



**HEAT & HUMIDITY PROCEDURES  
FOR ATHLETICS**

**FCPS SPONSORED ATHLETIC EVENTS (Practices and Contests):**

It is each coach’s responsibility to be trained, understand and follow the heat and humidity procedures. The athletic directors and administrators at each school should monitor the coaches to ensure they respond appropriately.

Coaches will evaluate weather related conditions either by direct measurement on site or through internet services with conditions at the nearest zip code. This should be done before practice begins and as conditions warrant.

**CONSULT THESE WEBSITES FOR DAILY UPDATES:**

- AccuWeather – [www.accuweather.com](http://www.accuweather.com)
- The Weather Channel – [www.weather.com](http://www.weather.com)
- The National Weather Service – [www.srh.noaa.gov](http://www.srh.noaa.gov)
- Air Quality Index – [www.airnow.gov](http://www.airnow.gov)

**HEAT, HUMIDITY, AND AIR QUALITY CHART**

The following chart will be used to determine limitations posed on athletic activities. In game situations, game officials and administrators on duty, in consultation with certified athletic trainers and coaches, will make decisions on heat and humidity.

Temperature	Humidity	Air Quality Index	Restrictions
Less than 89 F	Under 70 %	Code Green Good Air Quality	No restrictions
80 – 89 F	70 % or more	Code Yellow Moderate Air Quality	Monitor carefully Shortened practice Frequent water breaks Football – minimum pads
90 - 99 F	70 % or less	Code Yellow Moderate Air Quality	Monitor carefully Shortened practice Frequent water breaks Football – minimum pads
90 – 99 F	70 % or more	Code Orange Approaching Unhealthy	Monitor carefully Shortened practice Mandatory water and shade every 15 – 20 minutes T-shirt and shorts only
100 + F	Any Value	Code Red Unhealthy Air Quality	Cancel, postpone, or suspend activities

# HEAT INDEX CHART

Temperature (°F)	Relative Humidity (%)												
	40	45	50	55	60	65	70	75	80	85	90	95	100
110	136	-	-	-	-	-	-	-	-	-	-	-	-
108	130	137	-	-	-	-	-	-	-	-	-	-	-
106	124	130	137	-	-	-	-	-	-	-	-	-	-
104	119	124	131	137	-	-	-	-	-	-	-	-	-
102	114	119	124	130	137	-	-	-	-	-	-	-	-
100	109	114	118	124	129	136	-	-	-	-	-	-	-
98	105	109	113	117	123	128	134	-	-	-	-	-	-
96	101	104	108	112	116	121	126	132	-	-	-	-	-
94	97	100	102	106	110	114	119	124	129	135	-	-	-
92	94	96	99	101	105	108	112	116	121	126	131	-	-
90	91	93	95	97	100	103	106	109	113	117	122	127	132
88	88	89	91	93	95	98	100	103	106	110	113	117	121
86	85	87	88	89	91	93	95	97	100	102	105	108	112
84	83	84	85	86	88	89	90	92	94	96	98	100	103
82	81	82	83	84	84	85	86	88	89	90	91	93	95
80	80	80	81	81	82	82	83	84	84	85	86	86	87

# AIR QUALITY INDEX CHART

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101-150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151-200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201-300	Health alert: everyone may experience more serious health effects.
Hazardous	> 300	Health warnings of emergency conditions. The entire population is more likely to be affected.

## HEAT RELATED ILLNESS: SIGNS AND SYMPTOMS

ILLNESS	SYMPTOMS	FIRST AID	RETURN TO PLAY
Heat Cramps (Mild)	Involuntary Muscle Spasms	Hydration Stretching Relaxation Massage	Symptom Free Monitor Carefully
Heat Exhaustion (Moderate)	Headache, nausea, vomiting, chills, dizziness, rapid pulse, cool or clammy skin, pale, excessive sweating	Shade or AC Remove excessive clothes/equipment Lie with feet above heart Rehydrate if no nausea Monitor HR, BP, CNS status and core temperature	Symptom Free Avoid intense activity for several days If medical treatment was sought, must have doctor release to return
Heat Stroke (Medical Emergency)	Disorientation, slurred speech, confusion or aggressive behavior, dry skin, flushed and hot skin, rapid/pounding pulse.	Call 911 Aggressive whole body cooling (cold water immersion)	Only with doctor release and specific return to play instructions

		Fans, Ice, Cold Towels if immersion not available	Return slowly under supervision of Health Care Professional
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**INSTRUCTIONS TO ATHLETES:**

Athletes will be instructed to remove themselves from any athletic activity if they feel overheated. If an athlete has any symptoms of heat related illness, he/she will be removed from any athletic activity and given reasonable and prudent immediate care by the training and/or coaching staff. The athlete’s parent/guardian will be notified and advised to contact their physician or go to the local emergency room if symptoms persist or worsen. Athletes with any heart related illness will be re-evaluated by the Certified Athletic Trainer before being allowed to return to activity. The coach will verify the athlete’s practice status with the certified athletic trainer prior to the athlete returning to activity.

**PREVENTION OF HEAT RELATED ILLNESS:**

- a. Allow unlimited access to water/fluids at all practices and games.
- b. Watch players who have a high body fat; have to work harder for same results.
- c. Watch players who have smaller bodies; less surface area to get rid of heat.
- d. Watch those with more clothing/equipment; the heat is trapped against their bodies.
- e. Encourage athletes to drink fluids at same rate that they lost them (work hard, drink a lot).
- f. Talk to athletes and coaches in preseason about prevention of heat illness (Gatorade video).
- g. Discourage weight loss if it is only fluid loss (wrestlers, etc.).
- h. Set up a weight chart and have players weigh in/out/in before practice; measure fluid loss.
- i. Check urine; dark concentrated urine means dehydrated, clear means hydrated.

- j. Those who are not acclimatized are at a greater risk. Acclimatization is the process where the body learns to function more efficiently in the heat. For example, in the spring 75° feels warm, but when you are acclimatized to the heat in the summer 75° feels cold!
- k. Those athletes who are in poor physical condition are at higher risk. For example, the ones who did not do summer conditioning are at greater risk in the fall.
- l. Athletes who have been ill, have a fever, or are recovering from an illness are at greater risk.

### **FLUID REPLACEMENT:**

- a. Athletes must drink past the point where their thirst is quenched.
- b. Fluids should be available freely to all athletes at all times.
- c. Athletes must replenish fluids to the weight they were before practice.
- d. Athletes should check their urine color before practice; if it is dark, they are still dehydrated and should drink before practice.
- e. Cold water is an excellent replacement fluid.
- f. Fluids other than water:
  - 1. Sport drinks are generally only necessary during long-term activities. They help replenish sugar and minerals lost in sweat. However, they are not harmful at any time.
  - 2. Avoid drinks high in sugar (sodas) due to slow absorption.
  - 3. Avoid drinks high in caffeine: tea, sodas, and coffee. They cause urination.