

16 August 2009



IMSA Coaches:

As another sports season is upon us, we must all be vigilant for heat illnesses in our athletes. Heat illnesses are best prevented by acclimatization, adapting activity to the weather, and proper hydration. This memo will detail various guidelines on how to use these measures as well as how to recognize a heat illness.

Acclimatization is the process by which your body adapts to its overall environment. The body will change its use of water, management of electrolytes, and how it actually approaches the task of dissipating heat. Unfortunately, there is no set time frame for this process to take place. Research suggests 1-2 weeks of activity in an environment is generally enough time for acclimatization. Therefore, these first few weeks of the season are when we shall have to watch the athletes the most closely as they adapt to the heat, humidity, and activity level.

Adapting the athletes' activity in regards to the weather is absolutely essential to the prevention of heat illness and it is also the easiest variable to control. The following table contains the general standards I will be utilizing to determine appropriate precautions for practices:

Temperature (°F)	Relative Humidity (%)	Action for Practices
80 to 90	<70	No changes
80 to 90	>70	Regular rest breaks are necessary; wear breathable and loose clothing
90 to 100	<70	
90 to 100	>70	Practices shall be shortened and modified
> 100	> 70	Practices shall be cancelled

Practices will be cancelled if a heat index is calculated to be greater than 130 °F. It is possible to reach this heat index even if it is cooler than 100 °F, but it requires extremely high humidity. A measurement of the heat index shall be taken on any and all days that pose a risk to the athletes. Coaches shall be contacted by Mike or me regarding any need to make the above changes. However, if you have not heard from one of us regarding practices and you are concerned about the heat, err on the side of caution and modify practice. Also, you may contact me in my office or on my cell, and I will take a measurement for you.

Proper hydration for athletes is extremely important for their safety in the heat as well as for their general performance regardless of the environment. I would suggest that you use these hydration strategies with your athletes. It is good to keep in mind that one gulp of water is about 1 fluid ounce. While these strategies are not a guarantee to prevent heat illness, they will significantly reduce the risks as well as contribute to their overall well being.

Pre-Exercise Hydration	2-3 hours before activity: 17-20 fl oz. of water or sports drink 10-20 minutes before activity: 7-10 fl oz. of water or sports drink
Hydration during Exercise	Every 10-20 minutes: 7- 10 fl oz. of water or sports drink
Post-Exercise Hydration	Within 30-60 minutes of exercise: Replace water, carbohydrates, and electrolytes lost during exercise.

As coaches, you will be spending far more time with your athletes than I shall. Each of you must be my eyes and ears for heat illnesses. While it would be too lengthy to describe every heat illness, the signs and symptoms of dehydration are very similar to various heat illnesses and dehydration is usually present in heat illness. A dehydrated athlete will exhibit thirst, irritability, general discomfort, headache, weakness, dizziness, cramps, nausea, vomiting, and/or decreased performance. It is important to note that one should not rely on thirst as indication to drink as the thirst mechanism does not kick in until one is already dehydrated. If one of your athletes begins to show any of the above signs and symptoms, have them stop practicing and contact me immediately.

Thank you for your time and assistance in these matters. These guidelines will help to prevent a major incident. If at any time you have questions, comments, or concerns, please do not hesitate to call me or stop into my office.

Sincerely,

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