



DATE: 27 AUGUST 2026

1 Flash Flood (Source: The Indian Express)

A flash flood is a sudden, rapid flooding event that occurs within minutes to a few hours.

Cause

- Cloudburst or intense localised rainfall.
- Glacial Lake Outburst Floods (GLOFs) in the Himalayan regions.
- Dam or embankment failure.
- Urbanisation leading to impervious surfaces and blocked drainage.
- Deforestation and slope destabilisation in hill areas.



Areas Generally Affecting

- **Hilly Terrain:** Flash floods in the Himalayas (Uttarakhand) and Afghanistan.
- **Urbanised Region:** Flash flood in an urban region like Chennai.
- **Arid and Semi-Arid:** Rajasthan dry river beds

2 Avalanche (Source: The Indian Express)

AVALANCHE

An avalanche is a sudden flow of snow, ice, and/or rock down a mountain slope caused when a slope becomes unstable and gravity takes over.

HOW AN AVALANCHE FORMS



TYPES OF AVALANCHES



SLAB AVALANCHE

A cohesive slab of snow breaks off along a weak layer and slides down the slope.



LOOSE SNOW AVALANCHE

Loose snow particles on the surface lose cohesion and flow down the slope rapidly.



WET SNOW AVALANCHE

Occurs when snow becomes saturated with water, often in spring, and flows as heavy, dense snow.



GLIDE AVALANCHE

The whole snowpack slides on the ground over a lubricated surface, usually on gentle slopes.



ROCK ICE AVALANCHE

A very large volume of rock, ice, and debris detaches from steep slopes or cliffs and rushes down at great speed. Highly destructive and can travel long distances.

CAUSES / TRIGGERS



Heavy snowfall



Strong winds



Rapid warming



Human activity (skiers, climbers, snowmobiles)



Earthquakes



Explosions (blasting)



Rain on snow



Changes in snowpack structure

AVALANCHE PRONE CONDITIONS

- Steep slopes (30° to 45°)
- Depth of snowpack
- Weak layers in the snowpack
- Recent heavy snowfall
- Wind direction and speed
- Temperature changes
- Terrain features (ridges, gullies, bowls)

30° – 45°
Most Prone Zone



IMPACTS



Loss of life and injuries



Damage to forests



Disruption of transportation



Damage to infrastructure



Blocking of rivers and streams



Loss of property and livelihood

SAFETY TIPS



Check weather and avalanche forecast



Learn about the terrain and snow conditions



Avoid steep slopes and risky areas



Carry avalanche safety gear (beacon, probe, shovel)



Travel with a partner and inform your itinerary



If caught in an avalanche, try to move to the side and stay on top

DID YOU KNOW?

- ❄️ Avalanches can travel at speeds of 20 to 80 km/h.
- ❄️ They can occur naturally or be triggered by a small disturbance.
- ❄️ Most avalanches occur between December and April.
- ❄️ Avalanche awareness and preparedness save lives.



BE AWARE, BE PREPARED, STAY SAFE IN THE MOUNTAINS.

