

# High Altitude and Health

This information will help to explain high altitude and its affect on your health. Most people will not be affected, but for those who are, this information will be helpful and encouraging. It is important to note, however, that if you experience prolonged unexplained health discomforts, a physician should be consulted immediately.

Elevations in our area range from 9,000 to 14,000 feet. Elevations of 8,000 feet and higher are considered “high altitude”, where air is “thinner” and contains less oxygen than at lower elevations. “Altitude Illnesses” are the result of hypoxia, insufficient oxygen for normal tissue function. Visitors from much lower elevations may experience altitude illness after traveling from lower to higher altitudes in one day.

The symptoms of altitude illness are similar to the flu and include headache, nausea, and difficulty sleeping. The signs of a severe case of altitude illness are shortness of breath, coughing, congestion and difficulty with thought process. If you feel you are suffering from symptoms of altitude illness, you should notify medical personnel immediately. The Food and Drug Administration has recently released medication called Acetazolamide (or Diamox) to treat and prevent these symptoms and it is available through a physician’s office. The more severe cases are treated with oxygen therapy and the patient is transported to a lower elevation.

Acclimatization is the process of adjusting to decreased barometric pressure and oxygen content. The rate of acclimatization differs with individual physiology but a healthy person should acclimatize to a given altitude in 24 to 48 hours. During the acclimatization process you will increase your ventilations, or breath heavier, and your heart rate will speed up significantly. After 3 to 5 days your heart rate should return to normal. If you have or have had any heart related or circulatory problems, you should consult a physician before participating in any activities at high altitude.

## How To Avoid High Altitude Illness

If at all possible, avoid traveling from sea level to 8,000 feet in one day. Instead, spend the night somewhere in the 5,000 to 7,000 ft. range. This will give your body a chance to adjust to the change in altitude a step at a time. Avoid alcohol, sleeping pills and narcotic pain medication, and restrict salt, sugar, and caffeine intake 3 days prior to your arrival and during your first few days at high altitude. Alcohol, drugs, sugar and caffeine may escalate the symptoms of altitude illness. Maintain a diet of 70% or greater carbohydrates, and drink plenty of water.

It is also very important to remember that the chance for severe sunburn increases at higher elevations. Again, this is because of decreased oxygen. For your protection, always wear a sunscreen (SPF 15 or above), and proper eye wear or sunglasses that filter out 100% UVB and 99% UVA. Improper eye protection can be worse than no protection at all.