

Rocky Mountain News

Playing safe, staying safe in Colorado heights

Altitude, cold, sun, storms can challenge recreationists

**By Janet Reese, Special To The Rocky
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Two lightly clad brothers suddenly are caught in a late-May whiteout while hiking near St. Mary's Glacier. One dies from hypothermia.

A Louisiana man gets lost in early June while hiking a loop trail in Rocky Mountain National Park. He survives seven nights with no food or gear.

Lightning strikes and injures a group of seven hikers in July as they huddle under a tree near Marble. The lightning kills their dog.

What began as a fun summer day in the mountains turned into a harrowing experience for these hikers.

They made serious mistakes, but luckily, in each case, Colorado search-and-rescue teams located them.

"In Colorado, one of the biggest summer hazards is the quickly changing weather in the high country," Alpine Rescue Team spokesman Loren Pfau said. "Getting caught outside without adequate clothing or shelter can become a life-threatening situation."

Don't put yourself in a position to be rescued.

By being prepared and taking precautions this summer, you can avoid these five backcountry hazards.

Lightning

In Colorado, lightning is the No. 1 life-threatening weather hazard. Colorado ranks third in the nation behind Texas and Florida for fatal lightning strikes. During an average year in Colorado, lightning will kill three people and injure 15.

Fifty percent of all known Colorado lightning casualties happen in one of four places: on mountain summits, under a lone tree, in wide-open areas and on lakes. Thunderstorms are most likely from April to September, peaking in July. Though mountain thunderstorms are most common during midafternoon, the first lightning strikes can occur before noon. Because any lightning is deadly, climb or hike early and descend below tree line by noon.

Avoiding lightning

- Before leaving home, check the latest weather forecast. Internet weather sites such as the National Weather Service (NWS.NOAA.gov), Weather Radio or television and radio stations are good sources.



"In Colorado, one of the biggest summer hazards is the quickly changing weather in the high country," Alpine Rescue Team spokesman Loren Pfau said. "Getting caught outside without adequate clothing or shelter can become a life-threatening situation." Don't want to put yourself in a position to be rescued, then follow these guidelines.

Always keep an eye on the sky for developing weather and approaching storms. Take these precautions to avoid being struck by lightning.

- Move away from water, metal or graphite equipment, which conduct electricity.
- Avoid standing on ridge tops, rocky peaks and pinnacles, near or under a lone tree or tall trees.
- In a forest, seek shelter in a low area under a thick growth of small, even-size trees.
- In an open valley or meadow, seek low ground such as a ditch or gully.
- If you feel your hair stand on end, drop to the ground in a crouched position, hands on knees. Do not lie flat on the ground.
- In a group, spread out so lightning won't travel among members.

Getting lost

"Most of our search-and-rescue missions are for people who get lost," Pfau said. "People get lost for many reasons. Kids wander away from campsites or picnic areas. Some people cut trails or take the wrong trails. Others become disoriented in heavily forested areas or open mountain slopes and head the wrong way."

Some people are in a hurry and do not think about where they are going, and some do not bother with the map homework that can give them a good mental picture of the area. Others rely on the skill of their partners, who might get them lost.

Avoiding getting lost

- "Be sure of the trail you're taking," Pfau said. "Stay on the trails and use a map and compass, basic necessities. GPS is a good add-on. Always carry the '10 essentials' (see box) and take a wilderness course to learn about safe hiking."
- People commonly get lost after splitting up from the group they started with, Pfau said. "Stay together. Watch children, especially in picnic areas where they can take off and be gone," Pfau said. "The tendency is to go downhill, which may not be the right direction."
- Most important, before you head to the mountains, tell someone where you're going, what you're doing and when to expect you back. Leave a note on your dashboard with the same information. "It's much easier to search for someone if you know where to begin," Pfau said.
- If you think you're lost, stay put and "hug a tree," Pfau said. "If you have a cell phone and there's service, call 911 right away. No one is charged for search-and-rescue services. Outdoor users can buy a Colorado Outdoor Recreation Search and Rescue card, which helps to defray the cost of big searches."

Hypothermia

Nearly 700 people each year in the United States die of hypothermia, the No. 1 killer of outdoor recreationists. Hypothermia is not a condition of cold weather alone - it frequently occurs during summer.

Hypothermia occurs when the body's core temperature drops below 96 degrees. Hypothermia is dangerous because it quickly affects judgment and reasoning and can lead to apathy, collapse and death. The cause of hypothermia usually is extended exposure to cold temperature or a cool, damp and windy environment.

Mild hypothermia symptoms include intense shivering, stumbling, dulled thinking and uncooperative behavior. Moderate symptoms are increasing lethargy and mental confusion. Uncontrollable shivering might not be present. The person won't realize he is in danger and might remove clothing because of a false sense of warmth. As hypothermia deepens, the affected person might become unresponsive or unconscious.

Avoiding hypothermia

- Know the signs of hypothermia and watch for them on yourself and others.
- Turn back early in wet and windy conditions if people are feeling unduly chilled, or are starting to shiver.
- Eat plenty of carbohydrates, some fats and drink plenty of water before and during the trip. Dehydration hastens the onset of hypothermia.
- Use windproof and waterproof garments to protect the body. Dress in layers, using moisture-wicking fabrics such as wool and polypropylene. Cotton (such as jeans) and many synthetics are dangerous. If wet, they stay wet and suck away your body's heat.
- Cover areas that are susceptible to heat loss: head, neck and hands.

Altitude sickness

Altitude affects everyone differently, from mild headaches to severe medical problems. "If you are gaining significant altitude, you will likely suffer some effects, and without a doubt, it will affect your physical performance," Pfau said. "People should understand that they will move more slowly at altitude and factor that into their hiking plans."

Acute mountain sickness is related to the body's attempts to compensate for hypoxia, decreased levels of oxygen. This usually occurs at altitudes above 7,000 feet in individuals who have not acclimated before engaging in physical activities. Symptoms include headache, insomnia, loss of coordination, dizziness, shortness of breath, nausea and vomiting.

AMS settles in within a day of the initial ascent, and if it is mild, it lasts only a day or so, but it can grow in severity. A descent of 2,000 to 3,000 feet in elevation is the best treatment.

Avoiding altitude sickness

- Gradually ascend to give your body a chance to acclimate to the higher altitude.
- Avoid drinking alcohol and smoking.
- Drink extra water before and during the trip. Drink a minimum of three to five quarts a day depending on activity level, wind, temperature and elevation.

UV overexposure

Intense ultraviolet (UVA and UVB) radiation can burn at high altitude, even on overcast days. The risk for sunburn is higher during summer because the level of solar radiation is about three times higher than during winter. The same harmful UV rays that damage skin can also hurt eyes.

Avoiding UV overexposure

- Use a water-resistant sunblock with a high SPF, and reapply frequently.
- Wear opaque clothes or clothes treated to limit exposure to UV light.
- Wear a wide brimmed hat.
- Wear sunglasses with 100 percent UVA and UVB protection.
- Polarized sunglasses can help cut glare.

Sources: Mountaineering: The Freedom Of The Hills, Mountaineering First Aid, Lightning Strikes: Staying Safe Under Stormy Skies, National Weather ...

Must-haves

Don't leave home without the "10 essentials" of backcountry travel

1. First-aid kit.
2. Map and compass.
3. Pocket knife.
4. Matches/fire starter.
5. Emergency shelter - space blanket or large garbage bag.
6. Flashlight.
7. Warm/ rain clothing.
8. Emergency food.
9. Emergency water.
10. Sun protection: sunglasses, sunscreen and hat. *Source: Alpine Rescue Team*

CORSAR card

The Colorado Outdoor Recreation Search and Rescue card is designed to help reimburse search-and-rescue teams and sheriff's departments for expenses they might incur during a search-and-rescue mission. You can buy the card (\$3 for one year; \$12 for five years) at most outdoor stores and at the same places that sell Colorado fishing licenses. Also online at AlpineRescueTeam.org.

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