

MAUNA KEA HAZARDS

EXPOSURE TO ALTITUDE

The summit elevation is 13,796 feet (4,205 m). The oxygen level is greatly reduced and a person can experience shortness of breath and/or impaired judgement. Reduced atmospheric pressure at high altitudes may cause **altitude sickness** or result in the development of other life threatening conditions such as **pulmonary edema** (fluid in the lungs) and **cerebral edema** (fluid on the brain). Also because the summit is above much of the atmosphere that blocks the sun's damaging ultraviolet rays, individuals risk exposure to serious sunburn and eye damage, especially if there is snow on the ground.

Precautions Before Ascending the Summit

- Prior to ascending the summit, acclimatize by spending at least 1/2 hour at the Visitor Information Station located at the 9,200 feet (2,804 m) elevation. This may lessen the intensity or onset of altitude sickness. If symptoms occur at this elevation, **do not** travel beyond the Visitor Information Station.
- Apply sunscreen and wear sunglasses and protective clothing.
- Hikers should register at the Visitor Information Station and use the buddy system.
- **DO NOT DRINK ALCOHOLIC BEVERAGES BEFORE OR DURING YOUR VISIT.**

Persons at Risk

It is strongly advised the following individuals not travel above the Visitor Information Station:

- Pregnant women
 - Individuals in poor physical condition
 - Individuals with heart or respiratory problems
 - Children under the age of 16*
- * Extended exposure to high altitudes could cause permanent damage to children whose bodies are still developing.

Symptoms of ALTITUDE SICKNESS include:

- Headaches
- Drowsiness
- Nausea
- Altered mental state
- Loss of balance
- Impaired reason

Symptoms of PULMONARY EDEMA and CEREBRAL EDEMA include:

- Severe headaches
- Vomiting
- Breathing difficulties
- Coughing
- Blue lips or fingernails
- Disorientation
- Extreme drowsiness (could result in a coma)

**IF SYMPTOMS PERSIST OR BECOME SEVERE,
IMMEDIATELY DESCEND TO A LOWER ELEVATION
IT COULD MEAN A MATTER OF LIFE OR DEATH!**

SNOW RECREATION

Because some of the slopes are very steep with rock outcroppings at the bottom, you are strongly advised NOT TO USE the following: **inner tubes, boogie boards, or other devices that are NOT equipped with braking mechanisms or which do NOT provide directional control on snow or ice.**

Due to the fragile environment and cultural significance of Mauna Kea AND safety to you and others using the mountain, SNOW MOBILES OR ANY TYPE OF OFF-ROAD VEHICLES ARE PROHIBITED.

- **THERE IS NO EQUIPMENT OR INFRASTRUCTURE AVAILABLE FOR ORGANIZED SNOW PLAY ON MAUNA KEA**
- **ALL SNOW RECREATION IS AT THE RISK OF THE INDIVIDUAL**

FALLING ICE

During the winter ice regularly forms on the observatory buildings and other structures. As these ice formations melt large fragments fall to the ground without warning. You could be injured or your vehicle could be damaged.

**DO NOT APPROACH OBSERVATORY BUILDINGS AND OTHER STRUCTURES
WHEN ICE IS PRESENT**

WEATHER

Weather can change very rapidly resulting in severe conditions including freezing temperatures, snow storms, and high winds which can reach over 100 mph. "White-outs" caused by blowing snow and fog block all visibility. Road conditions can become hazardous due to deep snow drifts, freezing fog, and ice preventing vehicular passage. Visitors that are on the summit when severe weather occurs face a life-threatening situation. Severe weather conditions can last up to a week preventing immediate rescue. Should you get stuck in a severe winter storm, always stay with your vehicle.

VISITOR ADVISORY

- Equip yourself with cold weather clothing
- EVACUATE AS SOON AS HAZARDOUS WEATHER CONDITIONS BEGIN TO OCCUR

DRIVING

The summit access road is approximately eight miles long and includes steep inclines. The first five miles of the road is unpaved with poor traction, narrow sections, blind curves, and rocks on the road. In some places there may not be enough room for two-way traffic, especially when large trucks are on the road. Road clearing and maintenance equipment should be given the right of way. Stopping distances are greatly increased when there is snow or ice on the road. Drivers should expect to see a lot of vehicles and pedestrians on the road. Drivers should also be careful of the sun in their eyes during early morning and late afternoon.

DRIVERS ARE CAUTIONED TO:

- Use 4-wheel drive vehicles
- Drive slowly (Note the speed limit is 25 mph)
- Always use 4-wheel drive LOW RANGE (to reduce brake failure and overheating)

REMOTE LOCATION

Mauna Kea is a very remote location. There are no public accommodations, food or gasoline services. Observatory buildings are not open to the public. There are limited restroom facilities above the Visitor Information Station. The only public telephone above the Visitor Information Station is an emergency phone in the entrance to the University of Hawai'i 88-inch Telescope. Cellular phone coverage is unreliable on the Saddle Road, Mauna Kea Access Road and on the summit. Vehicles should be in good working condition, especially the brakes, and should contain sufficient fuel to return to Hilo or Waimea. Emergency services, including medical assistance, may be two hours away.

**ALL VISITORS ARE RESPONSIBLE FOR THEIR OWN SAFETY
TRAVEL IS AT YOUR OWN RISK**

CONTACT INFORMATION

- Emergencies: 911
- Visitor Information Station: 961-2180
- Winter Conditions: 935-6268 (recording)

**OFFICE OF MAUNA KEA MANAGEMENT & MAUNA KEA SUPPORT SERVICES
UNIVERSITY OF HAWAI'I**