

Medical Information for Hikers

This file/document is a compilation of the medical articles provided by the Coachella Valley Hiking Club at <https://cvhikingclub.net/> . As this content is updated from time to time to reflect changes in recommended medical practices, we recommend that you download a fresh copy on a regular basis. Hike Leaders should carry a copy of this document on their smartphones for reference in the field. This reference supports, but does not replace, regular training and certification in wilderness first aid.

The topics are presented in alphabetical order, not in order of priority.

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Altitude Illnesses

Background

- The elevation in the Coachella Valley averages around 150 ft above sea level (from ~480 ft above sea level in Palm Springs to 70 ft below sea level in Coachella).
- Altitude symptoms typically become more common over 8200 ft elevation, and especially without time for acclimatization.
- Traveling rapidly via the Palm Springs Aerial Tram to the Mountain Station (~8500 ft), hiking to the Mt San Jacinto summit (10,834 ft), or hiking at higher elevations on the PCT may produce symptoms.
- Developing symptoms has no relationship to fitness level, and can also occur in individuals who have never suffered symptoms before.
- Risk factors:
 - Prior history of altitude sickness (most reliable predictor)
 - Living at sea level/ low altitude
 - History of chronic pulmonary or cardiovascular disease
 - Age under 50
 - Obesity

Symptoms/ How to Address

- AMS (Acute Mountain Sickness)- Mildest form. Fatigue, headache, nausea, vomiting.
- HAPE (High Altitude Pulmonary Edema)- Uncommon at elevations listed above. Significant shortness of breath, cough, weakness. **Requires urgent descent.**
- HACE (High Altitude Cerebral Edema)- Uncommon at elevations listed above. Extreme fatigue, drowsiness, confusion, loss of coordination. **Requires urgent descent.**

Prevention

- Drink more fluids (water) than usual.
- Pace of hike more moderate (slow down).
- Avoid alcohol intake prior to the hike.
- Ibuprofen can help with mild symptoms.

(Sources: NIH/National Library of Medicine, Acute Mountain Sickness, 9-15-25. [Acute Mountain Sickness - StatPearls - NCBI Bookshelf](#))

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Anaphylaxis

Definition

- Severe, rapidly progressing and potentially life-threatening allergic reaction that involves multiple organ systems.
- Common triggers: bees, wasps, hornets, fire ants, tree nuts, milk, eggs, fish, shellfish, latex, medications.
- Hiker may have a previous history, or may have new onset, even if previously exposed to the allergen without history of reaction.
- Generally occurs within minutes to hours of exposure (most within 1 hour of exposure).

Symptoms

- Itching, skin rash, hives
- Swelling of face, lips, tongue
- Feeling of fullness in the throat, cough, clearing throat, hoarseness
- Shortness of breath, wheezing, respiratory distress
- Rapid heart rate
- Feeling faint due to drop in blood pressure
- Abdominal cramps, vomiting

Management

- **Any hiker with a known history of anaphylaxis should ALWAYS have an EpiPen to carry. Should not participate in the hike otherwise; Hike Leaders should include this in Trailhead talk.**
- If hiker cannot administer their own EpiPen, someone else on the hike will need to locate it and administer it, preferably to the front outer side of a thigh.
- If reaction is new-onset and no EpiPen available, an oral anti-histamine can be given (Benadryl/ diphenhydramine, 50 mg if patient is awake and can swallow) but is not a substitute for epinephrine (EpiPen). Benadryl can also be given after EpiPen use.
- **Always call 911 or trigger SOS for any anaphylactic reaction since a second “phase” may occur within 4-6 hours. [See: Initiating a Rescue](#)**
- Gently scrape stinger off of skin, if visible.
- Have hiker sit or recline back with feet elevated if feeling light-headed.
- Monitor for ABCs (Airway, Breathing, Circulation) and initiate CPR if necessary.

(Sources: "Anaphylaxis", NIH/National Library of Medicine, 1-2023; "Wilderness Medical Society Clinical Practice Guidelines on Anaphylaxis", 3-2022.)

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Bleeding Injuries

Superficial bleeding wounds (Scrapes, Shallow Cuts, Abrasions)

- Use gloves to prevent contact with blood-borne pathogens.
- Apply pressure with gauze pads until oozing stops or slows.
- Using tweezers or gloved hands, pick out any obvious debris such as gravel, sticks, etc.
- Gently cleanse the wound with clean water or alcohol preps.
- Dress with appropriately sized band-aids or gauze.
- Use rolled gauze or Ace-type wrap to hold dressing in place until further care can be given.

Nosebleeds

- Sit Up and Lean Forward: Sit down to reduce blood pressure to the nose, and lean forward to keep blood from running down the throat, which can cause vomiting.
- Pinch the Nose: Use the thumb and index finger to firmly pinch the soft part of the nose, just below the bony bridge.
- Hold Pressure: Maintain constant, firm pressure for at least **10–15 minutes** without releasing to check if it has stopped.
- Breathe through the Mouth: While the nose is pinched, breathe through the mouth.
- Apply Cold (optional): If a cold pack is available, place it across the bridge of the nose to help constrict blood vessels.

Major Bleeding

1. Safety First

- Ensure Personal Safety: Before helping, evaluate the scene for hazards (e.g., active violence, fire, unstable structures) to avoid becoming a victim yourself.
- Protection: Use gloves to protect against bloodborne pathogens.

2. Identifying Life-Threatening Bleeding. Note: a major arterial bleed such as from neck, or groin can cause death in 2-5 minutes. Signs:

- Blood that is spurting out of the wound.
- Blood that won't stop coming out of the wound.
- Blood that is pooling on the ground.
- Clothing that is soaked through with blood.
- Bandages that are soaked through with blood.
- Loss of all or part of an arm or leg.

3. The 3 Core Techniques (ABC)

- A - Alert: Call 911. *See: [Initiating a Rescue](#)*

- B - Bleeding: Find the bleeding injury.
- C - Compress: Apply pressure to stop the bleeding.
- Key Pressure Techniques:
 - Direct Pressure: Apply firm, direct, strong, and unrelenting pressure with both hands directly on the wound.
 - Wound Packing: For deep, gaping wounds (specifically in the shoulder, groin, or neck), pack the wound with bleeding control gauze (preferred), plain gauze, or a clean cloth, then apply direct strong pressure as above.
 - Tourniquet Application: For severe, uncontrollable bleeding on an arm or leg, apply a manufactured tourniquet, or a belt, 2–3 inches above the wound, between the wound and the heart (never on a joint). Tighten it until the bleeding stops.
 - Never release pressure to check bleeding; maintain pressure until EMS arrives.

(Sources: Center for Wilderness Safety, wildsafe.org and American College of Surgeons Stop The Bleed, stopthebleed.org)

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Flash Floods

Flash floods occur when intense, sudden rainfall transforms a dry wash into a raging, muddy torrent. Because sun-baked desert soil cannot quickly absorb large amounts of water, runoff cascades instantly into steep canyons and arroyos, sometimes arriving as a towering wall of water.

Prevention and Safety Strategies

The best way to survive a flash flood is to never put yourself in harm's way.

Plan Before You Go

- **Check the Forecast:** Monitor official updates from the National Weather Service or local agencies, such as those provided by the Bureau of Land Management for your specific area.
- **Avoid Slot Canyons:** If there is any chance of thunderstorms in the region, avoid deep, narrow canyons entirely.
- **Scout Your Camp:** Never pitch a tent or park a vehicle in a dry wash, arroyo, or low-lying drainage.

What to Do If You Are Caught

- **Seek Higher Ground Immediately:** If you spot signs of flooding, act rapidly and move to the highest accessible elevation. Do not waste time trying to gather gear.
- **Never Try to Outrun It:** Do not attempt to hike out of a wash when a flood is approaching. Get out of the channel completely.
- **Never Cross Floodwaters:** Avoid crossing any flooded trail or ravine, either on foot or in a vehicle. Only 6 inches of moving water can sweep an adult off their feet, and 12 inches can float most cars.
- **Abandon Your Vehicle:** If your car stalls in a flooded area, leave it immediately and climb to higher ground. Vehicles are quickly swept away by rapid currents.
- **Wait It Out:** Desert flash floods are typically brief and subside within a few hours. Be patient and wait for the water to completely recede before attempting to move on.

(Source: Bureau of Land Management, Flash Floods.)

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Heat Illnesses

Heat Cramps

- Cause - Fluid and electrolyte loss.
- Symptoms – Painful, involuntary muscle spasms that usually occur during heavy exercise in hot environments.
- Management - Rest and cool down, massage muscles. Drink clear juice or an electrolyte-containing sports drink.

Heat Exhaustion

- Cause - Excessive fluid loss leading to hypovolemic shock
- Symptoms – Headache, fatigue, gradual weakness, nausea, anxiety, excessive sweating, fainting, loss of consciousness
- Manifestations - Pale, grayish, clammy skin; weak, slow pulse; low blood pressure
- Management - Patient positioned flat or with the head down out of the sun; drink plenty of water, loosen and dampen clothing to lower body temperature.

Heatstroke

- Cause - Inadequacy or failure of heat loss mechanism leading to rise in core body temperature
- Symptoms - Headache, weakness, dizziness, nausea, vomiting, confusion, loss of consciousness
- Manifestations – Hot, red, dry skin with little sweating, shallow breathing, rapid pulse, very high temperature > 104°F
- Management – Emergency and immediate cooling by wrapping or immersing in cold water (e.g., wet clothes/bandannas, immerse in stream, ice if available). **Call 911. [See: Initiating a Rescue](#)**

Heatstroke is a genuine medical emergency; immediate cooling is required.

Compare	
Heat Exhaustion	Heat Stroke
Possible irritability or confusion	Confusion, delirium, definite mental status changes
Moist clammy skin	Dry hot skin
Normal or subnormal body temperature	Very high body temperature

- See: [When is it Too Hot to Hike?](#)
- See: [Hydration Basics](#)

(Source: Greater Outdoors California Day Hike Leader, rev. 1-2020)

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Hydration Basics

- How much you need to drink depends on a number of factors, such as the activity you're doing, intensity level, duration, weather, your age, your sweat rate and your body type.
- A good general recommendation is about one half-liter of water (16oz) per hour of moderate activity in moderate temperatures.
- Strenuous hiking in high heat may require that you drink one liter (32 oz) of water or more per hour.
- Plain water is sufficient for activities under 1 hour, but electrolyte solutions are important for longer durations to prevent hyponatremia (dangerously low blood sodium).
- Snacks and/or electrolyte replacement preparations with carbohydrate, sodium, and potassium should be interspersed with water intake for long and/or strenuous hikes.
- Drink smaller amounts often, to continually hydrate.
- Drink more at altitude.
- Drink even in cold weather.
- Sun can hasten dehydration, so use sunscreen, SPF protective clothing.
- Watch for early signs of dehydration: thirst, dry lips and mouth, fatigue, headache, decreased urine output, and/or darker colored urine, then rehydrate with water and electrolytes as above. Note: all of these symptoms and signs are indicative that dehydration is present, and increased fluid intake over the baseline suggested is needed.
- See: [When is it Too Hot to Hike?](#)
- See: [Heat Illnesses](#)

(Source: REI Hydration Basics, 2026)

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Hypothermia

Although it would seem unlikely we would encounter hypothermia with our CVHC geography, it is not impossible. The following scenarios might place a hiker at risk:

- Hiking at higher altitude with insufficient layers and especially if there is wind
- Rain that wets clothing, at lower ambient temperatures

Definition: Core body temperature less than 95 degrees F. However, you're probably not going to have a thermometer in the field. Below are signs and symptoms to watch for:

- Mild (95–89.6°F / 35–32°C) Shivering, cold extremities, impaired coordination, fast heart rate, urinary urgency, alert but may show poor judgment
- Moderate (89.6–82.4°F / 32–28°C) Shivering slows or stops, confusion/apathy, slurred speech, drowsiness, stumbling, impaired consciousness
- Severe (< 82.4°F / < 28°C) No shivering, muscle rigidity, unconscious, very slow or absent pulse, cardiac arrhythmias, may appear dead

Treatment by Stage:

All Stages:

- Remove from cold/wind/water. Remove wet clothing (cut off if needed) in a sheltered area.
- Insulate from the ground and environment: use a vapor barrier (tarp, plastic sheet) plus dry insulating layers.
- Handle gently — rough movement can trigger fatal cardiac arrhythmias.

Mild Hypothermia

- Encourage movement and shivering (the body's most effective rewarming tool).
- Provide warm, sweet drinks and high-calorie food.
- Apply dry insulation; may use external heat sources (warm water bottles, heat packs to trunk).
- If fully recovered and risk factors resolved, evacuation may not be necessary.

Moderate Hypothermia

- Do NOT allow the patient to walk or move themselves.
- Keep horizontal at all times to prevent cold blood from rushing to the heart (afterdrop).
- Apply active rewarming: large heat packs or warm water bottles to the trunk (armpits, chest, groin) — NOT to extremities.

- Evacuate to a hospital.

Severe Hypothermia

- Treat as above for moderate hypothermia.
- Check pulse for 60 seconds before starting CPR — pulse may be very slow and faint.
- If no pulse detected, begin CPR.
- Evacuate immediately to a hospital. [See: *Initiating a Rescue*](#)
- Continue CPR during transport — survival with full neurologic recovery has been reported after hours of CPR.

Key Reminders

- "No one is dead until they are warm and dead." Do not stop resuscitation in the field.
- Avoid giving food or drink to anyone who is not fully alert.
- Small chemical hand warmers are insufficient for core rewarming — use large heat packs applied to the trunk.
- After cold water rescue, watch for sudden collapse ("circum-rescue collapse") even after removal from water.

Prevent hypothermia: stay dry, layer clothing, eat and drink regularly, recognize early signs in companions.

(Sources: Wilderness Medical Society (WMS) Clinical Practice Guidelines For the Out-of-Hospital Evaluation and Treatment of Accidental Hypothermia: 2019 Update.)

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Initiating a Rescue

Steps to take after determining a hiker needs emergency evacuation:

1. Secure the scene- move hiker away from immediate danger such as rockfall or swift water.
2. Be sure you have taken the emergent steps to provide first aid as described in Resources, depending on the situation.
3. Attempt to call 911 using cell phone. (Note: many modern smartphones such as iPhone 14 and beyond, can connect to low-earth orbit (LEO) satellites for emergency and messaging use when you are completely out of range of traditional cell towers. Be familiar with your cell phone's capabilities).
4. Also trigger SOS with satellite communicator if someone has one (Garmin inReach devices, Zoleo, SPOT) or use T-satellite if you have it.
5. Cell phones with satellite capability and satellite communicators will transmit GPS coordinates for your location when SOS is triggered. Be prepared to communicate specifics of the situation via cell text or satellite communicator text.
6. A useful phone App that provides location information is "What3Words." Opening the App displays 3 words that correspond to your specific GPS location, which you can relay to responders. Cell or internet service is not required to use this App.
7. Do not change position unless EMS advise you to.
8. Keep hiker stabilized.
9. Create high-visibility conditions- bright clothes, clothes attached to hiking poles, waving, rocks and branches to create large 'X'.
10. Universal Distress signals:
 - Whistle: Blow your whistle 3 short blasts, pause for 1 minute, and repeat.
 - Signal Mirror: Flash sunlight or a flashlight beam toward potential rescuers or overhead aircraft.
11. After SOS triggered and hiker stabilized as much as possible, determine with Sweep how many people may need to stay on-site to help, and how many to hike out back to trailhead (do not put other members of hiking group in danger).

*See below for Important Quick Rescue Reminder From the
Fowler-O'Sullivan Foundation- Hiker Safety Initiative*

QUICK RESCUE REMINDER

1. Stay Calm
2. Stay put — don't wander
3. If aircraft is overhead, move to open terrain if safe
4. Make yourself visible
5. Activate SOS if available

Your preparations and actions can determine:

- How quickly you are found
- How small the search area becomes
- How safely rescuers can reach you

Prepared by Fowler-O'Sullivan Foundation

DEVELOPED WITH INPUT FROM SEARCH & RESCUE PROFESSIONALS

Because every hiker deserves to come home.

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Fowler-O'Sullivan Foundation
Hiker Safety Initiative

HOW TO HELP SEARCH & RESCUE FIND YOU

Conscious or Unconscious

READ BEFORE YOUR HIKE



**PARTICIPATING IN YOUR OWN RESCUE
CAN HELP SAVE YOUR LIFE**

KEEP THIS CARD IN YOUR PACK OR FIRST AID KIT

PART 1: IF YOU ARE UNCONSCIOUS

What helps SAR find you is the preparation you made **before the emergency**



Wear bright, high-contrast clothing and gear

Bright jackets, packs, tents, and ground cloths are easier to spot from helicopters, drones, and aircraft.



RECCO tags (in any situation)

These passive tags require no batteries or activation. Place the RECCO tag on the outside of your backpack. Let family or friends know you carry a RECCO tag so they can inform search teams. Helicopter detectors may help locate the tag.



A shared trip plan

Tell someone where you parked, your route, expected return time, and what you are wearing. Also share the make, model, color, and license plate number of your vehicle.



Phone (keep powered on)

May provide location clues even without service. Texts may work when calls don't. Carry a portable charger.



Satellite communicator (if carried)

Devices such as the Garmin inReach can provide location information if the device is turned on, even if SOS was never activated. If a trusted friend or family member has access to your MapShare page, they may be able to provide your last known location to search teams.

PART 2: IF YOU ARE CONSCIOUS

If you are conscious but lost or injured, your actions can help **Search & Rescue locate you**



Use SOS if you carry a satellite communicator

Activate SOS immediately if you need to be rescued.



Stay put

Moving increases the search area and makes locating you harder. If aircraft is overhead and you are able to move safely, getting into a clearing or open area can improve visibility from the air.



Make yourself visible

Lay out bright clothing or gear to create contrast with the terrain.



Signal aircraft with movement

Use bright gear/clothing. Attach to a hiking pole/stick or wave by hand. Even snow or sand in the air can create movement that **may be seen**.



Use sound

Whistles or repeated noise can help ground teams locate you. Three whistle blasts is a recognized distress signal. Move away from loud ambient noise such as rushing streams so you can hear rescuers' voices or whistles.



Create signal markers

Use rocks, branches, or disturbed ground to create large X's or arrows visible from the air.

Lightning

Preventing Lightning Injuries

1. **Monitor weather:** Watch for building cumulonimbus clouds, increasing winds, and darkening skies. Follow the rule: "When thunder roars, go indoors."
2. **Seek shelter early:** The safest options are enclosed buildings or hardtop vehicles. In the wilderness, seek deep caves, dense forest, or deep ravines. Avoid ridgelines, summits, isolated trees, open fields, shallow caves, and tents.
3. **Time your activities:** Be off peaks and ridgelines by early afternoon ("up by noon, down by two").
4. **Remove metal objects:** Discard ski poles, trekking poles, and remove watches, belt buckles, and necklaces to reduce contact burn risk.
5. **Wait it out:** Do not resume outdoor activity until at least 30 minutes after the last thunder or lightning.
6. **Lightning position (last resort):** If a strike is imminent (hair standing up, crackling sounds, blue haze, ozone smell), crouch with feet together on an insulating surface such as a dry sleeping pad or backpack (metal removed).

Treating Lightning Strike Victims in the Field

- **Scene safety first:** Victims do not carry residual electrical charge — it is safe to touch and treat them immediately.
- **Reverse triage:** **Unlike standard mass casualty triage, prioritize victims who appear dead (pulseless, apneic). They have the best chance of recovery with immediate CPR.**
- **Begin CPR immediately:** Cardiac arrest from lightning is often reversible. Support ventilation aggressively — the respiratory center may remain paralyzed even after the heart restarts, risking a second arrest.
- **Use an AED if available:** Ventricular fibrillation may be present and is a shockable rhythm.
- **Spinal precautions:** Assume spinal injury, especially if the victim was thrown or fell.
- **Assess for associated injuries:** Check for fractures, burns, tympanic membrane rupture, and hypothermia.

- **Evacuate:** All lightning strike victims require hospital evaluation, including ECG monitoring for at least 24 hours, even if initially asymptomatic, due to the risk of delayed cardiac complications. ([See: Initiating a Rescue](#))

(Sources: Wilderness Medical Society (WMS) Practice Guidelines for lightning injury prevention and treatment, supplemented by clinical reviews on lightning injury management and the National Athletic Trainers' Association position statement on lightning safety.)

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Major Injuries

Includes: Severe Sprains, Suspected Fractures, Major Falls with extent of injury unknown

For Bleeding Injuries, please see: [Bleeding Injuries](#)

Strains and Sprains (usually ankle, knee, wrist)- PRICE Protocol (*from Wilderness Medical Society Clinical Practice Guidelines for the Treatment of Acute Pain in Austere Environments: 2024 Update*)

- **Protection:** Stabilize the injured area with taping, bracing, or improvised splinting. In the backcountry, splints can be fashioned from available materials such as trekking poles, sticks, or sitting/sleeping pads secured with clothing or straps. Splint the extremity in the position found; do not attempt to straighten if fracture is suspected.
- **Relative rest:** Limit use of the injured extremity to prevent worsening. However, patients can still self-ambulate during evacuation when appropriate.
- **Ice/cryotherapy:** Apply ice, snow, or bagged cold water when available. Cycle 10 minutes of cooling followed by 10 minutes of passive rewarming for the first 24–48 hours.
- **Compression:** Use an elastic bandage or improvised wrap, fitted snugly but not so tight as to compromise circulation. Check capillary refill, sensation, and movement of distal extremities regularly.
- **Elevation:** Elevate the injured area above heart level when feasible to reduce swelling.

Suspected Fractures

- **PRICE Protocol**, as above
- If self-ambulation is not possible, call 911/ initiate evacuation. [See: Initiating a Rescue](#)
- Open fractures (exposed bone) should be identified and any wound covered with a clean dressing to prevent further contamination. Do not attempt to clean.
- Long-bone fractures and open fractures can cause substantial, potentially life-threatening blood loss — a pale, blue, or purple extremity indicates poor perfusion and warrants urgent evacuation.

Major Falls with extent of injury unknown (*ex: falls from a height*)

- **Call 911/ Initiate evacuation.** [See: Initiating a Rescue](#)
- Before approaching the patient, assess the scene for ongoing hazards (rockfall, unstable terrain). Risks to rescuers must be weighed against likely benefits to the patient.
- Wilderness falls commonly cause lower extremity (47%), head (40%), and spine (36%) injuries.
- **Primary Survey (ABCDE)**

- **Airway:** Look for any obstructions, listen for fluid or gurgling, feel for air moving in and out of airway. Remove obstructions before proceeding.
- **Breathing:** Look to see if chest wall is moving properly, listen for wheezing or unusual sounds, feel for movement of air. Do artificial respiration if not breathing.
- **Circulation:** Look for severe bleeding (remember to look for bleeding of torso, and for femur fractures), listen for heartbeat, feel for pulse at neck and wrist. If there is no pulse, do CPR. If there is severe bleeding, control it with direct pressure.
- **Disability/Deformity:** Protect the head, neck and back. Use soft padding or clothing alongside the head and neck to help with immobilization. Check extremities for any obvious deformities or injuries.
- **Environment:** Prevent hypothermia by removing any wet clothing and covering with heat retaining jackets/clothing. Prevent heat illness by creating shade; do not attempt to give anything by mouth until EMS arrives.

(Sources: Wilderness Medical Society Clinical Practice Guidelines for the Treatment of Acute Pain in Austere Environments: 2024 Update; Pre-Hospital Trauma Care, The Surgical Clinics of North America, 2024)

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Rattlesnake Bites

The #1 priority is rapid evacuation to a hospital. Nothing done in the field can replace antivenom. Do not let first aid delay transport.

IMMEDIATE ACTIONS (Do These First)

1. **Move away** from the snake to a safe distance. Do not attempt to catch, kill, or handle the snake.
2. **Call 911** or activate emergency evacuation immediately. ([See: Initiating a Rescue](#))
3. **Stay calm.** Reassure the victim — rattlesnake bite fatalities are rare when treated promptly.
4. If safe, take a **photo of the snake** from a distance for later identification.

FIRST AID WHILE AWAITING EVACUATION

- **Remove** all rings, watches, bracelets, and tight clothing near the bite site before swelling begins.
- **Immobilize** the bitten limb with a loose splint (do NOT wrap tightly). Keep the limb at **heart level**.
- **Clean** the wound gently with soap and water if available; apply a sterile dressing.
- **Note the time** of the bite and write it down or mark it on the patient's skin.
- **Mark the leading edge** of any swelling or redness with a pen and note the time, so progression can be tracked.
- **Minimize exertion.** Keep the victim still. Walking increases venom absorption. If the victim must walk to reach help, balance reduced exertion with avoiding delay to care.
- **Monitor** airway, breathing, and circulation continuously. Be prepared to perform CPR if needed.

DO NOT DO ANY OF THE FOLLOWING

- **✗** Do NOT apply a tourniquet
- **✗** Do NOT cut the wound or attempt to suck out venom
- **✗** Do NOT apply ice, heat, or electric shock

- ❌ Do NOT apply a pressure immobilization bandage (evidence is mixed and may worsen tissue injury for pit vipers)
- ❌ Do NOT give the victim alcohol or stimulants
- ❌ Do NOT let the victim drive themselves to the hospital (venom can cause fainting)
- ❌ Do NOT attempt to capture or kill the snake

WARNING SIGNS REQUIRING URGENT EVACUATION

Difficulty breathing, severe swelling spreading rapidly, dizziness/fainting, vomiting, or bleeding from the bite that won't stop. Any bite by a rattlesnake or suspected venomous snake is a medical emergency — even if symptoms seem mild at first.

Definitive treatment is antivenom, which can only be given in a hospital. Evacuate promptly.

Sources: 2026 Wilderness Medical Society (WMS) guidelines, the 2024 AHA/Red Cross First Aid guidelines, and the NEJM review on snake envenomation.

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Types of rattlesnakes found in Coachella Valley and surrounding mountains

- **Southwestern Speckled Rattlesnake (*Crotalus pyrrhus*):** Highly camouflaged to blend into the granite and rocky terrain of the desert foothills. Their coloration varies greatly from cream and pink to dark gray. Venom is primarily hemotoxic (affects blood coagulation).



- **Mojave Rattlesnake** (*Crotalus scutulatus*): Often referred to as the "Mojave Green," this is the most famous—and most venomous—rattlesnake in the area. They are identifiable by the white and dark bands on their tails and prefer brushy, open desert floors. Venom has neurologic, hemorrhagic and muscle tissue damaging effects.



- **Sidewinder** (*Crotalus cerastes*): Also known as the horned rattler, these are the smallest rattlesnakes in California. They are best recognized by the horn-like scales above their eyes and their unique "sidewinding" movement across the sand. Venom has primarily hemorrhagic toxins.



- **Southern Pacific Rattlesnake** (*Crotalus helleri*): Highly venomous. In the Idyllwild/San Jacinto region, their venom is known to be particularly potent and can contain a mix of hemotoxic and potent neurotoxic components.



Scorpions and Spiders

Scorpions:

Stripe-tailed (or Devil) Scorpion (Common Desert Scorpion): These are smaller, brownish scorpions often found hiding around cinder block walls and rock beds. Their sting is painful but typically harmless to healthy adults.



Giant Desert Hairy Scorpion: As the largest scorpion in North America, they can grow up to 6 inches long. Despite their intimidating size, their sting is usually mild—comparable to a bee or hornet sting—and rarely causes severe medical issues.



Arizona Bark Scorpion: This is the most venomous scorpion in North America. Its sting is extremely painful and can cause severe symptoms like numbness, muscle twitching, and breathing difficulties. While historically more common near the Colorado River, established populations have been found in local cities like Indio and Palm Desert. However, it still remains relatively uncommon locally. Immediate medical attention is recommended for children, the elderly, or those having allergic reactions.



Spiders:

In the Coachella Valley, the **Western Black Widow** is the only native spider with venom medically significant to humans. Brown Recluse spiders do not naturally live in Southern California, and bites are exceedingly rare.

The Western Black Widow is easily recognized by its glossy black body and the distinct red "hourglass" marking on the underside of its abdomen. They prefer dark, undisturbed, and cluttered areas—commonly nesting inside cluttered garages, outdoor sheds, patio furniture, woodpiles, and water meter boxes.

Symptoms: Bites are neurotoxic, causing intense pain, muscle cramps, nausea, and sweating. Fatality is extremely rare: While painful, bites are rarely fatal for healthy adults if treated, and antivenom is available at local medical centers.

Treatment: Seek immediate medical attention.



(Sources: Various)

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When is it Too Hot to Hike?

“Safe” hiking temperatures can vary depending on individual tolerance, acclimatization, health/fitness and preparedness. However, the following general guidelines can help determine the risk of the hiking conditions:

- **Below 80°F:** This range is typically considered safe for most hikers, provided they are adequately prepared with the ten essentials (see below).
- **80°F – 90°F:** Caution is advised. Hikers should take extra precautions to stay hydrated, rest frequently in the shade, and monitor for signs of heat-related illnesses.
- **90°F – 100°F:** High risk. It’s crucial to take significant precautions such as carrying extra water, avoiding midday heat, wearing sun-protective clothing, and recognizing the early signs of heat exhaustion and heat stroke.
- **Above 100°F:** Extremely dangerous. Hiking in these temperatures can quickly lead to heat-related illnesses, or death, even for experienced hikers.

See: [Hydration Basics](#)

See: [Heat Illnesses](#)

(Source, Anza Borrego Foundation, 6-2024)

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