Fact Sheet: High Altitude

High altitude travel is generally considered travel above 8,000 feet (2438.4 m). At 8,000 feet, there is only ~75 percent of the available oxygen at sea level. Oxygen decreases at ~3% in volume with each 1,000 feet (304.8 m) in elevation. UV intensity increases 2% for every 1,000 feet of elevation. Issues that can occur at high altitude include:

- Falls
- Sunburn
- Hypothermia
- Frostbite
- Altitude Sickness
- Snow Blindness

Personal Protective Equipment

- Sunglasses
- Sunscreen
- Hat
- Warm clothing
- Sturdy boots
- Altimeter
- Ropes gear – if necessary

Preparation and Training

- Consult your primary care physician before the trip, especially if you have history with heart or lung disease or injury.
- Take a course in technical ropes training, if necessary.
- It is recommended you take courses in: Wilderness First Aid

General Safety

- Use sunscreen and sunglasses, even if weather is overcast.
- Maintain a slow, even pace.
- Breathe deeply.
- If your hike starts at high elevation, spend a few days adjusting to the altitude prior to hiking.
It is best to sleep no more than 1,500 feet (457.2 m) higher than you did the night before. This helps the body adjust gradually to the decreased amount of oxygen.

- Keep hydrated and well fed.
- Many people at high altitude have trouble sleeping due to altered breathing patterns. Do not take sleeping pills to address sleep issues at altitude.
- Humidity at high altitude can be low, which can aggravate the respiratory system and cause coughing fits. Breathing through a scarf or balaclava can help, as this will humidify and warm the air you breathe.
- Keep in mind emergency rescue services may have difficulty reaching your location. Do not take unnecessary risks.

**References and Additional Resources**

- **Information for people traveling to high altitude** from MedEx
- **EPA – A Guide to the UV Index**
- Adapted from *High Altitude Fact Sheet*, by University of Maryland: Department of Environmental Safety, Sustainability & Risk (https://essr.umd.edu/about/research-safety/field-research-safety/planning) with permission.