Student-Athlete Health and Wellness for parents

Tucson Unified School District
Why are we concerned?

• The overall health of the student is paramount.
• Your cooperation can ensure your athlete’s safe return to play.
What are we concerned about?

• Concussions
• Heat Illnesses
• Hydration
• Nutrition
• Hygiene
• Additional concerns
Concussions

• The Facts
  – A concussion is a brain injury
  – All concussions are serious
  – Can occur without loss of consciousness
  – Can occur in any sport
Concussions—con’t

- **Second Impact Syndrome**
  - A second concussion occurring before the brain has recovered from the first
  - Can result in brain swelling, permanent brain damage, and even death
Concussion Stats

- Between 1.6 and 3.8 million sports-related concussive injuries annually in the US
- Ranks 2^{nd} on list of most common causes of fatalities in football
# Signs & Symptoms of a Concussion

<table>
<thead>
<tr>
<th>Signs observed by parents or coach</th>
<th>Symptoms reported by athlete</th>
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<tbody>
<tr>
<td>Appears dazed or stunned</td>
<td>Headache</td>
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<tr>
<td>Is confused about assignment</td>
<td>Nausea</td>
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<tr>
<td>Forgets plays</td>
<td>Balance problems or dizziness</td>
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<tr>
<td>Unsure of game, score or opponent</td>
<td>Double or fuzzy vision</td>
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<tr>
<td>Moves clumsily</td>
<td>Sensitivity to light and/or noise</td>
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<td>Answers questions slowly</td>
<td>Feeling sluggish</td>
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<tr>
<td>Loses consciousness</td>
<td>Feeling foggy or groggy</td>
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<td>Shows behavior or personality changes</td>
<td>Concentration or memory problems</td>
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<tr>
<td>Can’t recall events prior to hit</td>
<td>Confusion</td>
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<tr>
<td>Can’t recall events after hit</td>
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TUSD & AIA Policies concerning concussions

• **ImPACT Testing**
  – Neurological test used by the certified athletic trainers to help determine proper return-to-play status
  – Baseline given to incoming freshmen and juniors and newly enrolled students
  – **REQUIRED** before participation

• **BrainBook**
  – Educational tool implemented by the AIA to educate athletes about concussions
  – Can be taken individually
  – **REQUIRED** before participation
Arizona recently passed a bill regulating concussions. This affects how you function as a coach!

- “the Pupil and Pupil’s parents must sign an Information Form at least once each school year that states that the Parent is aware of the nature and risk of a concussion and head injury.”

- “a Pupil who is suspected of sustaining a concussion or head injury in a practice session, game, or other interscholastic activity be immediately removed from the athletic activity.”

- “A Team Athlete, Team Coach, Official, Licensed Health Care Provider, Team Volunteer, or Team Parent may remove an athlete from play.”

- “A Pupil may return to play the same day if a Health Care Provider rules out a suspected concussion at the time the Pupil is removed from play.”

- “On a subsequent day, the Pupil may return to play if the Pupil has been evaluated by and received Written Clearance to resume participation in athletic activity from a Health Care Provider who has been trained in the evaluation and management of concussion and head injuries.”

- **Health Care Providers include:**
  - A Physician - MD or DO
  - A Nurse Practitioner
  - A Certified Athletic Trainer
  - A Physician Assistant
What Parents Can Do...

- Seek medical attention immediately—consult with your school’s athletic trainer or doctor.
- Keep your teen out of play—wait for medical clearance.
- Tell your teen’s coaches about any recent concussions.
- Remind your teen: it’s better to miss one game than the entire season.
- Watch the following video with your teen to stay informed: http://www.nata.org/Heads-Up
Heat Illnesses

- Heat illnesses are a major concern in athletics.
- Every effort needs to be made to ensure your athletes’ safety during participation.
- Proper acclimatization to the weather is vital.
Heat Stroke Fatalities in Sports

*Data provided by National Center for Catastrophic Sports Injury*
Heat Illnesses—con’t.

• Please be aware of the following heat-related illnesses, their signs and symptoms, and appropriate treatment:
  – Heat cramps
  – Heat exhaustion
  – Heat stroke
Heat Cramps

• **Signs and symptoms:**
  – dehydration, thirst, sweating, cramps, fatigue

• **Treatment**
  – cease activity, sports drink, mild stretching and massage
Heat Exhaustion

• **Signs and Symptoms:**
  - normal or elevated body temp (97-104°F), dehydration, dizziness, light-headed, headache, nausea, fast & weak pulse, ↓ urine output, muscle cramps, profuse sweating, chills, cool, clammy skin

• **Treatment**
  - remove excess clothing, cool the athlete with ice bags/towels/fans, move to shaded area, rehydrate, 911 if symptoms do not resolve
Heat Stroke

• **This is a Medical Emergency!**

• **Signs and Symptoms**
  – high body temp (104°F and ↑), dizzy, drowsy, irrational, confused, irritable, disoriented, seizures, loss of consciousness, dehydrated, hot & dry skin (little to no sweating), ↑ pulse rate (100-120 bpm), vomiting, diarrhea

• **Treatment**
  – **immerse athlete in cold water tub immediately or cool athlete by any means possible, CALL 911, monitor vitals, continue cooling during transport**
# 14-Day Heat Acclimatization Schedule

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
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Days 7 & 14 are Sundays—rest days
What Parents Can Do…

• Ensure your teen is properly hydrated BEFORE and AFTER practices and games
Hydration

• Acclimate PRIOR to the start of your season
• Do not rely on thirst to tell you when to drink –
  – If you’re thirsty, you’re already dehydrated
• Drink fluids throughout the day
• Drink at least 20 oz. of fluids 2-3 hours before activity
• Drink 10 oz. of fluids 10-20 minutes before activity
Hydration During Activity

• During practice or competition, water breaks should be allowed every 30 minutes or less
• Drink 10 oz. every 15 minutes during activity
• Drink 24 oz. of fluids for every pound of weight lost after activity
• It is the coaches responsibility to ensure that each athlete stays hydrated
Hydration—con’t

• What to Drink
  – Water
  – Sports beverages (i.e. Gatorade, Powerade)

• What NOT to Drink
  – Carbonated and/or caffeinated beverages
  – Tea
  – Coffee
  – Alcohol
Nutrition

• Plays vital role in sports
• Healthy diet needed to improve performance and avoid injury
Nutrition—con’t

• Eat a minimum of 2,000 calories a day
  – 60% carbohydrates (fruits, veggies, whole grains)
  – 25% fat (unsaturated fats)
  – 15% protein (meats, dairy, eggs)

• A balanced diet will provide all nutrients—NO need for supplements!
Nutrition—con’t

• Game Day
  – Eat 2-4 hours before game time
  – Meal should be high in carbs, low in fat & protein (i.e. turkey sandwich, pasta w/tomato sauce)
  – Small snack 1-2 hours before game (fruit, crackers, bagel, etc.)
Hygiene

• Certain guidelines need to be followed to decrease transmission of communicable diseases
Hygiene—con’t

- Wash hands
- Treat & cover ALL wounds
- Clean gear & equipment every day
- Wash practice clothes daily
- DO NOT share personal items- towels, water bottles, clothing
- Shower immediately after activity
What **Parents** Can Do…

- Encourage your teen to eat properly during the season
- Encourage your teen to shower **IMMEDIATELY** after practices and games
Additional Concerns

• **Sickle Cell Trait (SCT):**
  – Blood disorder where red blood cells have a difficult time carrying oxygen to various organs

**Athlete guidelines:**
  – Build up training slowly → longer periods of rest
  – Pre-season programs → NO performance tests!
  – Stop activity with onset of symptoms
  – SCT athletes “set their own pace”
  – Conditions that worsen SCT:
    • Heat stress
    • Asthma
    • Dehydration
    • Illness
    • Altitude changes

• For more information:
Additional Concerns

• *Diabetes*
  – Alert the coaching staff and ATC if your teen is diabetic
  – Ensure your teen has access to glucose or sugar in the event of a diabetic emergency
  – For more information: 
Additional Concerns

- **Exertional hyponatremia** (decreased sodium levels in blood)
  - Athletes should drink plenty of water & replace lost electrolytes with sports beverages

- **Asthma**
  - Structured warm-up protocol
  - [http://www.cdc.gov/asthma/](http://www.cdc.gov/asthma/)

- **Lightning**
  - TUSD follows the “flash-to-bang” protocol (if within 6 miles → athletes moved indoors)
What **Parents** Can Do…

- Properly fill out the *Medical History* form prior to your teen’s season & list any medical conditions that the sports medicine team should be aware of.
- Give extra inhalers, glucose/insulin, etc. to the certified athletic trainer in case of emergency.
How You Play a Part

• Prevention is KEY—talk with your teen prior to the start of the season about these issues
• Help the sports medicine staff by reporting any injuries or illnesses
THANK YOU!

Please contact your school’s certified athletic trainer with any questions or concerns.