a safe distance and wait for emergency services

- **FIRST AID MEASURES**

- 1-Check Bleeding

- 2- Check for suspected fractures (if person unable to move limbs)

- 3-Assume every patient/person to be having spinal injuries if unable to lift neck and back

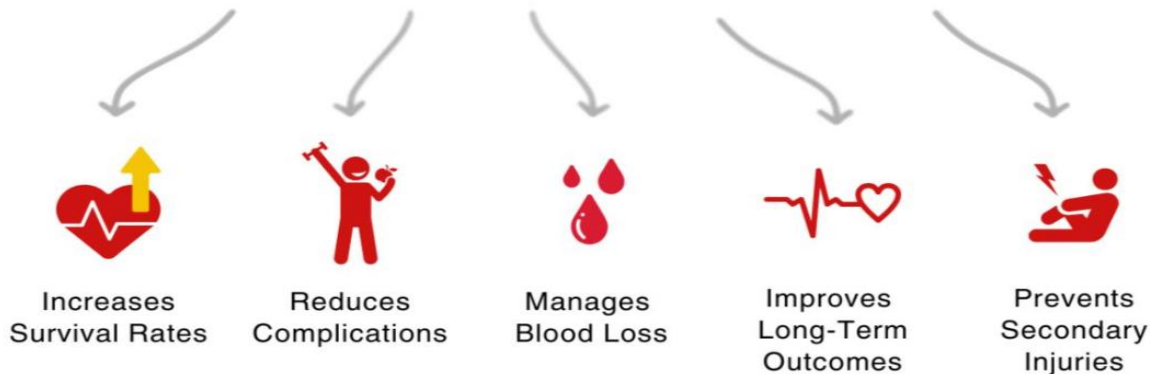
- 4-In high altitude give thermal protection by blankets



- **GOLDEN HOUR RULE IN ROAD TRAFFIC ACCIDENT**
- **The first 60 minutes after a traumatic injury**
- Period where prompt treatment → maximum survival benefit
- Delays → rapid increase in mortality

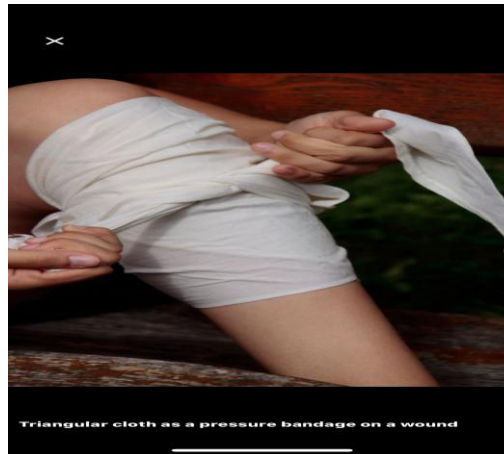
THE "GOLDEN HOUR"

Fast medical intervention saves lives:



- **1-WHAT TO DO IF BLEEDING PRESENT**

- **Compression** –Apply firm, direct and continuous pressure using clean towels and clothes.



- If blood seeps through add more clothes on top but do not remove original clothes
- Elevate the bleeding part above heart level

- If you see embedded objects like wooden twig, metal or glass apply pressure around it not over it.
- If wound is small then clean it with water and soap do not put iodine /spirit
- If bleeding in limbs is uncontrollable use tourniquets

Tourniquet

Step 01

Loosely tie a piece of nonelastic fabric as close to, but at least 2 inches (5 centimeters) above, the injury.



Step 02

Insert a stick or other strong item just underneath the loose knot. Twist and wind it, so the bandage cinches and tightens, until the bleeding stops.



Step 03

Tie another knot over the cinching object to hold it in place and note the time.



2-FOR SUSPECTED FRACTURE DO SPLINTAGES

- PRINCIPLES OF SPLINTING:-
- **Check Circulation**, Sensation and Movement of finger/toes before and after splinting
- **Immobilize joints** –splint should cover the joint above and below injury
- **Padding**-Ensure rigid items do not directly press against the skin,use soft materials to fill gap

- ***VARIOUS SPLINT WHICH CAN BE USED-***
- ***a –LOCAL /BACKGROUND ITEMS –***
- Trekking poles/Hiking sticks



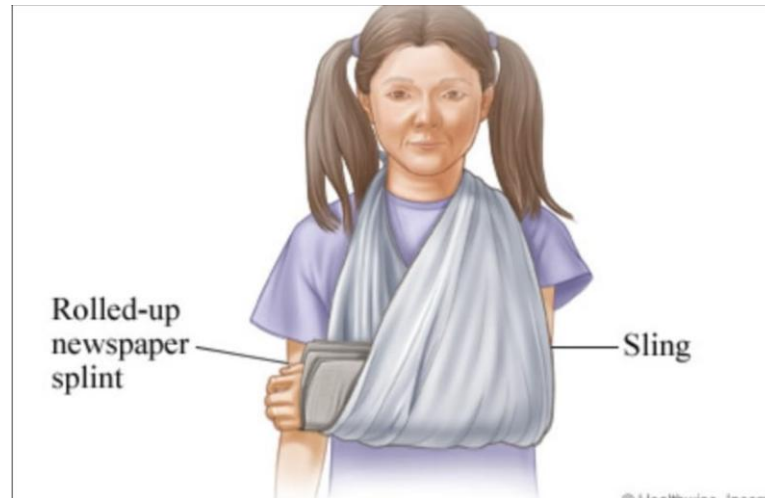
- Sleeping pad/Insulite pad



- Wood/Branches/Barks



- Rolled Magazines or Newspaper



- ***b-COMMERCIAL SPLINTS***

- ***SAM SPLINT***-It is a lightweight, moldable splint made of aluminum core + foam covering, used for fracture and soft tissue immobilization



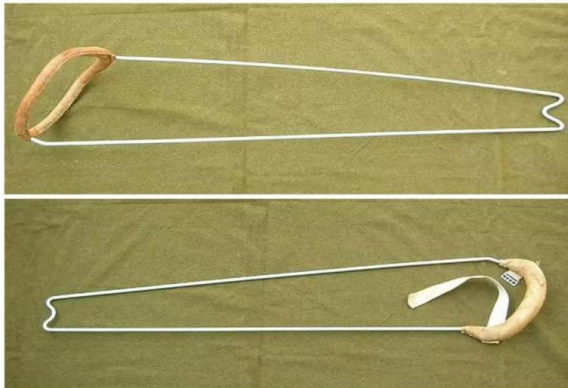
- ***AIR SPLINTS***-An air splint (inflatable splint) is a transparent plastic splint that is wrapped around a limb and then inflated to provide uniform circumferential pressure for immobilization.



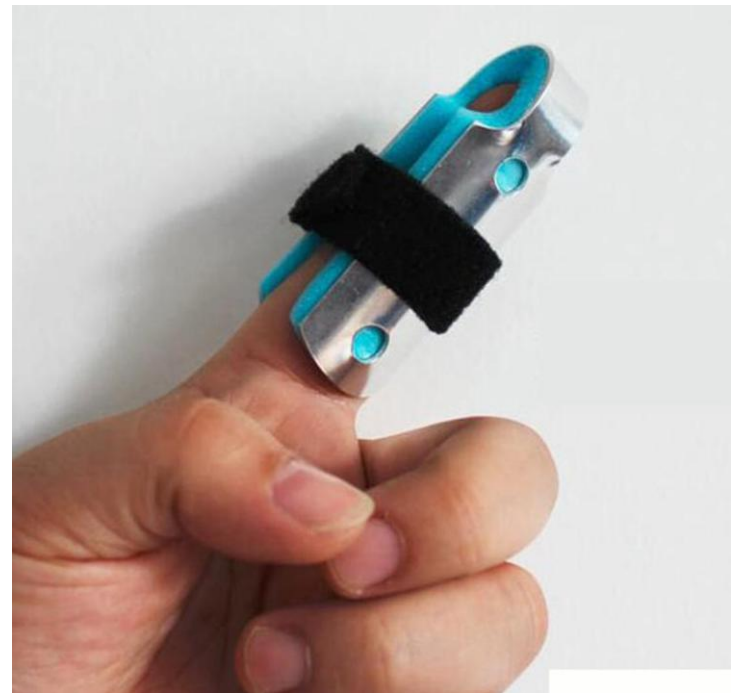
- **TRACTION SPLINT**-A traction splint is a device used mainly for shaft of femur fractures to apply longitudinal traction, reducing pain, muscle spasm, and bleeding.

THOMAS SPLINT

- Devised by H.O Thomas initially for T.B Knee



- ***FINGER SPLINT/STACK SPLINT***-A finger splint is a device used to immobilize and protect an injured finger. It maintains proper alignment, reduces pain, and allows healing of bones, tendons, or ligaments.



- ***ANATOMICAL SPLINT***

- **a-Buddy splint**-Buddy splinting (buddy taping) is a simple method where an injured finger is taped to an adjacent normal finger to provide support and controlled motion.



- **b-Leg to Leg Splinting**-An improvised splinting technique where the injured leg is secured to the normal leg to provide stability during transport, especially in remote/hilly areas.



• 3-FOR SUSPECTED SPINAL INJURY

One person should hold the head firmly from both sides.

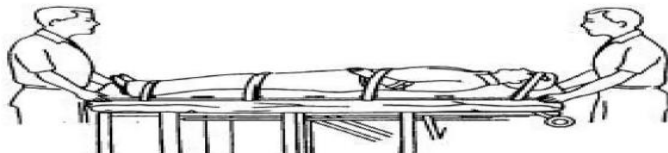
- Avoid bending or rotating the neck.
- If 3–4 people are available:
 - One person controls the head and neck (team leader).
 - Others support the shoulders, pelvis, and legs.
 - Lift the patient together as one unit.
 - Avoid sudden movements or twisting.



STEP 1



STEP 3



STEP 5



STEP 2



STEP 4

Log Roll in Spinal Injury Victim

- **4-Thermal Protection Steps (TO PREVENT HYPOTHERMIA)**

- Cover the patient with a blanket, jacket, or cloth
- Protect the patient from cold wind, rain, or snow
- Keep the patient off the cold ground using cloth, bag, or board
- Avoid unnecessary exposure of the body during first aid



GENERAL MEDICATION WHICH SHOULD BE KEPT IN FIRST AID

- **-FOR PAIN**

- Tab .Paracetamol

- Tab.Ibuprofen

- **-FOR VERTIGO**

- Tab betahistine

- **-FOR MOTION SICKNESS**

- Tab promethazine

- REGISTRATION OF YATRA IS MANDATORY IN OFFICIAL WEBSITE BY GOVERNMENT OF UTTARAKHAND
- <https://registrationandtouristcare.uk.gov.in>

Tourist Care Uttarakhand
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Captcha



Get OTP

WEATHER FORECAST

- The traveller should check the weather forecast and plan accordingly .
- Should avoid travelling in heavy rains.



- According to official government-released data (Uttarakhand state / PIB / govt-linked sources), the Char Dham Yatra **2025** saw approximately:
- **TOTAL PILGRIMS**-50 lakh(approx)
- **TOTAL MORTALITY**-Approx 150-170 mortality reported in year 2025 with majority (>80%) deaths are medical (cardiac / high-altitude related)

CHAR DHAM YATRA 2026

OPENING DATES



YAMUNOTRI

**APRIL
19
2026**



GANGOTRI

**APRIL
19
2026**



KEDARNATH

**APRIL
22
2026**



BADRINATH

**APRIL
24
2026**

JAI BADRI VISHAL
JAI KEDAR BABA

