

# Hiking Tips - Hike Smart

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HIKE SMART - For a safe and enjoyable hike, prepare for your hike before you arrive!

- Review the hiking tips below.
- Check the park's [Area Closures](#) page for current information on trail conditions and situations affecting the backcountry.

Don't become a victim! Hike safely!



## Plan Ahead

THE DIFFERENCE BETWEEN A GREAT HIKE OR A TRIP TO THE HOSPITAL IS UP TO YOU!

Average temperatures, weather information, and road conditions can be found on the park's [Weather Conditions](#) page.

## Be Kind to Yourself

KNOW YOUR ABILITIES AND CHOOSE AN APPROPRIATE HIKE

You could be hiking at elevations ranging from sea level to just under 14,000 feet with temperatures that range from hot, dry desert conditions to winter storm conditions with snow possible at higher elevations. Almost everyone who hikes in Hawaii Volcanoes for the first time reports that it was more difficult than they expected. Be conservative in planning your hike!

If you have asthma, diabetes, a heart condition, knee or back problems, or any other health or medical issues, limit both your exertion and your exposure to the heat. The altitude, strenuous climbing, dehydration, and intense inner heat will combine to make any medical problem worse. Stay within your training, physical limitations, and abilities.

Be aware that efforts to assist you may be delayed due to limited staff, other rescue calls, employee safety requirements, and limited helicopter flying capability during periods of darkness or inclement weather.

Do not rely on physical strength alone, hiking smart is much safer. Rangers respond to heat-exhausted hikers often during the summer — don't let yourself become one of them! Use the information below to hike smart.

During the day, temperatures can soar into the high 90s or higher. Along the coast there are NO trees to provide relief from the sun.

The Heat Equation: High Temperature + High Humidity + Physical Exertion = Heat Illness or Death.

Earthquakes can produce rock falls -- avoid potential rock fall areas. A volcanic eruption is possible at any time; stay upslope and upwind from active lava flows and their gases. Volcanic gas (vog) can present breathing problems miles downwind from its source. Stay on the trail: earth cracks, thin

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crusts, and hidden lava tubes are prevalent.

## 10 Hiking Essentials For the Coast and Lower Elevations

- Water – plain water and some small amounts of electrolyte replacement (4 quarts or liters of water per person, per day)
- Food – even for day hikes
- First Aid Kit – band aids, ace wrap, antiseptic, moleskin, etc.
- Map – while many trails are well-marked, maps are helpful tools.
- Pack – to carry the essentials.
- Flashlight/Spare Batteries – just in case.
- Spray Bottle - fill with water for your own personal air conditioning system.
- Hat/Sunscreen – to keep the sun off you and to protect your skin.
- Whistle and/or Signal Mirror – for emergency use (you can also use CDs as low-cost signal mirrors)
- Waterproof Clothing – poncho or jacket; especially useful at higher, colder elevations or in the rain forest.

### Drink and Eat Often

You can sweat nearly two quarts of fluid each hour you walk in the heat. Fluid/electrolyte loss can exceed two quarts per hour if you hike uphill in direct sunlight and during the hottest time of the day.

Do not wait until you are feeling thirsty to start replacing fluids and electrolytes. By the time you feel thirsty, you are already dehydrated. Even a mild level of dehydration can make hiking a lot less fun. The more dehydrated you become, the less efficient your body is at cooling, making hiking more difficult.

Your body can only absorb about one quart of fluid per hour, so drink ½ to one quart of fluid every hour that you are hiking in the heat. Carry a water bottle in your hand or wear a camel pack and drink small amounts often, alternate between water and a sports drink with electrolytes.

Balance your food intake with fluid consumption or else you run the risk of becoming dangerously debilitated and severely ill. Food is your body's primary source of fuel and salts (electrolytes). Carry salty snacks, energy bars or similar rations on day hikes and camping food for overnight trips.

### Stay on Trail

Shortcutting on trails within Kilauea and Kilauea Iki calderas is prohibited. Shortcutting causes erosion resulting in the loss of vegetation and creates unsafe conditions for other visitors. There have been many rescues of visitors who have gone off trail in these areas because the shortcut they thought would save them time quickly disappeared, causing them to become lost.

There are some areas where it is safe and permitted to leave the trail. Indeed much of the lava viewing is off trail and a fantastic visitor experience can be had in these areas. Check with the backcountry office to find out where it is safe and legal to leave the trail.

### Unexploded Ordnance

DO NO TOUCH IT! Report the location to rangers. In the Ka'ū Desert and coastal areas west of Ka'aha, there may be unexploded World War II ammunition.

### The Hazardous H's

#### WATCH OUT FOR THESE HEALTH HAZARDS

**HEAT EXHAUSTION** - The result of dehydration due to intense sweating. Hikers can lose one or two quarts (liters) of water per hour.

*Symptoms:* pale face, nausea, vomiting, cool and moist skin, headache, cramps.

*Treatment:* drink water with electrolytes, eat high-energy foods (with fats and sugars), rest in the shade for 30-45 minutes, and cool the body by getting wet.

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**HEATSTROKE** - A life-threatening emergency where the body's heat-regulating mechanisms become overwhelmed by a combination of internal heat production and environmental demands. Your body loses its ability to cool itself.

*Symptoms:* flushed face, dry skin, weak and rapid pulse, high core body temperature, confusion, poor judgment or inability to cope, unconsciousness, seizures.

*Treatment:* the heatstroke victim must be cooled immediately! Continuously pour water on the victim's head and torso, fan to create an evaporative cooling effect. Immerse the victim in cold water if possible. Move the victim to shade and remove excess clothing. The victim needs evacuation to a hospital. Someone should go for help while attempts to cool the victim continue.

**HYPONATREMIA** (water intoxication) - An illness that mimics the early symptoms of heat exhaustion. It is the result of low sodium in the blood caused by drinking too much water and losing too much salt through sweating.

*Symptoms:* nausea, vomiting, altered mental states, confusion, frequent urination. The victim may appear intoxicated. In extreme cases, seizures may occur.

*Treatment:* have the victim eat salty foods, slowly drink sports drinks with electrolytes, and rest in the shade. If mental alertness decreases, seek immediate help!

**HYPOTHERMIA** - A life-threatening emergency where the body cannot keep itself warm, due to exhaustion and exposure to cold, wet, windy weather.

*Symptoms:* uncontrolled shivering, poor muscle control, careless attitude. Look for signs of the "umbles" - stumbling, mumbling, fumbling, grumbling.

*Treatment:* remove wet clothing and put on dry clothing, drink warm sugary liquids, warm victim by body contact with another person, protect from wind, rain, and cold.

Avoid hypothermia by checking at the Backcountry Information Center for the latest weather and trail conditions, taking layered clothing for protection against cold and wet weather, eating frequently, replacing fluids and electrolytes by drinking before feeling thirsty, and avoiding exposure to wet weather.

## Be a Lightweight

### THE LESS YOU CARRY, THE MORE ENJOYABLE THE HIKE

Travel as light as possible, and refer to the 10 Essentials list above. The heaviest items in your pack should be food and water. Use hiking sticks to take stress off your legs. Wear well-fitting and broken-in hiking boots. Bring a small lightweight flashlight and a change of batteries and bulb. Wear sunscreen, sunglasses, and a hat. Bring a map, compass, signal mirror or whistle, first aid kit, and water purification tablets. Keep in mind that all trash (including biodegradable rubbish) must be carried out.

## Avoid Huffing and Puffing

### IF YOU CAN TALK WHILE YOU ARE WALKING, YOU ARE WALKING AT THE PERFECT SPEED

When you huff and puff your body is not getting enough oxygen. Walking at a pace that allows you to be able to walk and talk means that your legs and your body are getting the oxygen needed to function efficiently.

When your body generates fewer metabolic waste products, you enjoy your hike more and you feel better at the end. At times it may seem like you are walking too slow, but at an aerobic pace (sometimes even baby-sized steps when the trail is steep) your energy reserves will last longer. You will also feel much better that night and the next day.

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## Take a Break

### TAKE A 5-10 MINUTE BREAK AT LEAST ONCE EVERY HOUR

A break of 10 minutes helps remove the metabolic waste products that build up in your legs while hiking. Take a break at least every hour. Sit down and prop your legs up. Eat some food, drink some fluids, and take this time to enjoy and appreciate the view. These efficient breaks can recharge your batteries. In the long run, breaks will not slow you down.

When hiking on Mauna Loa take longer breaks to acclimate to elevation changes. If hiking in from the Mauna Loa Weather Observatory, take at least an hour at the trail head before even starting your hike in order to acclimate.

## Watch Your Time

Rock piles and cairns (ahu in Hawaiian) are difficult to see in the dark. Start your hike during cooler parts of the day, but plan plenty of time so you can see where you are going.

## Horses and Hikers

### HORSES AND MULES HAVE THE RIGHT OF WAY

To ensure safety for yourself, other trail users, and horse riders, when encountering horses or mules on the trails:

- › Step off the trail on the uphill side away from the edge.
- › Follow the direction of the wrangler. Remain completely quiet and stand perfectly still.
- › Do not return to the trail until the last horse is 50 feet (15 meters) past your position.

## Tsunamis

Tsunamis are possible anywhere along the coast. Follow these tips to avoid being a tsunami victim:

- In case of a strong earthquake, move to higher ground immediately and stay there.
- When camping along the coast, camp above the tsunami zone. Check with the Backcountry Office for best locations to camp to avoid tsunamis. If camping within the tsunami zone, be prepared to evacuate at any time.
- Pay attention to helicopters flying at night and listen to any warning announcements coming from the aircraft.
- Leave a cell phone on at night if possible so that rangers can notify you in the event of a tsunami.

## Boats

Most of the coast is NOT accessible by boat. If planning a boat trip to one of the few areas that are accessible, follow these points:

- File a "float plan" with a reliable friend on shore.
  - Pay attention to weather forecasts and increasing sea conditions.
  - Carry a cell phone, satellite phone or marine VHF radio
  - Carry a "kicker" or travel by twin engine craft.
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## Backcountry Permits

Backcountry permits are REQUIRED for overnight stays. The information you get when obtaining your permit and the information you give to rangers as part of the permit process might save your life. The permits are FREE but the cost of a ticket for not obtaining one is \$100 or more.

## Lava Hiking

Hikes to lava flows can be extremely arduous, advanced and challenging and should only be attempted by the most physically fit people. It may be 10 miles or more round trip with an estimated time to complete of at least six hours. Hiking across lava fields requires continuous awareness and concentration. The lava is uneven, jagged and very sharp. All skin should be covered. If you decide to do this hike, you should have:

- 2 liters water minimum
- rain jacket
- gloves
- long pants
- long sleeve shirt
- first aid kit
- good shoes
- one flashlight per person
- compass (recommended)

Please view this four-minute video - ["Plan for Safe Viewing of Lava Flows"](#)

**HAZARD ALERT:** Lava entering the ocean builds lava deltas. The lava delta and adjacent areas both inland and out to sea are some of the most hazardous areas on the flow field. Frequent delta/bench collapses give little warning, can produce hot rock falls inland and in the adjacent ocean, and can produce large local waves. The steam plume produced by lava entering the ocean contains fine lava fragments and an assortment of acid droplets that can be harmful to your health. The rapidly changing conditions near the ocean entry have been responsible for many injuries and a few deaths.

Don't become a victim! Hike safely!

