#### Madison Consolidated Schools Athletic Department Extreme Heat Guidelines

In the event of Extreme Heat, Madison Athletics will follow the guidelines from the National Athletic Trainer's Association for determining how outdoor practices and/or events will be run. Weather forecasts are sometimes hard to predict, so please be flexible as we work to make the best decisions possible for our student-athletes.

Madison Athletics will use WetBulb Globe Temperature (WBGT) as our baseline for decisions on home events and/or practices. The WBGT is a more accurate way of measuring the temperature and humidity as it measures the heat stress in direct sunlight, which takes into account temperature, humidity, wind speed, sun angle, and cloud coverage to a specific location.

We have two different WBGT measurements on Campus:

- 1. Madison's Weather Station: <u>Click Here</u> (Due to elevation of Weather Station please add 5 degrees WBGT listed to give a more accurate reading)
- 2. Handheld WBGT Reader

For away events we will be in communication with the opposing school's Athletic Department to determine the best course of action.

For practices, coaches may utilize alternative solutions, such as moving practices indoors, having practices later in evenings, morning practices before school, etc...

### **NATA Guidelines**

WBGT (°F)	Activity Guidelines and Rest Break Guidelines
<82.0	Normal activities: provide ≥3 separate rest breaks of minimum duration 3 min each during workout.
82.0-86.9	Use discretion for intense or prolonged exercise. Watch at-risk players carefully. Provide ≥3 separate rest breaks of minimum duration 4 min each.
87.0-89.9	Maximum practice time = 2 h. For football: players restricted to helmet, shoulder pads, and shorts during practice. All protective equipment must be removed for conditioning activities. For all sports: provide ≥4 separate rest breaks for minimum duration 4 min each.
90.0-92.0	Maximum length of practice = 1 h. No protective equipment may be worn during practice and there may be no conditioning activities. There must be 20 min of rest breaks provided during the hour of practice.
>92.1	No outdoor workouts, cancel exercise, delay practices until a cooler WBGT reading occurs.

Source: NATA Position Statement: Exertional Heat Illness, Journal of Athletic Training volume 50, number 9 2015, Table 5

## **BEAT THE HEAT**

Summer's high temperatures put student athletes at increased risk of heat illness. There are several types of heat illness. They range in severity, from heat cramps and heat exhaustion, which are common but not severe, to heat stroke, which can be deadly. Although heat illnesses can be fatal, death is preventable if they're quickly recognized and properly treated.

# DEHYDRATION AND HEAT ILLNESSES

As a rule-of-thumb, most athletes should consume 200 to 300 milliliters of fluid every



It takes only 30 MINUTES for cell damage to occur with a core body temperature of 105 degrees.



Currently, 13 states have heatacclimatization policies, for secondary school athletics with New Jersey being the first.



Exertional heat stroke is one of the top three killers of athletes and soldiers in training.

- . From 2010-15, 20 athletic heat stroke fatalities were reported.
- . It takes seven to 14 days for a body to adapt to exercising in the heat
- Dehydration at levels of 3 to 4 percent body mass loss can reduce muscle strength by an estimated 2 percent.

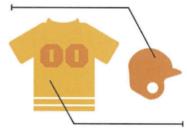
#### SAFETY TIPS



Have sports drinks on hand for workout sessions lasting longer than an hour.

Keep beverages cold – cold beverages are consumed 50 percent more than warm beverages.

Hydrate before, during and after activity. Remove unnecessary equipment, such as helmets and padding, when environmental conditions become extreme.

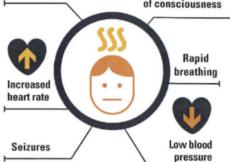


Clothing worn by athletes should be light colored, lightweight and protect against the sun.

- For the first week or so, hold shorter practices with lighter equipment so players can acclimate to the heat.
- Follow a work-to-rest ratio, such as 10-minute breaks after 40 minutes of exercise.
- Get an accurate measurement of heat stress using a wet-bulb globe temperature, which accounts for ambient temperature, relative humidity and radiation from the sun.
- . If someone is suffering from exertional heat stroke, remember to cool first and transport second.
- Have large cold tubs ready before all practices and games in case cold water immersion is needed to treat exertional heat stroke.



Signs of nervous system dysfunction, such as confusion, aggression and loss of consciousness



Sources: Korey Stringer Institute, American Medical Society for Sports Medicine, NATA

Infographic courtesy of the National Athletic Trainers' Association, www.nata.org