The MCPS Fall Heat Plan conforms to recommendations by the Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), the National Federation of High Schools (NFHS), the Maryland Public Secondary Schools Athletics Association (MPSSAA), and the Maryland State Department of Education (MSDE). The plan includes updated guidance from the MPSSAA and MSDE for the summer of 2022, along with requirements from Maryland House Bill 836. The Fall Heat Plan applies to activities during the first two weeks of fall practices. The Fall Heat Plan supplements other MCPS practice guidelines, including the Practice Information and Weather Guidelines sections of the High School Athletics Handbook.

The Fall Heat Plan includes the following components:

A. Education (including hydration awareness)
B. Definitions
C. Implementation Guidelines
D. Emergency Plan
E. Weather Guidelines
F. Hydration Information
G. Fall Heat Plan Q & A for Coaches (attachment A)
H. National Athletic Trainers’ Association (NATA) Position Statement: Fluid Replacement for Athletes (attachment B)

A. Education

1. Student-Athletes
   a) Student-athletes shall review heat acclimatization and hydration information provided in the Health and Safety section of the Athletics web page of the MCPS website.
   b) Coaches and athletic trainers will reinforce heat and hydration-related concerns with student-athletes.
   c) Schools will display posters on proper hydration in locker rooms.
   d) Student-athletes shall receive a health and safety PowerPoint presentation at the beginning of each season. In addition to heat acclimatization and proper hydration, the health and safety PowerPoint addresses other important health and safety concerns.

2. Parents/Guardians
   a) During the online registration process for athletics, student-athletes and parents/guardians are required to review health and safety information including information on heat acclimatization and hydration, contained on the MCPS athletics website prior to participation. Parents/guardians and student-athletes electronically complete the Student/Parent Athletic
**Participation Contract and Parent Permission Form** which verifies that they have reviewed and understand important health and safety information. If parents/guardians cannot register online and access the website, the information will be available through the local school.

b) Health and safety will be included on the agenda for coach-parent preseason meetings. Coaches are required to conduct preseason parent/guardian meetings.

3. Coaches
   a) MCPS coaches shall complete the National Federation of High School (NFHS) online course titled and “Heat Illness Prevention” every two years.
   b) MCPS coaches shall review materials available on the MCPS athletics website.
   c) Health and safety-related information, including heat acclimatization, will be addressed at systemwide and local school preseason coaches’ meetings.

**B. Definitions**

1. **Heat Acclimatization** – Enhancing an individual’s exercise heat tolerance and ability to exercise safely and effectively in warm to hot conditions.

2. **Hydration** – The process of drinking fluid to restore fluid levels in the body to avoid poor performance, muscle cramps, dizziness, fatigue, and other heat related illness.

3. **Practice** – A period of time a student-athlete engages in physical activity during a coach-supervised, school-approved sports, or conditioning-related activity, including warm-up, stretching, weight training, and cool-down periods.

4. **Preseason Practice** – the initial 14 days of practice for a student-athlete.

5. **Recovery Period** – The time between the end of one practice or walk-through and the beginning of the next practice or walk-through.

6. **Walk-Through** – A teaching opportunity when a student-athlete is not wearing protective equipment, including helmets, shoulder pads, catcher’s gear, or shin guards, or using other sports-related equipment (e.g., footballs, soccer balls, lacrosse sticks, blocking sleds, pitching machines, marker cones). A walk-through may not include conditioning or use of weight equipment, and does not include any part of a practice period.

**C. Implementation Guidelines**

1. **General Guidelines**
   a) Coaches shall monitor and implement MCPS temperature guidelines and restrictions.
   b) On single practice days, one walk-through is permitted.
   c) Double practice days (beginning no earlier than practice day six) must be followed by a single practice day or rest day. When a double practice day is followed by a rest day, another double practice day is permitted after the rest day.
   d) Practices and walk-through sessions must be separated by three hours of continuous rest.
   e) If a practice is interrupted by weather or heat restrictions, the practice may recommence once conditions are safe; total practice time may not exceed original limitations.
   f) The heat acclimatization period is designed for student-athletes on an individual basis. Days in which student-athletes do not practice due to a scheduled rest day, injury, illness, or other reasons do not count towards their heat acclimatization period.
2. Equipment Restrictions

   Football
   a) Practice days one and two – helmets only; shorts/t-shirts.
   b) Practice days three-through-five – helmets and shoulder pads only; shorts/t-shirts; contact with blocking sleds and tackling dummies may be initiated.
   c) Beginning practice day six – full protective equipment and full contact may begin.

   Field Hockey
   a) Practice days one and two – goalies may wear a helmet and goalie kickers, and student-athletes may wear shin guards, goggles, and mouth pieces.
   b) Practice days three-through-five – goalies may wear a helmet, chest protection, and goalie kickers.
   c) Beginning practice day six – full protective equipment may be worn.

   Other Sports – Shin guards, goalie gloves, knee pads may be worn beginning day one.

3. Practice Days One through Five

   School teams shall conduct all practices within the general guidelines above as well as the following guidelines for practice days one-through-five.
   a) School teams are limited to one practice per day not to exceed three hours in length.
   b) One walk-through session is permitted per day no longer than one hour in duration.

4. Practice Days Six through Fourteen

   School teams shall conduct all practices within the general guidelines above as well as the following guidelines for practice days six–through–fourteen.
   a) Total practice and walk-through time per day should be limited to five hours with no single session longer than three hours in duration.
   b) School teams may participate in full contact practices with all protective equipment worn.
   c) Beginning with the 6th day of practice, teams may conduct double practice days (double practices may not be conducted on consecutive days).

5. Scrimmages

   a) Football – scrimmages may be held beginning on day eight.
   b) Field Hockey – scrimmages without goalies may be held beginning on day four. Scrimmages with goalies may begin on day six.
   c) Cross country, Tennis Soccer, Volleyball – scrimmages may begin on day four.

D. Emergency Action Plan

   Each school shall have a venue-specific emergency action plan that includes guidelines and procedures associated with heat acclimatization and heat-related emergencies. Knowing what to do and following specific protocols could minimize potentially catastrophic injuries. Plans should include recognition of heat illness and immediate emergency actions. Local school athletic trainers shall be consulted during the generation of the emergency plan.

Updated July 2023
1. Venue-Specific Action Plan
   Each school shall develop a venue-specific action plan for all athletic facilities that includes:
   a) Operation of an automated external defibrillator
   b) Heat acclimatization protocols outlined in the Fall Heat Plan
   c) Coordination of care for other emergent injuries such as spine injuries, concussions, and other life-threatening injuries
   d) Response to instances of severe weather

2. Preparedness
   a) Coach training to recognize symptoms and initiate cold water immersion (NFHS course “Heat Illness Prevention” at www.nfhslearn.com)
   b) Cooling station – centrally located on campus, with shaded & secluded area
   c) Materials on hand; i.e., 100 gallon Rubbermaid stock tank, plastic children’s pool, tarps for off-campus activities
   d) Water source and bottled water
   e) Ice and/or ice packs for water cooling or application to victim
   f) Cell phone

3. Emergency Treatment
   a) Recognition of symptoms
   b) Rapid submersion in tub or pool or application of ice under arms and to groin area (cool first)
   c) Transport via ambulance to hospital (transport second)
   d) Coordination with responding emergency medical personnel
   e) Water consumption

4. Pre-assignment of Responsibilities
   a) Person to call 911 first and then call parent/guardian(s)
   b) Person(s) to prepare soaking tub or pool or ice bags for topical application
   c) Person(s) to assist with moving and attending injured player
   d) Person to meet and escort emergency vehicle to victim
   e) Person to supervise remaining members of the team

5. Communication
   Emergency action plans shall be communicated to stakeholders, including the following:
   a) Posted at each athletic facility at the school or available onsite at practices and contests
   b) Available on the school’s athletic website for viewing by student-athletes and parents/guardians at the beginning of each school year
   c) Distributed to each member of the coaching staff
   d) ATC conducts training of coaching staff at the local school
e) Rehearsed in-person and interactively by all members of the coaching staff of each sport before each season

f) Verification of training and rehearsal to the athletics specialist

E. Weather Guidelines – extracted from the MCPS Athletics Handbook

Schools shall monitor prevailing weather conditions, including the current heat index, and make appropriate practice and activity accommodations. The heat index is available in the Health and Safety section of the MCPS Athletics webpage (click on the **Heat Index tab**). The heat index on the Athletics webpage applies to the 20877 zip code, the most central site in Montgomery County.

In hot, humid weather, coaches shall use good judgment in determining the length and nature of the practice. Frequent water breaks shall be provided, and players shall be carefully monitored. Restrictions shall be implemented per the code - green, gold, orange, or red.

The heat index changes as the day progresses. A heat index in the morning, for instance, may increase to a more dangerous level later in the day. Thus, restrictions that would apply to a morning practice or activity may be different than in the afternoon or evening. The relevant heat index that coaches shall use will be the one nearest to the start time of the practice or activity. The heat index shall be monitored as the day progresses every 30 minutes and appropriate modifications implemented.

**NOAA's National Weather Service**

**Heat Index**

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Heat Index</th>
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<tbody>
<tr>
<td>80</td>
<td>Code Green</td>
</tr>
<tr>
<td>81</td>
<td>Code Gold</td>
</tr>
<tr>
<td>82</td>
<td>Code Orange</td>
</tr>
<tr>
<td>83</td>
<td>Code Red</td>
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**Code Green - Heat Index Under 85°**
Normal practice guidelines and restrictions. Provide ample water. Water is always available and athletes should have unrestricted access. Ice-down tub and towels are available. Athletes should be monitored carefully.

**Code Gold - Heat Index 85° to 94°**
Provide ample water. Water is always available and athletes should have unrestricted access. Optional water breaks every 30 minutes for 10 minute time frames. Ice-down tub and towels are available. Athletes should be monitored carefully.

**Code Orange - Heat Index from 95° to 104°**
Exercise caution. Provide ample water. Water is always available and athletes should have unrestricted access. Mandatory water breaks every 30 minutes for 10 minute time frames. Ice-down tub and towels are available. Reduce time outside or move indoors to air conditioning if possible. Athletes should be monitored carefully. Limit time in which student-athletes are wearing full equipment.

**Code Red - Heat Index from 105° and Above**
Stop all outside activity including practice or play. Stop all indoor activity if air conditioning is not available and the heat index indoors is 105° or greater.

Updated July 2023
F. Hydration Information for Student-Athletes

1. Have readily available an unlimited amount of water during practice and designated breaks.

2. Drink before, during, and after practice and games. For example:
   a) Drink 16 ounces of fluid 2 hours before physical activity.
   b) Drink another 8 to 16 ounces 15 minutes before physical activity.
   c) During physical activity, drink 4 to 8 ounces of fluid every 15 to 20 minutes (some athletes who sweat can safely tolerate up to 48 ounces per hour).
   d) After physical activity, drink 16 to 20 ounces of fluid for every pound lost during physical activity to achieve normal hydration status before the next practice.

3. Student-athletes who do not properly rehydrate their bodies between practices run the risk of cumulative dehydration. Cumulative dehydration develops insidiously over several days and raises the risk for heat illness, especially in the first few days of acclimatization (see NATA position statement on Fluid Replacement for Athletes – Attachment B).

4. Student-athletes can monitor their hydration level by the color and volume of urine.
   - Small amounts of dark urine indicate the need to drink more, while a “regular” amount of light colored urine is normal and indicates the student-athlete is well hydrated.
   - A urine chart, such as the one used by the University of Maryland, should be posted so that student-athletes can assess their individual hydration.

5. Athletic trainers, if available, should assist in the monitoring of student-athletes during times where athletes are becoming acclimated to a new sports season and when temperatures are high.

6. Hyponatremia is a rare, but potentially deadly disorder resulting from the overconsumption of water or other low-sodium fluid (including most sports drinks). It is commonly seen during endurance events, such as marathons, when participants consume large amounts of water or other beverages over several hours, far exceeding fluid lost through sweating. The opposite of dehydration, hyponatremia is a condition where there is an excessive amount of water in the blood and the sodium content of the blood is diluted to dangerously low levels. Affected individuals may exhibit disorientation, altered mental status, headache, lethargy and seizures. A confirmed diagnosis can be made by measuring blood sodium levels. Suspected hyponatremia is a medical emergency and the Emergency Medical System must be activated (or Call 9-1-1). Hyponatremia is treated by administering intravenous fluids containing high levels of sodium (hypertonic solutions).

7. Resources on Hydration:
   - NFHS Position Statement and Recommendations for Maintaining Hydration to Optimize Performance and Minimize the Risk for Exertional Heat Illness
   - NFHS Heat Acclimatization and Heat Illness Prevention Position Statement
   - NATA Position State: Fluid Replacement for Athletes
   - NATA Position Statement: Exertional Heat Illnesses
   - Hydration Color Chart