



# ALTITUDE ILLNESS

## Key Facts

(HACE) is due to brain swelling. AMS. Symptoms include a

- High altitudes have less oxygen due to low air pressure and our bodies take time to adjust to this
- Climbing or traveling to places that are 2500 meters (8,000 feet) or more above sea level may put you at risk for altitude illness
- The faster you ascend and the higher you climb, the greater the risk altitude illness
- Being physically fit does not reduce your risk of altitude illness



This fact sheet was developed by Anny Huang MBBS and Sarah McGuinness MBBS in collaboration with the Digital Communications Committee



## SYMPTOMS

There are three types of altitude illness:

- Acute mountain sickness (AMS) can show up within a few hours of reaching high places. Symptoms include headaches, tiredness, dizziness, loss of appetite, nausea and vomiting.
- High altitude cerebral edema (HACE) is due to brain swelling and usually happens after AMS. Symptoms include a severe headache, vomiting, feeling sleepy, unsteady and confused.
- High altitude pulmonary edema (HAPE) is due to fluid in the lungs. Symptoms include cough, shortness of breath, weakness and blue-tinged skin and nails (cyanosis).

Severe AMS, HACE and HAPE are life-threatening and need urgent medical care.



## PREVENTION

- Ascend gradually. Avoid going straight from low places to places above 2500m (8,000ft). Once over 3000m (9,800ft), increase sleeping altitude by less than 500m (1,600ft) per day, with a rest day every 3 days.
- See your health care provider before travel. They may suggest medicines like acetazolamide (Diamox) to reduce symptoms.
- Drink plenty of water, avoid alcohol and take it easy in the first 48 hours at altitude.
- Travel with experienced guides and check that your insurance covers emergency evacuation.
- Coca leaves, ginkgo biloba, and garlic don't prevent altitude illness, despite popular beliefs.



## TREATMENT

- Know the signs of altitude illness and let others know if you feel unwell.
- If you have symptoms, don't go higher until you feel better.
- Mild symptoms like headache or fatigue can usually be managed with rest and pain relief.
- Serious symptoms - like trouble breathing, confusion, or trouble walking - are emergencies.
- Descend to a lower altitude right away if serious symptoms appear. Going lower can save your life.



## MORE INFORMATION

Travellers are advised to check official health information from their own country, such as:

- Centers for Disease Control and Prevention, United States: <https://wwwnc.cdc.gov/travel/page/travel-to-high-altitudes>
- Travel Health Pro, United Kingdom: <https://travelhealthpro.org.uk/disease/12/altitude-illness>
- Medical Expeditions Travel at High Altitude Booklet, available in multiple languages: <https://www.medex.org.uk/the-medex-book/>

## REFERENCES

1. Hackett PH, Shlim DR. High-Altitude Travel and Altitude Illness. CDC Yellow Book: Health Information for International Travel. 2026. <https://www.cdc.gov/yellow-book/hcp/environmental-hazards-risks/high-altitude-travel-and-altitude-illness.html>
2. Luks AM et al. Wilderness Medical Society Clinical Practice Guidelines for the Prevention, Diagnosis, and Treatment of Acute Altitude Illness: 2024 Update. Wilderness Environ Med. 2024; 35(1\_suppl):2S-19S. <https://doi.org/10.1016/j.wem.2023.05.013>



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