

Altitude Sickness

If you are planning a trip to altitudes over 8,000 feet, discuss high-altitude illness with your doctor. The higher you climb above sea level, the less oxygen there is in the air. The oxygen level becomes very low at altitudes above 8,000 feet. If you usually live at low altitude you are more likely to have problems at higher altitude because your body is not used to the decrease in oxygen.

There are 3 main types of high-altitude illness:

- Acute Mountain Sickness (AMS)
- High-altitude pulmonary edema (HAPE) which affects the lungs
- High-altitude cerebral edema (HACE) which affects the brain

High-altitude illness can be prevented in several ways:

- Take your time traveling to higher altitudes (it takes your body several days to adjust to the decreased level of oxygen). If you have no chronic medical conditions, you can probably go from sea level to an altitude of 8,000 feet in several days. When you reach an altitude above 8,000 feet, do not ascend any faster than 1,000 feet per day. Plan your trip so you have time to get used to the high altitude before you start your physical activity.
- Sleep at an altitude that is lower than the altitude you were at during the day. For example, if you ski at an elevation of 10,000 feet during the day, sleep the night before and the night after at an elevation of 8,500 feet.
- If a slow ascent is not possible, speak to your clinician about a prophylactic medication called acetazolamide, which can be prescribed for you before you travel.

Some of the first signs of high-altitude illness are headache, lightheadedness, weakness, trouble sleeping and an upset stomach. If you develop these symptoms, stop going up to a higher altitude or go back down to a lower altitude until your symptoms resolve. More severe symptoms include difficulty breathing (sometimes at rest), coughing, confusion, and inability to walk in a straight line. If you develop these symptoms descend to a lower altitude and seek medical attention immediately. Do not ignore these symptoms – high-altitude illness can be fatal if not recognized and treated.

If you have a chronic illness such as heart or lung disease, you may be able to go to high altitude if your disease is under good control. If you have coronary artery disease, mild emphysema or high blood pressure, you are not at increased risk of high-altitude illness, nor do you risk making your disease worse by traveling to a high altitude. Being overweight is also not an increased risk. However, if you have sickle cell anemia, severe lung disease (such as COPD or severe emphysema), or severe heart disease, traveling to high altitude may be dangerous. Always check with your clinician if you are unsure.

There is not much information about traveling to high altitude when pregnant, though some experts recommend not traveling above 8,000 feet. Check with your obstetrician.

Remember, also, that if you need to boil your water to insure a safe supply, that it must be boiled for 3 minutes at altitudes above 6562 feet (2000 meters), or boiled for 1 minute and then treated with iodine disinfectant.

For more information, visit www.high-altitude-medicine.com