



Dear Athlete:

Welcome to the Mile High City. The Medical Committee wishes you great success during your competitions here in Denver, Colorado. We have included this letter to inform you of the unique aspects of the climate and altitude that will affect you during your visit. We hope that this information will help you to enjoy your visit to our city, compete at your best and prevent any serious injury or illness.

ALTITUDE

Denver sits at the foot of the Rocky Mountains at an altitude of 5,280 feet. Consequently, the air is "thinner" here.

What does this mean for athletes?

Because of the altitude, it is harder for your blood to deliver oxygen to working muscles and the brain. You may experience more rapid fatigue or breathlessness while competing. However, you may also feel the effects of the altitude during your regular daily activities. Typically this is limited to headache and getting winded on stairs or brisk walks. Although it is unusual at elevations in and around Denver, some people may experience more profound symptoms of Acute Mountain Sickness (AMS). In addition to headache, symptoms include difficulty sleeping, nausea/vomiting, dizziness and fatigue.

What can I do to prevent altitude sickness?

- (1) Drink plenty of water a few days before and during your stay here in Denver. The body's mechanism to stimulate thirst lags behind the loss of water. Just because you don't feel thirsty, doesn't mean you aren't dehydrated.
- (2) If at all possible, arrive in Denver 24-48 hours before your first competition to get used to the altitude.
- (3) Avoid caffeine-containing drinks such as soda, tea or coffee. Caffeine increases urine production and therefore depletes your body of fluids. If you are planning on traveling to the mountains, we recommend doing so after your competition, therefore, allowing your body more time to adjust.

SUN/HEAT EXPOSURE

Because of its altitude, there is less atmosphere over Denver to absorb ultraviolet (UV) rays, the invisible light that causes sunburns. Many people also think Denver is cool in the summer due to the altitude. The average daily temperature in Denver in the first week of August is 88° F but can range as high as 103°. The average humidity is 30%.

What does this mean for athletes?

As little as 15 minutes of direct sun exposure can lead to painful sunburns. The intense sunshine and heat can also lead to heat illnesses such as heat cramps, heat exhaustion and heat stroke. This becomes more likely if you are exercising heavily.

- **Heat Cramps:** severe muscle spasms usually in the arms, legs and abdomen that usually occur after work or athletic activity is complete
- **Heat Exhaustion:** characterized by fatigue, irritability, headache, dizziness, vomiting and muscle cramps, flushed hot skin, high heart rate and, very rarely, elevated temperature

- **Heat Stroke:** a medical emergency characterized by the same symptoms as Heat Exhaustion PLUS body temperature over 105 degrees and problems with the central nervous system such as confusion, loss of consciousness or seizures

What can I do to prevent sunburn?

It is very important to apply a sunblock with an SPF (sun protection factor) of 15 or higher twice daily (and more frequently if sweating considerably) to avoid getting burned. If your sport allows, sunglasses with UVA/UVB protection and hats with a brim are also recommended. Seek shade when not on the field.

What can I do to prevent heat illness?

Drink plenty of water before, during and after competition! Drink plenty of water before, during and after competition! Drink plenty of water before, during and after competition! During half time or when on the sidelines, rest in the shade if possible. Take frequent breaks from competition. You may also want to consider bringing a spray bottle with water to mist yourself on the sidelines. Fanning moist (not wet) skin is a rapid and effective way to keep cool. Wear light-weight, light-colored clothing. Synthetic fabrics (polyester, nylon) allow better evaporation of sweat and therefore more effective cooling than cotton.

What do I do if I think I have heat illness?

Alert your coach, delegation head or one of the medical staff immediately. Get yourself out of the heat and sunshine.

ATHLETES WITH MEDICAL CONDITIONS

- 1) Remember to bring any daily medications and/or rescue medications with you to Denver.
 - a. If you have severe allergies, BRING YOUR EPI-PEN if prescribed.
 - b. If you have asthma, BRING YOUR INHALER and SPACER
- 2) Carry your rescue medications with you to your venue/competition.
- 3) Alert Medical Staff if you are at all concerned that you are having any symptoms of illness.



**The Children's Hospital
Colorado**