



High Altitude Sickness

The signs and symptoms of high altitude sickness have been recognized for more than 2000 years. Symptoms usually occur at elevation of 6000 feet or higher. Today, people are arriving at these high elevations more quickly and without the necessary acclimatization. One may leave sea level and be at an altitude of over 12,000 feet all in one day.

Altitude sickness can be divided into three categories:

MILD – MODERATE – SEVERE

Mild altitude sickness:

Although a nuisance, it is not serious. Symptoms usually occur within 8-24 hours of arriving at elevation and may include headache, nausea, vomiting, loss of appetite, fatigue or weakness, dizziness or lightheadedness, and difficulty sleeping. If someone at altitude has been drinking alcohol, it is difficult to determine if their symptoms are caused by alcohol or altitude. This is one of the reasons that alcohol should be avoided. Mild altitude sickness is an indication that more time should be allowed for acclimatizing. This can be accomplished by spending 1 or 2 days at a lower altitude. When the symptoms subside, try returning to higher altitude. While this situation is not serious it should not be taken lightly. If ignored, the symptoms may worsen and progress to a moderate or severe condition. It is extremely important to seek medical attention if symptoms become moderate or severe.

Moderate altitude sickness:

The headache becomes more severe and resistant to conventional pain medicine. In addition to the symptoms of mild altitude sickness, breathlessness with exertion, decreased urine output, and loss of coordination occur. If these symptoms are present, descend to a lower elevation immediately and seek medical attention.

Severe altitude sickness:

An uncommon but potentially fatal form of altitude sickness, most prevalent among people exercising at altitude of 14,000 feet or higher. Symptoms are similar to moderate altitude sickness but progress to breathlessness at rest, productive cough with frothy pink sputum, inability to sleep, and confusion. Anyone with severe altitude sickness must descend to a lower altitude immediately and go the nearest emergency room.

Prevention

An ounce of prevention really is worth a pound of cure. Whether hiking in the back country or touring Rocky Mountain National Park by car, a few simple precautions can make your stay in the mountains a pleasant one.

Acclimatize:

Gradual ascent is important. If you flew into Denver from a low altitude, you may benefit from spending your first night in Denver or one of the front range towns. Do not over exert, especially in the first few days. If you are hiking or climbing in the back country do not ascend more than 1000 feet per day. Although there are no absolute rules, it is often beneficial to “climb high but sleep low.”

Hydration:

Dehydration may lead to altitude sickness. Drink enough fluids to allow you to produce large amounts of clear urine. Start increasing your fluid intake before activity so that you don't have to “catch up.”

Diet:

Some people feel a high carbohydrate diet may prevent some symptoms.

Medicines:

Several medicines are available for prevention of altitude sickness. Ask your doctor or see us if you want to discuss this.

Who should not spend time at high altitudes

It is not medically safe for all persons to be at high elevations. If you have any medical problems, especially those related to the heart and lungs, check with your physician before leaving home. Examples of concern would be persons with:

- Heart disease with uncontrolled rhythm irregularities
- Congestive Heart Failure
- Mitral Stenosis
- Pulmonary hypertension
- Angina and symptomatic heart disease
- Moderate to severe COPD (Chronic Obstructive Pulmonary Disease)
- Anyone with a complicated pregnancy
- Uncontrolled hypertension
- Anyone with sickle cell disease

Remember, your susceptibility to altitude sickness may change from one year to the next. Always be aware of your condition when you are in high elevations. Surprisingly, people who have previously lived at high altitude, then live at a low altitude, are at high risk for altitude sickness on return to high altitude. Be careful and enjoy the mountains.