"PREVENTION OF HEAT ILLNESS"

Practice or competition in hot and/or humid environmental conditions poses special problems for student-athletes. Heat illness is a primary concern in these conditions. Although deaths from heat illness are rare, constant surveillance and education are necessary to prevent heat-related problems.

The following practices should be observed:

1. Pursuant to ARTICLE V, HEALTH, Preparticipation Physical Evaluation Necessary Before Pupil Begins Practice, of the PIAA By-Laws, identify any history of previous heat illness or heat-related condition in the student-athlete.

2. General conditioning provides only partial heat acclimatization. Therefore, student-athletes should be exposed gradually to hot and/or humid environmental conditions over a period of seven (7) to ten (10) days to provide better heat acclimatization. Each exposure also should involve a gradual increase in the amount of exercise that is undertaken over a period of days to weeks until the exercise intensity and duration is comparable to that likely to occur in competition. If conditions are extreme, training or competition should be held during a cooler time of the day.

3. When protective gear and clothing must be worn, frequent rest periods should be scheduled so that the gear and clothing can be loosened to allow evaporation of sweat and other forms of heat loss. During the acclimatization process, it may be advisable to use a minimum of protective gear and clothing and to Practice in T-shirts, shorts, socks and shoes. Excessive tape and outer clothing that restrict sweat evaporation should be avoided. Rubberized suits should never be used.

4. Regular measurements of environmental conditions are recommended, including the wet-bulb temperature, dry-bulb temperature and globe temperature. Thus, the potential impact of humidity, air temperature and solar radiation are assessed. Portable devices are available for making such measurements, and the person responsible for taking such measurements should identify those devices. A wet-bulb temperature higher than 75 degrees Fahrenheit or warm-weather humidity above 90 percent may represent dangerous conditions that are made more severe if the sun is shining. A wet-bulb globe temperature (WBGT) higher than 82 degrees Fahrenheit (28 degrees Celsius) suggests that all activity be curtailed or discontinued. An alternative guide is a Heat Index Chart. Use of cooling methods may include, but are not limited to, spray bottles, ice tubs, ice towels, ice “tacos”, shaded areas and small portable pools with ice.

5. Dehydration (hypohydration) must be avoided because it hinders performance and can result in profound heat illness. Cool water must be readily available. Student-athletes should be encouraged to drink as much and as frequently as comfort allows. For participation periods up to two (2) hours in duration (either Practice or competition), most weight loss represents water loss, and that fluid loss should be replaced as soon as possible. Cool water is the recommended fluid replacement during both Practice and competition. Electrolyte solutions are not needed and salt tablets should not be used. A normal, healthful diet will replace salt loss.
6. By recording the body weight of each student-athlete before and after workout or Practice, progressive hypohydration or loss of body fluids can be detected, and the potential harmful effects of hypohydration can be avoided. It is recommended that, for every pound of weight loss that occurs, sixteen (16) ounces of cool water should be consumed. Those who lose three (3) percent of their body weight or more over a period of several days should be medically evaluated.

7. Some student-athletes may be more susceptible to heat illness than others. Susceptible individuals include: those not heat-acclimatized, those in relatively poor physical condition, those with excess body fat, those who regularly push themselves to capacity, those with a history of heat illness and those with any febrile condition or other metabolic disorder.

8. Student-athletes should be informed of and monitored for signs of heat illness such as: light-headedness or unsteadiness, cramping, pale or flushed skin, nausea, excessive fatigue, and/or rapid and weak pulse. Signs of advanced heat illness are cessation of sweating, disturbance of vision, and/or incoherency.

Any form of heat illness should be treated as a medical emergency, requiring the prompt attention of a medical professional. Immediate evaluation and treatment is essential in order to prevent serious health consequences to the student-athlete.

For additional information and education on prevention of heat illness, access the FREE Heat Illness Prevention course at NFHSLearn.com.

https://nfhslearn.com/courses/61140/heat-illness-prevention