

**Cypress Fairbanks Athletics**  
**Heat and Hydration Recommendations & Policy**

**Heat and Hydration General Information**

Early fall football, and cross-country, practices are conducted in very hot and humid weather in many parts of the United States. Due to the equipment and uniform needed in football, most of the heat problems have been associated with football. During hot weather, the athlete is subject to the following:

*Heat Cramps* – Painful cramps involving abdominal muscles and extremities caused by intense, prolonged exercise in the heat and depletion of salt and water due to profuse sweating.

*Heat Syncope* – Weakness, fatigue and fainting due to loss of salt and water in sweat and exercise in the heat. Predisposed to heatstroke.

*Heat Exhaustion (Water Depletion)* – Excessive weight loss, reduced sweating, elevated skin and core body temperature, excessive thirst, weakness, headache and sometimes unconsciousness.

*Heat Exhaustion (Salt Depletion)* – Exhaustion, nausea, vomiting, muscle cramps, and dizziness due to profuse sweating and inadequate replacement of body salts.

*Heatstroke* – An acute medical emergency related to thermoregulatory failure. Associated with nausea, seizures, disorientation, and possible unconsciousness or coma. It may occur suddenly without being preceded by any other clinical signs. The individual is usually unconscious with a high body temperature and a hot dry skin (heatstroke victims, contrary to popular belief, may sweat profusely)

It is believed that the above mentioned heat stress problems can be controlled provided certain precautions are taken. According to the American Academy of Pediatrics Committee on Sports Medicine, heat related illnesses are preventable.

**General Recommendations:**

The following practices and precautions are recommended to prevent heat related illnesses:

1. Educate student athletes and parents about heat illnesses and prevention in compliance with Texas Education Code.
2. Each athlete should have a physical exam with a medical history when first entering a program and an annual health history update. History of previous heat illness and

- type of training activities before organized practice begins should be included. State high school association's recommendations should be followed.
3. It is clear that top physical performance can only be achieved by an athlete who is in top physical condition. Lack of physical fitness impairs the performance of an athlete who participates in high temperatures. Coaches should know the **PHYSICAL CONDITION** of their athletes and set practice schedules/activities accordingly.
  4. Along with physical conditioning, the factor of acclimatization to heat is important. Acclimatization is the process of becoming adjusted to heat and it is essential to provide for **GRADUAL ACCLIMATIZATION TO HOT WEATHER**. It is necessary for an athlete to exercise in the heat if he/she is to become acclimatized to it. It is suggested that a graduated physical conditioning program be used. Final stages of acclimatization to heat are marked by increased sweating and reduced salt concentration in the sweat.
  5. Staff athletic trainers or campus coaches/coordinators will modify work to rest ratios, practice schedules, and amount of equipment based on the environment.
  6. The old idea that water should be withheld from athletes during workouts has **NO SCIENTIFIC FOUNDATION**. The most important safeguard to the health of the athlete is the replacement of water. Water must be on the field and readily available to the athletes at all times. It is recommended that a minimum of five minutes be scheduled for a water break every half hour of heavy exercise in the heat. **WATER SHOULD BE AVAILABLE IN UNLIMITED QUANTITIES**. Check and be sure athletes are drinking water. Cold water is preferable. Drinking ample water before practice or games has also been found to aid performance in the heat.
  7. Salt should be replaced daily. Modest salting of foods after practice or games will accomplish this purpose. Salt tablets are not recommended. **ATTENTION MUST BE DIRECTED TO REPLACING WATER – FLUID REPLACEMENT IS ESSENTIAL**.
  8. Athletes should weigh each day before and after practice and have their **WEIGHT CHARTS CHECKED**. Generally a three percent weight loss through sweating is safe, and over a three percent weight loss is in the danger zone. If over a three percent weight loss is recorded, the athlete should not be allowed to practice in hot and humid conditions. Observe the athletes closely under all conditions. Do not allow athletes to practice until they have adequately replaced their weight.
  9. Observe athletes carefully for signs of trouble, particularly athletes who lose significant weight and the eager athlete who constantly competes at his/her capacity. Some trouble signs are nausea, incoherence, fatigue, weakness, vomiting, cramps, weak rapid pulse, visual disturbance and unsteadiness.
  10. Athletes with special medical conditions notify coaching and/or athletic training staff and have the ability to remove self from practice
  11. Cooling by evaporation is proportional to the area of the skin exposed. In extremely hot and humid weather, reduce the amount of clothing covering the body as much as possible.
  12. Know what to do in case of an emergency and have your emergency plans written with copies to all your staff. Be familiar with immediate first aid practice and prearranged procedures for obtaining medical care, including ambulance service. You

are required by UIL regulations to train your participants for how to handle a medical emergency situation.

13. Know both the temperature and humidity. The greater the humidity, the more difficult it is for the body to cool itself.
14. To identify weather stressing conditions, regular measurements of environmental conditions will be taken daily.

## **Means of Monitoring**

- At the high school level campus athletic trainers will use the telvent weather system or one of the below approved websites to monitor severe weather activity.
- At the middle school level and any site without an athletic trainer, the campus coordinators can use the following approved websites to monitor weather.
  - <http://www.accuweather.com/>
  - <http://www.weather.com/>
  - <http://www.noaa.gov/>
  - <http://www.wunderground.com/>
- In the event of severe weather situations a district wide email will be sent out by the athletic office no later than 1:30PM to announce the suspension of athletic activity for a designated amount of time.

**SUMMARY** – The main problem associated with exercising in the hot weather is water loss through sweating. Water loss is best replaced by allowing the athlete unrestricted access to water. Water breaks two or three times per hour are better than one break an hour. Probably the best method is to have water available at all times and to allow the athlete to drink water whenever he/she needs it. Never restrict the amount of water an athlete drinks, and be sure the athletes are drinking the water. The small amount of salt lost in sweat is adequately replaced by salting food at meals. Talk to your medical personnel concerning emergency treatment plans.

**\*\*\*See chart on next page for specific actions in extreme heat conditions**

## Extreme Heat Policy

95°-99° or Heat Index of 100-104	<ul style="list-style-type: none"> <li>• Access to cool water is unlimited during all practices regardless of conditions.</li> <li>• Monitor for heat related medical emergencies</li> <li>• All items listed in “General Recommendations Section above”</li> </ul>
100°-104° or Heat Index of 105-110	<ul style="list-style-type: none"> <li>• Items listed in section “95°-99° or Heat Index of 100” and “General Recommendations” above</li> <li>• Shorts and shoulder pads</li> <li>• Water Breaks every 30 minutes for no less than 5 minutes.</li> <li>• A outdoor practice that does not exceed a 2 hour maximum.</li> </ul> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"> <li>• Items listed in section “95°-99° or Heat Index of 100” and “General Recommendations” above</li> <li>• Full pads</li> <li>• Water Breaks every 20 minutes for no less than 5 minutes.</li> <li>• A outdoor practice that does not exceed a 1.5 hour maximum.</li> <li>• HS Conditioning should take place without helmets and shoulder pads, JH conditioning should be moved indoors</li> </ul>
105° or Heat Index of 110-114	<ul style="list-style-type: none"> <li>• Items listed in section “95°-99° or Heat Index of 100” and “General Recommendations” above</li> <li>• Shorts, T-shirts and Helmets Only</li> <li>• Water Breaks every 20 minutes for no less than 10 minutes.</li> <li>• No outdoor conditioning. Conditioning can take place indoors</li> <li>• A outdoor practice that does not exceed a 1.5 hour maximum.</li> </ul> <p>• <i>No outdoor middle school activities, activities must be indoors</i></p>
110° or Heat Index of 115	<i>All outdoor activity is suspended</i>