

Mountain Accident Case Studies

1. Seoraksan Cold Wave and Hypothermia Casualty (2 Deaths) — 2023-12-16 to 19

1. Incident Overview

Two mountaineering club members went missing during a hike in Seoraksan in sub-zero cold wave conditions and were later found deceased, presumed to have died from hypothermia.

2. Causes and Sequence (Reported)

Failure to reach safety points due to extreme cold, snow, and accumulated fatigue. Likely hypothermia onset during nighttime exposure.

3. Reporting and Initial Response

Family and companions reported the case; joint fire and police search initiated.

4. Rescue and Emergency Response

Search teams sequentially discovered and recovered the victims near the last known location; both confirmed dead on site.

5. Agency Roles

Joint command by police and fire departments, with cooperation from Korea National Park Service.

6. On-Site Safety/Response Guidelines (Key Points)

- In severe winter: start early, descend early.
- Maintain body temperature and dryness (quick-dry clothing, spare gloves).
- Avoid night hikes.
- At first signs of hypothermia: retreat immediately, apply warming measures, replenish fuel/energy.

7. Follow-Up Measures

Strengthened recommendations on winter mountaineering safety protocols and equipment checks.

2. Bukhansan Insubong Rockfall/Climbing Falls (Multiple Incidents) — 2025-05-31 to 06-02

1. Incident Overview

Over one weekend, a series of climbing accidents occurred at Insubong, Bukhansan: 1 fatality and 2 injured. Climbers were members of separate hobby groups.

2. Causes and Sequence (Reported)

Suspected mistakes in rope handling and belay during descent (investigation ongoing).

3. Reporting and Initial Response

Companions alerted emergency services → fire department helicopters and rescue teams deployed.

4. Rescue and Emergency Response

Injured climbers airlifted; multiple fractures and bleeding treated before hospital transfer.

5. Agency Roles

Joint investigation by fire and police; special mountain rescue units of the National Park supported.

6. On-Site Safety/Response Guidelines (Key Points)

- Triple partner checks (knots, belay device, anchors).
- Backup knots/Prusik safety line.
- Standardized pre-descent communication calls.
- Mandatory helmet use.

7. Follow-Up Measures

Additional safety signs at high-incident routes/descents; strengthened leadership training in climbing groups.

3. Seoraksan Rockfall Fatality — 2025-08-03

1. Incident Overview

A climber fell approx. 60m during ascent in the Mongyudowon district of Seoraksan, found after 3-hour rope rescue but later pronounced dead at hospital.

2. Causes and Sequence (Reported)

Fall occurred on exposed high-altitude section (detailed cause under investigation).

3. Reporting and Initial Response

Companions alerted authorities → 119 rescue teams dispatched.

4. Rescue and Emergency Response

Rescue in difficult terrain with rope systems, victim evacuated but succumbed in hospital.

5. Agency Roles

Joint investigation by Gangwon Fire Department and police.

6. On-Site Safety/Response Guidelines (Key Points)

- In exposed sections: shorten protection intervals, split pitches to reduce fall distance.
- Pre-climb briefing on weather, rope length, and belay points mandatory.

7. Follow-Up Measures

Investigation results to inform improvements in route guidance and management.

4. Winter Camping Carbon Monoxide Poisoning — 2023-11-11 to 12

1. Incident Overview

Over one weekend, five deaths occurred nationwide in Korea from carbon monoxide (CO) poisoning during winter camping (tents, car camping, fuel heaters).

2. Causes and Sequence (Reported)

CO accumulation due to incomplete combustion in enclosed/poorly ventilated environments.

3. Reporting and Initial Response

Cases reported with symptoms of unconsciousness, headache → rescue teams dispatched.

4. Rescue and Emergency Response

Ventilation, oxygen administration, possible hyperbaric oxygen therapy (HBOT). Epidemiological studies have highlighted CO poisoning as a recurring camping hazard.

5. Agency Roles

Local governments, police, and fire departments issued warnings and expanded campsite safety inspections.

6. On-Site Safety/Response Guidelines (Key Points)

- No open flames or fuel-burning devices inside tents.
- Mandatory CO detector use.
- Ensure ventilation, follow fuel handling safety rules.
- At suspicion: ventilate immediately and call 119.

7. Follow-Up Measures

Recommendation for mandatory CO detector installation in winter camping, with expanded public safety campaigns.

5. Nepal Gurja Himal Avalanche/Cold Disaster (7,193m) — 9 Dead — 2018-10-11 to 15

1. Incident Overview

Expedition team of 5 Koreans and 4 Nepalese guides perished at base camp when a storm and icefall destroyed the site. Expedition leader Kim Chang-ho among the dead.

2. Causes and Sequence (Reports/Investigations)

Strong winds and falling ice blocks destroyed tents/camp, leading to multiple fatalities. Regarded as the worst Korean mountaineering accident since 2015.

3. Reporting and Initial Response

Helicopters and local rescue teams launched recovery operations.

4. Rescue and Emergency Response

Joint mountain-air recovery and repatriation of remains.

5. Agency Roles

Local police, aerial rescue units, and Korean diplomatic authorities cooperated.

6. On-Site Safety/Response Guidelines (Key Points)

- For high-altitude expeditions: secure camp anchoring, windbreaks, and crevasse/slope risk assessment.
- Strict observance of weather windows.
- Continuous evaluation of icefall/avalanche risks above campsites.

7. Follow-Up Measures

Mountaineering community discussed strengthening standards on camp placement, weather judgment, and risk communication.

6. Annapurna Trekking Blizzard and Avalanche Disaster — 2014-10-14

1. Incident Overview

Unprecedented blizzard and avalanches caused by Cyclone *Hudhud* struck Nepal, killing at least 40–43 people and rescuing hundreds. Considered one of Nepal's worst trekking disasters.

2. Causes and Sequence (Reports/Records)

Tropical cyclone combined with upper-level trough produced heavy snow, triggering mass casualty incidents around Thorong La and adjacent passes.

3. Reporting and Initial Response

Large-scale air and ground rescue operations; many areas suffered total communication outages.

4. Rescue and Emergency Response

Nepal Army and local rescue teams conducted widespread search and rescue, saving 400–600 people in stages.

5. Agency Roles

Nepalese authorities and international partners coordinated response; discussions on mandatory guides, GPS trackers, and safety reforms followed.

6. On-Site Safety/Response Guidelines (Key Points)

- High-altitude trekking: stop or descend immediately when weather deteriorates.
- Avoid forcing itineraries.
- Ensure communication, location sharing, emergency food, and thermal planning.

7. Follow-Up Measures

Improved trekking safety regulations, mandatory guide requirements, and enhanced information provision recommended.