

Backcountry Health Topics

This brief list of common outdoor health problems, preventative measures and possible remedies is intended to help you stay healthy while you explore the backcountry.

Sunburn

Sunburn, caused when our skin is exposed to too much of the sun's ultraviolet light, is the most common problem experienced by backpackers.

- **Prevention:** All wilderness travelers, regardless of skin color, should wear sunscreen with an SPF (sun protection factor) of at least 15. The American Academy of Dermatology and the Skin Cancer Foundation recommend an application of sunscreen every two hours, even on cloudy days. The groups also offer these tips:
 - Within the continental United States, minimize your exposure to the sun between 10 a.m. and 4 p.m. Potential for skin damage is greatest at noon (or 1 p.m. during daylight savings time). At these peak-intensity hours, a fair-skinned person could suffer skin damage in less than 15 minutes.
 - Always shade your head, neck, ears and eyes, particularly at high elevations, where a thinner atmosphere allows more UV rays to reach your skin. Sand, brightly colored clothing and snow can all intensify the sun's impact. Some outdoor clothing comes with SPF ratings. Fabrics with tighter weaves help keep the sun off your skin.
 - Lenses of sunglasses should block both UVA and UVB rays. Examine product information tags or spec sheets to verify that the lenses offer this protection.
 - Check with your doctor to determine if any medications you are taking increase your susceptibility to sunburn.
- **Remedy:** If you do get burned, soothe damaged areas with an aloe-based skin cream, and keep them covered for the remainder of your trip (either with clothing or with a strong sunscreen) to avoid further damage. If sunburn is serious and you experience persistent nausea, chills or fever, seek professional medical attention.

Blisters

One little blister, the product of friction that rubs skin back and forth in a concentrated area, can ruin an otherwise wonderful backpacking journey.

- **Prevention:** Blisters are easier to avoid than they are to fix. Make sure you start every backpacking trip with footwear that is broken in and fits you well. Also wear clean, properly sized socks. Consider wearing two pairs of socks—a lightweight wicking liner and a thicker cushioning sock—to lessen the chance of abrasion.

Tip: On the trail, address foot discomfort as soon as it develops. A quick response can often stop a blister before it becomes serious. At the first sign of irritation, put a small

patch of protective material—moleskin, 2nd Skin or even duct tape—over the affected area to minimize abrasion.

- **Remedy:** If you're undertaking your first backpacking season and know you are prone to blisters, consider applying moleskin to your typical "blister zone" before you hit the trail.

If a blister develops and walking becomes too painful, you could drain the blister by lancing it along its base with a clean razor blade or knife. Once this is done, soothe the area with some antibacterial ointment, then cover it with a patch of 2nd Skin (or similar product) plus a small adhesive bandage to keep the blistered area clean.

If the area is still sensitive, cut a doughnut-shaped cushioning patch out of Molefoam or duct tape and encircle the injured area. You may need to bulk up your circular pad with a number of layers to hold your sock and boot out away from the damaged area. This cushion will protect the area from further damage.

General Aches and Pains

General aches and pains (sore muscles, headaches, joint pain) are a common factor of many beginning backpacking trips.

- **Prevention:** Static stretching, such as a motionless hurdler's stretch held for 30 seconds or so, is no longer viewed as a smart tactic, either before or after aerobic activity.

Recent studies indicate static stretching only increases a person's tolerance for the discomfort of the stretch, but the stretch itself actually weakens muscles. Dynamic stretching, such as a modest walk or jog, is the preferred method. For a hiker, therefore, the best warm-up is spending your first 10 or 15 minutes on the trail walking at a moderate pace.

Any trekker who feels the need to do some sort of pre-hike activity could try the straight-leg march. Begin by kicking one leg straight in front of you, with toes flexed skyward. Reach toward your airborne toes with your opposing arm. Drop that leg and perform the same motion with your opposite limbs. Aim for a half dozen or more repetitions.

Tip: Don't attempt to exceed your physical limits early in your hiking season.

- **Remedy:** Most muscle aches can be fixed with a little rest and gentle massage. For headaches, take a couple of pain reliever tablets—aspirin, ibuprofen or acetaminophen—and a short rest. Joint pain is typically caused by overuse, though it can be the result of twists or unusual compressions. Again, rest is usually the best remedy. Elevating the sore joint might help alleviate pain. Taking glucosamine, a cartilage-repairing nutritional supplement, can also help joint pain and expand your range of motion.

Poison Ivy, Oak, Sumac

Wherever you travel, you may run into troublesome plants.

- **Prevention:** Learn how to recognize the dangerous plants that are common in the area you'll be exploring. Remember that poison oak and ivy leaves grow in clusters of three, so if you see "leaves of three, let it be." Be wary of touching anything foreign to you. Keep in mind that the oily rash-causing resin found in poison oak and ivy, urushiol, remains present in the plants even during dormant winter months. Contact with a leafless stem in January can still spawn an itchy rash. Pre-exposure lotion can be helpful. If traveling in unfamiliar territory, consider carrying a lightweight, compact field guide to help you recognize plants.
- **Remedy:** Carry a small supply of hydrocortisone cream or another soothing, anti-inflammatory lotion to lessen the discomfort caused by skin irritations. Fluid from a rash-induced blister will not spread the rash. However, if the resin is not cleaned from clothing, boots, skin or tools, you can re-infect yourself or another person. It's the resin, not the rash, that spreads infection. A good first-aid manual will provide other useful tips on limiting the spread of the rash.

Biting Insects

Mosquitoes, flies and other biting insects are an unavoidable part of many backpacking trips. Happily, bug bites are usually more of a nuisance than a health hazard.

- **Prevention:** The easiest way to deal with bug bites is to avoid them altogether. This means identifying and avoiding the worst locations and times of year for bugs. It also means packing the right kinds of clothing (light-colored long-sleeve shirts, long pants, bug shirts, bug-net hats and so on) and using some form of topical repellent if necessary.

DEET-based products are effective, though natural alternatives are available for individuals who prefer to avoid synthetic chemicals. DEET is not recommended for pregnant women or small children, especially those less than 1 year old. DEET will not hurt cotton, wool or nylon, but it can damage plastics, synthetic fabrics, furniture, walls, watch crystals, and eyeglass frames.

- **Remedy:** First-aid products like After Bite help relieve the swelling and itching caused by bug bites.

Tip: Some people are allergic to certain insect stings. If you are, protect yourself by avoiding risky situations as much as possible and by carrying whatever medicines you need to counteract the reactions. Make sure everyone in your backpacking group knows about your allergy and what to do if you get stung/bit.

Stinging Insects

Bees, wasps, hornets and yellow jackets are additional winged threats a backpacker may encounter.

- **Prevention:** If you come upon a beehive or wasps' nest, leave the area quickly and quietly. In campgrounds, avoid brightly colored clothing, shiny jewelry or belt buckles, and scented cosmetics. If you or someone in your group is allergic to bee or wasp stings, make sure to visit a health care professional for preventative injections.
- **Remedy:** For a normal reaction to a sting (itching, redness and slight swelling) the following first-aid items may be useful: ice, baking soda, oral antihistamines (such as Chlortrimeton and Dimetane), epinephrine inhaler (such as Primatene), topical steroids (such as Cortaid or Lanacort), and local anesthetics (such as Benzocaine, Lanacaine or Solarcaine).

Ticks

Not all ticks transmit Lyme disease. Check with rangers about potential danger before you explore an area unfamiliar to you.

- **Prevention:** Lyme disease is one of a number of potentially serious conditions that can be passed to humans through tick bites. The best way to avoid trouble is to avoid bites altogether by avoiding areas where ticks are prevalent and by checking your hair and skin for ticks frequently. Permethrin-based insect repellents can be applied to clothing to repel or kill some ticks.
- **Remedy:** If a tick is discovered, remove it immediately by pinching the skin just below the head of the tick with tweezers and lifting the tick straight up and out. You may lose a small piece of skin in the process. Be careful not to squeeze the tick body or twist it during removal, since this may cause the tick to regurgitate more bacteria into the wound. For similar reasons, burning or covering a tick in cooking oil is not recommended as a method of removal.

Snakebites

While many snakes are harmless, some have potentially lethal bites.

- **Prevention:** Avoid areas prone to snakes. Check your trail guide or ask a local forest ranger or guide. Stay in well-groomed, open areas. Watch where you're going and listen. If you see a snake, don't antagonize it.
- **Remedy:** If bitten by a snake such as a rattlesnake (a pit viper), first back away from the snake. Calm yourself or the person bitten. Rinse the wound. Apply a mechanical extractor pump for three minutes following the bite. Make no additional incisions. Mark the time so you can check the progress of swelling. Remove jewelry. Get to the hospital as quickly as possible for an anti-venom serum. Try to identify the offending snake to help medical personnel.

Hantavirus

Hantavirus is spread by the droppings, urine and saliva of contaminated rodents, particularly the deer mouse, cotton rat, rice rat and the white-footed mouse. Inhaling fumes or dust that carries

traces of rodent excreta is the most likely way humans are exposed to the virus during activities such as cleaning a barn or cabin.

As pointed out by Dr. Paul Auerbach, author of the respected book *Medicine for the Outdoors*, a person infected by the virus has an incubation period of 1 to 5 weeks following exposure. Symptoms include fever, muscle aches, headache, cough, dizziness, abdominal pain, nausea and vomiting, and diarrhea for a few days. This is followed by difficulty breathing, mottled skin on the limbs, shock and, sometimes, bleeding. Up to 75% of victims, he reports, may die.

- Prevention: Avoid any areas with excessive rodent activity: barns, old cabins, or dusty, enclosed trail shelters. Dr. Auerbach recommends the following precautions:
 - Keep food and water covered and stored in rodent-proof containers.
 - Dispose of food clutter; spray dead rodents, nests, and droppings with disinfectant prior to handling (and wear gloves when you do).
 - Clean and disinfect cabins and other shelters thoroughly before using.
 - Don't make camp near rodent sites.
 - Don't sleep on bare ground.
 - Dispose, burn or bury garbage promptly.
 - Use only bottled or disinfected water for campsite purposes.
- Remedy: If you suspect that you or someone in your party has been infected with hantavirus, seek professional health care immediately. Dr. Auerbach points out that there is not yet any specific therapy beyond supportive care, although the antiviral agent ribavirin may prove useful.

Altitude Illness

Altitude illness is a state of unease a wilderness explorer feels when traveling at high elevations. Traditionally, 10,000 feet is regarded as the height where altitude symptoms—a sluggish sensation often accompanied by a headache—kick in for most people, but they can afflict others as low as 6,000 feet. Acute cases of this illness can be debilitating, even fatal.

- Prevention: Avoid abruptly changing elevations from one day to the next. If you're spending your pre-hike day in a low-lying valley, you could be asking for trouble if you take aim at a 9,000-foot pass the next day. It is better to acclimatize, meaning you gain elevation gradually, or you camp at a high elevation for a day or two before undertaking your hike. A general rule: Ascend no more than 1,000 feet per day.
- Remedy: Descend. If you sense the symptoms are overtaking you, seek out lower elevation quickly before your condition deteriorates and you are unable to walk unassisted. Aspirin can be beneficial for any head pain you experience.