
EPINEPHRINE AND MONTANA INTERSCHOLASTIC CYCLING LEAGUE

WHAT IS ANAPHYLAXIS:

Anaphylaxis is a severe, rapid and potentially life-threatening allergic reaction. It occurs when your immune system overreacts to a trigger (such as a food, medication or insect sting) and floods your body with chemicals. This causes blood vessels to dilate (dropping blood pressure) and airways to narrow (causing difficulty breathing). Anaphylaxis requires immediate life-saving treatment with epinephrine.

Note: Approximately 25% of life-threatening anaphylactic reactions requiring epinephrine are in individuals whose allergy was previously unknown. This means these persons did not know they had a severe allergy and are not carrying a personal EpiPen.

WHAT IS EPINEPHRINE:

Epinephrine (also known as adrenaline) is a naturally occurring hormone and neurotransmitter that the body releases during times of stress or danger. When administered as a medication, epinephrine rapidly counteracts the life-threatening effects of anaphylaxis by relaxing the muscles around the airways to improve breathing, constricting blood vessels to raise dangerously low blood pressure, reduce tissue swelling (such as of the tongue and throat) and slowing the progression of the allergic reaction. Anaphylaxis is extremely rapid in onset and can worsen within minutes. Epinephrine is the first and most effective treatment and should be administered immediately when a severe allergic reaction is suspected.

RISKS OF USING EPINEPHRINE:

When considering stock epinephrine for coaches (e.g., an EpiPen), it is important to understand that the medical consensus is that the risk of not treating anaphylaxis is far greater than the risk of administering epinephrine. Common side effects of epinephrine are generally mild and short-lived, including:

- Increased heart rate
- Feeling nervous, anxious, or jittery
- Trembling or shaking
- Headache
- Dizziness
- Sweating
- Nausea

These effects typically resolve as the medication wears off (within 1-2 hours).

Serious side effects are uncommon when epinephrine is administered at the recommended dose through an auto-injector (e.g., EpiPen). In people with significant underlying heart disease, epinephrine can occasionally cause abnormal heart rhythms, chest pain or elevated blood pressure. However, these risks are primarily a concern in older adults or individuals with known cardiovascular disease - not in the typical youth athlete population.

WHY MT NICA CORE MEDICAL STAFF SHOULD HAVE ACCESS TO EPINEPHRINE:

The key point emphasized by organizations such as the American Academy of Allergy, Asthma and Immunology, the American College of Allergy, Asthma and Immunology and the World Allergy Organization is: The benefits of giving epinephrine far outweigh the risks. In a life-threatening allergic emergency, there is no medical condition that would make withholding epinephrine the safer choice.

In other words, if a person appears to be experiencing a severe allergic reaction, medical experts recommend giving epinephrine even if there is some uncertainty about the diagnosis. Delaying treatment has been consistently associated with worse outcomes and fatalities.

For an outdoor youth sports organization, this is particularly relevant because:

- Athletes, coaches, volunteers or spectators may experience a first-time allergic reaction.
- Remote trail systems and outdoor venues can increase emergency response times.
- Epinephrine can temporarily stabilize a person and buy critical time until EMS arrives.
- The consequences of an unnecessary dose are typically mild and transient, whereas untreated anaphylaxis can be fatal.

All 50 states now allow schools to maintain and administer stock epinephrine for severe allergic reactions and anaphylaxis, reflecting the broad medical consensus that rapid access to epinephrine saves lives. Severe allergic reactions can occur without warning, including in individuals with no previously diagnosed allergy, and many people experiencing anaphylaxis do not have immediate access to epinephrine. Because anaphylaxis can become fatal within minutes, having trained head coaches carry stock epinephrine (e.g., EpiPen) provides an important safety measure and may offer a critical life-saving intervention while emergency medical services are en route.