



PAULDING COUNTY  
SCHOOL DISTRICT

*Focused on Learning*

**GUIDELINES FOR OUTDOOR ATHLETIC/  
EXTRACURRICULAR ACTIVITIES DURING  
EXTREME HOT AND HUMID WEATHER**

Revised June 2010



PAULDING COUNTY  
SCHOOL DISTRICT  
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*The following are the Paulding County School District guidelines for outdoor extracurricular activities during extreme hot and humid weather.*

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*Head Coach/Band Director*

*As the parent of \_\_\_\_\_, I verify that I have been informed of the Paulding County School District guidelines for outdoor extracurricular activities during extreme hot and humid weather.*

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*Parent Signature*

*Date*

**Please return signed and dated form to the head coach or band director.**



# PAULDING COUNTY SCHOOL DISTRICT

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## **GUIDELINES FOR OUTDOOR EXTRACURRICULAR ACTIVITIES DURING EXTREME HOT AND HUMID WEATHER**

\* The head coach of each of these teams (football, cross-country, marching band and softball) will hold a parent meeting prior to the first practice. Among the other issues, the PCSD guidelines for outdoor extracurricular activities during extreme hot and humid weather must be shared. Coaches should have parents sign the form and keep them on file for the season. ***No student should be outside on the practice field without a signed form on file.***

\* Each school shall have and use a digital psychrometer for the following activities: football, cross-country, band and softball. The digital psychrometer is used to measure the Wet Bulb Temperature (WBT), which is derived by evaluating the combined dry air temperature, humidity, ground radiated heat and the wind speed at that particular location. Conditions are subject to change during the practice/activity; therefore, measurements should be taken at regular intervals throughout the practice/activity. (***every 30 mins***) Measurements should be taken at the practice/activity site.

a. All Activities: Monitor and follow all guidelines.

b. Will be required to measure and document the Wet Bulb Temperature (WBT) ***at least*** through the month of September, during football spring practice in May, and other times when conditions warrant. This can be done by the school athletic administrator, athletic trainer or a football coach. A reading should be done every ***30 minutes*** and recorded on the county provided form. These forms will be kept on file at the school throughout the season. ***Each activity will also send copies of their weekly recordings to the District Athletic Director.***

\* Practices (prior to school starting) and/or games should be held early in the morning and later in the evening to avoid times when environmental conditions are generally more severe.

Once school begins, athletes in the outdoor sports shall be allowed to have water bottles with them during the day. If the students create a disruption with the water, the principal will have the discretion to appropriately deal with the situation.

\* An unlimited supply of cold water shall be available to participants during practices and games.

a. Coaches/Supervisors shall inform all students participating that cold water is always available or accessible and they will be given permission anytime he/she asks for water.

b. Hydration and fluid replacement is a daily process. Students should hydrate themselves before, during, and after practice. Meals should include an appropriate amount of fluid intake in addition to a healthy diet.

\* Give adequate rest periods. Remove appropriate equipment or clothing when possible. Exposed skin cools more efficiently.

a. Football players shall be allowed to remove helmets.

b. Shoulder pads should be removed if conditions warrant.

- \* Gradually acclimatize participants to the heat.
  - a. Research indicates 80% acclimatization may be achieved in 7-10 days, but could take up to 14 days. In some cases, it may take several weeks to become fully acclimated.
  - b. The length and intensity of practice should be adjusted according to the WBT until acclimatization occurs.
- \* Athletic participants should weigh in before practice and weigh out after to monitor water loss to identify those who are becoming dehydrated. **(REQUIRED FOR FOOTBALL through August; Optional for other sports)** *A 3% weight loss chart is included in this packet. Loss of 3% or 3 pounds of total body weight will result in suspension of participation until the weight has been regained. All exclusions will be documented and that athlete will be identified as high risk.*
- \* Participants should wear clothes that are light in weight and color.
- \* Students who need careful monitoring include:
  - a. Overweight students
  - b. Weight control problems (fluctuation)
  - c. Those taking over-the-counter and prescription medication
  - d. Students who have done absolutely no exercise at all
- \* Be familiar with all heat related symptoms and corresponding treatments.
- \* Be familiar with any emergency and 911 procedures.
- \* Be familiar with the Wet Bulb Temperature Chart and utilize guidelines determining length of practice and rest periods.
- \* Any directives from the Central Office must be strictly followed.
- \* ***If an athlete's doctor informs the coaching staff or athletic trainer in writing that the athlete has suffered a heat-related illness during the season, the athlete MAY NOT participate until the doctor clears the athlete in writing.***
- \* ***Please note: Being in the Metro Atlanta Area we are also faced with Smog Alert issues. In addition to our established Heat Guidelines, the District Office will monitor local heat/smog conditions. Taken into account will be any National Weather Service Heat Advisories, Metro Atlanta Smog Alerts, WBT readings, and information from surrounding school districts. Based on this information, The District may advise additional restrictions.***
- \* Any questions or concerns should be addressed to David Colvard, Director of Athletics at (770) 443-8000.

## **COMBATING HEAT STROKE**

- Each athlete should have a complete physical examination with medical history and an annual health history update. History of previous heat illness and type of training activities before organized practices should be included.
- Acclimatize athletes to heat gradually by providing graduated practice sessions for the first seven to 10 days and other abnormally hot or humid days.
- Know both the temperature and the humidity since it is more difficult for the body to cool itself in high humidity. Use of digital psychrometer is required to measure the relative humidity. Anytime the wet-bulb-temperature (WBT) is over 73 degrees, practice should be altered (refer to the Wet Bulb Temp Chart). When the WBT reaches 82 degrees, no outdoor practice is allowed.
- Even though the Wet Bulb Temp (WBT) is within safe parameters, use extreme caution whenever the outside temperature is 90 degrees or higher.
- Adjust activity level and provide frequent rest periods. Rest in cool, shaded areas with some air movement and remove helmets and loosen or remove jerseys. Rest breaks should be followed as listed on the WBT chart.
- Provide adequate cold water replacement during practice. Water should always be available in unlimited quantities. Give water regularly.
- Coaches should not provide salt tablets.
- Clothing is important and a player should avoid using long sleeves, long stockings and any excess clothing. Never allow use of rubberized clothing or sweat suits.
- Some athletes are more susceptible to heat injury. These individuals are not accustomed to work in the heat, may be over-weight or may be the eager athlete who constantly competes at his capacity. Athletes with previous heart problems should be watched closely.
- Be familiar with the attached chart of heat illness symptoms and treatments.
- Parents and coaches should continually remind each athlete of their responsibility of eating well and drinking plenty of water during the day prior to practices.
- Athletes are to be continually reminded to let a coach know immediately if they feel different in the slightest way. A coach should then give them immediate attention.
- Athletes should be made aware that they can get water AT ANY time they request it during a period of extreme heat.



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## WET BULB TEMPERATURE CHART

| LEVEL                  | FAHRENHEIT WBT        | CELSIUS WBT           | PRACTICE HOURS   | BREAKS   | FLUIDS     |
|------------------------|-----------------------|-----------------------|--|--|------------|
| 1) Very Low Risk       | 59 degrees and lower  | 15 degrees and lower  | Reasonable   | As needed  | As Desired |
| 2) Low Risk            | 60-64 degrees         | 16-17 degrees         | Reasonable   | 5 minute break every 30 minutes                        | Cold Water |
| 3) Moderate Risk       | 65-72 degrees         | 18-22 degrees         | Use Caution  | 5 minute break every 20-30 minutes                     | Cold Water |
| 4) High Risk           | 73-75 degrees         | 23-24 degrees         | Use Caution  | 5 minute break every 20 minutes<br>FB-Remove Helmet    | Cold Water |
| 5) High Risk           | 76-78 degrees         | 24-25 degrees         | Use Extreme Caution<br><u>Max. 2 Hrs. outdoor practice</u>                                 | 5 minute break every 15-20 minutes<br>FB-Remove Helmet | Cold Water |
| 6) Very High Risk      | 79-81 degrees         | 26-27 degrees         | Practice time should be shortened with low intensity<br><u>Max 2 Hrs. Outdoor Practice</u> | 5 minute break every 10-15 minutes<br>FB-Helmets only  | Cold Water |
| 7) Extremely High Risk | 82 degrees and higher | 28 degrees and higher | NO OUTDOOR PRACTICE  | NO OUTDOOR PRACTICE                                    | Normal     |

### ADDITIONAL RECOMMENDATIONS FOR SPECIFIC SPORTS/ACTIVITIES:

**CROSS-COUNTRY:** *Water provided marathon style; Check in locations during the run; Running in pairs as much as possible; Running in shaded areas and on soft surfaces; Runs in early morning and/or late evening; Keep water log for each runner during the school day; Possibly provide small walkie talkies or cell phones for emergencies;*

**MARCHING BANDS:** *Practice with water bottles; Tents and/or towers available for shade as needed; move off blacktop areas during breaks; Use of spray pumps to cool off members; Outdoor practices in early mornings and late evenings when possible;*



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## HEAT ILLNESS SYMPTOMS AND TREATMENTS

(As Recommended by the National Athletic Trainers Association, July 1999)

Heat illness is used to define several types of afflictions suffered when an individual experiences a rising body temperature and dehydration. Following are the different forms identified by the NATA.

### Illness

Heat Cramps

Heat Exhaustion

Heat Stroke

### Symptoms

- Muscle spasms caused by an imbalance of water and electrolytes in muscles
- Usually affects the legs and abdominal muscles
- Can be a precursor to heat stroke
- Normal to high temperature
- Heavy sweating
- Skin is flushed or cool and pale
- Headaches, dizziness
- Rapid pulse, nausea, weakness
- Physical collapse may occur
- Can occur without prior symptoms, such as cramps
- Body's cooling system shuts down
- Increased core temperature of 104° F or greater
- If untreated it can cause brain damage, internal organ damage, and even death if needed
- Sweating stops
- Shallow breathing and rapid pulse
- Possible disorientation or loss of consciousness
- Possible irregular heartbeat and cardiac arrest

### Treatment

- Rest in a cool place
- Drink plenty of fluids
- Proper stretching and massaging
- Application of ice in some cases
- Get to a cool place immediately and out of the heat
- Drink plenty of fluids
- Remove excess clothing
- In some cases, immerse in cool water
- Call 911 immediately
- Cool bath with ice packs near large arteries, such as neck, armpits, groin
- Replenish fluids by drinking or intravenously, if needed

# FLUID REPLACEMENT

(From the NATA)

| Weight Lost During Workout                 | Fluid Amount Needed To Refuel              |
|--|--|
| 2 pounds                                   | 32 oz. (4 cups or one sports drink bottle) |
| 4 pounds 64 oz. (8 cups or two bottles)    | 4 pounds 64 oz. (8 cups or two bottles)    |
| 6 pounds 96 oz. (12 cups or three bottles) | 6 pounds 96 oz. (12 cups or three bottles) |
| 8 pounds 128 oz. (16 cups or four bottles) | 8 pounds 128 oz. (16 cups or four bottles) |

## GUIDELINES FOR HYDRATION DURING EXERCISE

(From the NATA)

1. Drink 16-24 oz. of fluid 1 to 2 hours before the workout or competition.
2. Drink 4-8 oz. of water or sports drink during every 20 minutes of exercise.
3. Drink before you feel thirsty. When you feel thirsty, you have already lost needed fluids.



### 3% Weight Loss Chart

|          | A          | B         | C          | D         | E          | F         | G          | H         | I          | J         |
|----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
| <b>1</b> | <b>WGT</b> | <b>3%</b> | <b>WGT</b> | <b>3%</b> | <b>WGT</b> | <b>3%</b> | <b>WGT</b> | <b>3%</b> | <b>WGT</b> | <b>3%</b> |
| 2        | 125        | 121       | 176        | 171       | 227        | 220       | 278        | 270       | 329        | 319       |
| 3        | 126        | 122       | 177        | 172       | 228        | 221       | 279        | 271       | 330        | 320       |
| 4        | 127        | 123       | 178        | 173       | 229        | 222       | 280        | 272       | 331        | 321       |
| 5        | 128        | 124       | 179        | 174       | 230        | 223       | 281        | 273       | 332        | 322       |
| 6        | 129        | 125       | 180        | 175       | 231        | 224       | 282        | 274       | 333        | 323       |
| 7        | 130        | 126       | 181        | 176       | 232        | 225       | 283        | 275       | 334        | 324       |
| 8        | 131        | 127       | 182        | 177       | 233        | 226       | 284        | 275       | 335        | 325       |
| 9        | 132        | 128       | 183        | 178       | 234        | 227       | 285        | 276       | 336        | 326       |
| 10       | 133        | 129       | 184        | 178       | 235        | 228       | 286        | 277       | 337        | 327       |
| 11       | 134        | 130       | 185        | 179       | 236        | 229       | 287        | 278       | 338        | 328       |
| 12       | 135        | 131       | 186        | 180       | 237        | 230       | 288        | 279       | 339        | 329       |
| 13       | 136        | 132       | 187        | 181       | 238        | 231       | 289        | 280       | 340        | 330       |
| 14       | 137        | 133       | 188        | 182       | 239        | 232       | 290        | 281       | 341        | 331       |
| 15       | 138        | 134       | 189        | 183       | 240        | 233       | 291        | 282       | 342        | 332       |
| 16       | 139        | 135       | 190        | 184       | 241        | 234       | 292        | 283       | 343        | 333       |
| 17       | 140        | 136       | 191        | 185       | 242        | 235       | 293        | 284       | 344        | 334       |
| 18       | 141        | 137       | 192        | 186       | 243        | 236       | 294        | 285       | 345        | 335       |
| 19       | 142        | 138       | 193        | 187       | 244        | 237       | 295        | 286       | 346        | 336       |
| 20       | 143        | 139       | 194        | 188       | 245        | 238       | 296        | 287       | 347        | 337       |
| 21       | 144        | 140       | 195        | 189       | 246        | 239       | 297        | 288       | 348        | 338       |
| 22       | 145        | 141       | 196        | 190       | 247        | 240       | 298        | 289       | 349        | 339       |
| 23       | 146        | 142       | 197        | 191       | 248        | 241       | 299        | 290       | 350        | 340       |
| 24       | 147        | 143       | 198        | 192       | 249        | 242       | 300        | 291       | 351        | 340       |
| 25       | 148        | 144       | 199        | 193       | 250        | 243       | 301        | 292       | 352        | 341       |
| 26       | 149        | 145       | 200        | 194       | 251        | 243       | 302        | 293       | 353        | 342       |
| 27       | 150        | 146       | 201        | 195       | 252        | 244       | 303        | 294       | 354        | 343       |
| 28       | 151        | 146       | 202        | 196       | 253        | 245       | 304        | 295       | 355        | 344       |
| 29       | 152        | 147       | 203        | 197       | 254        | 246       | 305        | 296       | 356        | 345       |
| 30       | 153        | 148       | 204        | 198       | 255        | 247       | 306        | 297       | 357        | 346       |
| 31       | 154        | 149       | 205        | 199       | 256        | 248       | 307        | 298       | 358        | 347       |
| 32       | 155        | 150       | 206        | 200       | 257        | 249       | 308        | 299       | 359        | 348       |
| 33       | 156        | 151       | 207        | 201       | 258        | 250       | 309        | 300       | 360        | 349       |
| 34       | 157        | 152       | 208        | 202       | 259        | 251       | 310        | 301       | 361        | 350       |
| 35       | 189        | 183       | 209        | 203       | 260        | 252       | 311        | 302       | 362        | 351       |
| 36       | 159        | 154       | 210        | 204       | 261        | 253       | 312        | 303       | 363        | 352       |
| 37       | 160        | 155       | 211        | 205       | 262        | 254       | 313        | 304       | 364        | 353       |
| 38       | 161        | 156       | 212        | 206       | 263        | 255       | 314        | 305       | 365        | 354       |
| 39       | 162        | 157       | 213        | 207       | 264        | 256       | 315        | 306       | 366        | 355       |
| 40       | 163        | 158       | 214        | 208       | 265        | 257       | 316        | 307       | 367        | 356       |
| 41       | 164        | 159       | 215        | 209       | 266        | 258       | 317        | 307       | 368        | 357       |
| 42       | 165        | 160       | 216        | 210       | 267        | 259       | 318        | 308       | 369        | 358       |
| 43       | 166        | 161       | 217        | 210       | 268        | 260       | 319        | 309       | 370        | 359       |
| 44       | 167        | 162       | 218        | 211       | 269        | 261       | 320        | 310       | 371        | 360       |
| 45       | 168        | 163       | 219        | 212       | 270        | 262       | 321        | 311       | 372        | 361       |
| 46       | 169        | 164       | 220        | 213       | 271        | 263       | 322        | 312       | 373        | 362       |
| 47       | 170        | 165       | 221        | 214       | 272        | 264       | 323        | 313       | 374        | 363       |
| 48       | 171        | 166       | 222        | 215       | 273        | 265       | 324        | 314       | 375        | 364       |

|    |     |     |     |     |     |     |     |     |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 49 | 172 | 167 | 223 | 216 | 274 | 266 | 325 | 315 | 376 | 365 |
| 50 | 173 | 168 | 224 | 217 | 275 | 267 | 326 | 316 | 377 | 366 |
| 51 | 174 | 169 | 225 | 218 | 276 | 268 | 327 | 317 | 378 | 367 |
| 52 | 175 | 170 | 226 | 219 | 277 | 269 | 328 | 318 | 379 | 368 |