



Jackson Hole Fire/EMS Operations Manual

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Title: **Treatment Protocol:
Altitude Illness**

Division: 17

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ALTITUDE ILLNESS (Treatment Protocol)

DEFINITION:

Acute Mountain Sickness [AMS]- a syndrome seen at moderate altitudes(5-7,000 ft) especially in those who ascend rapidly consisting of headache, anorexia, nausea, and fatigue.

High altitude cerebral edema [HACE]- seen at high altitude (8,000 ft or more) it is the progressive neurologic deterioration in someone with AMS. Characterized by altered mental status, ataxia, stupor, seizure, and progression to coma.

High altitude pulmonary edema [HAPE]- also seen at high altitudes (8,000 ft or more) is the most lethal of altitude illnesses. Presents with progressive dyspnea, cough, hypoxia, and weakness progressing to coma and death. Prevalence is not that uncommon, estimated at one in 10,000 skiers/hikers in the Tetons

ALL PROVIDERS

- Perform ABC's
- Establish an airway and support respirations as needed
- Administer Oxygen via nasal cannula to obtain oxygen saturation > 90%. May increase to 100% NRB
- **Descend to a lower altitude ASAP. Descent of 500-1,000 ft most often is enough**
- If severe respiratory distress is present with pulmonary edema provide **positive pressure ventilation**, contact medical control ASAP

ADULT EMT-BASIC PROVIDER

- Follow as above

PEDIATRIC EMT-BASIC PROVIDER

- Follow as above

EMT-INTERMEDIATE PROVIDER

- Establish IV NS at 125ml/hr. If Systolic BP is < 90 mmHg consider a fluid challenge of 500 ml and repeat every five minutes to increase systolic blood pressure to > 100. **Use caution in patients with suspected HACE/HAPE. Patients with altitude**

EMT-INTERMEDIATE PROVIDER

- If patient is medically unstable, establish IV NS at 25 ml/hr. If hypotensive consider a fluid challenge of 20 ml/kg and repeat every five minutes to normal systolic blood pressure. **Use caution in patients with suspected HACE/HAPE. Patients with**

illness are often intravascularly dehydrated and will require IV fluids

- Apply Cardiac monitor
- Consider obtaining an ETCO2 waveform and numerical value. Treat accordingly
- Follow CHF protocol by physician order only

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