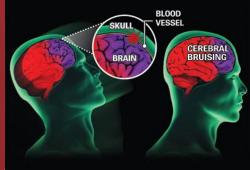
- Mike Boese MS, ATC
 - Certified athletic trainer
- Contact info
 - Mike.boese@tusd1.org 520-349-1339
- Training Room hours
 - M-F, immediately after school until practices and events are completed.
 - Saturdays, by prior arrangement.



- Concussions
- Heat illnesses
- Hydration
- Nutrition
- Hygiene
- Medical conditions
- Opioids
- Medicines, inhalers, etc
- Doctor visits
- TUSD website

CONCUSSIONS

- A concussion is a brain injury
- All concussions are serious
- Can occur without loss of consciousness
- Can occur in any sport
- 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



From the Training Room Signs & Symptoms of a Concussion

Signs observed by parents or coach	Symptoms reported by athlete
Appears dazed or stunned	Headache
Is confused about assignment	Nausea
Forgets plays	Balance problems or dizziness
Unsure of game, score or opponent	Double or fuzzy vision
Moves clumsily	Sensitivity to light and/or noise
Answers questions slowly	Feeling sluggish
Loses consciousness	Feeling foggy or groggy
Shows behavior or personality changes	Concentration or memory problems
Can't recall events prior to hit	Confusion
Can't recall events after hit	

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 competition

BrainBook

- Educational tool implemented by the AIA to educate athletes about concussions
- Can be taken individually
- REQUIRED before competition
- www.aiaonline.org
- Click on "BrainBook

ImPACT Testing

Wednesdays after school

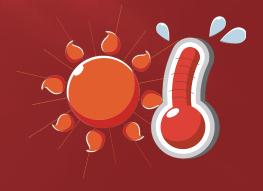
- Each team will be assigned a time slot
- Computer Lab
- Who tests this year?
 - ALL incoming freshmen
 - ALL juniors
 - Any new student-athlete to THS

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!

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
- Specific heat illnesses
 - 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

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
- 20 oz. of fluids 2-3 hours before activity
- 10 oz. of fluids 10-20 minutes before activity
- 24 oz. of fluids for every pound of weight lost after activity

What to Drink:

- Water
- Sports beverages

What NOT to Drink:

- Caffeinated and/or carbonated beverages
- Tea
- Coffee
- Alcohol



What TUSD is Doing...

- Acclimatization period
- Cooling tubs
- Pre & post practice weigh-ins
 - 24 oz. for every pound lost
- Heat index monitoring







What Parents Can Do...

- Make sure your son/daughter has a water container
 - TUSD policy
- Ensure your athlete is properly hydrated before & after activities
- Please list any pre-existing/family hx conditions on Med. History form

• Nutrition

- Plays vital role in sports
- Healthy diet needed to improve performance and avoid injury
- 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!

Hygiene

- Certain guidelines need to be followed to decrease transmission of communicable diseases
 - Wash hands
 - Treat & cover ALL wounds
 - Clean gear & equipment every day
 - Wash practice clothes daily
 - DO NOT share personal items- towels, water bottles and clothing
 - Shower immediately after activity





Medical Conditions to Report

- Asthma
- Diabetes
- Family hx of sudden
 cardiac arrest and/or
 death, fainting, or chest
 pains
- Any previous injuries
- Sickle cell trait (SCT)

 How You Play a Part
 Prevention is KEY — talk with your athletes prior to the start of the season about these issues

 Help your sports medicine staff by reporting any injuries or illnesses you are made aware of

Opioids

- Common opioids used are hydrocodone (Vicodin[®]) oxycodone (OxyContin[®], Percocet[®]), morphine, codeine, fentanyl
- 66% of 63,600 drug overdose deaths in 2016 involved an opioid. Many of these were prescribed to the user.
- Individuals may be prescribed opiates for pain relief for acute or chronic injuries. Symptoms of addiction may occur in as little as one week and are physical and emotional in nature.

- Signs of Use/Abuse
 - Decreased heart rate
 - Decreased blood pressure
 - Decreased wakefulness
 - Decreased pain sensation
 - Constricted pupils
 - Continued use increases drug tolerance

How to Monitor Prescribed Use:

- Parents/guardians should notify school/nurse/coach/athletic trainer if athlete has been prescribed an opioid
- If misuse/abuse is suspected, the coach should notify the athletic trainer and athletic director to document the concern and make necessary contacts
- Additional Information:

https://www.cdc.gov/drugoverdose/pdf/ahapatient-opioid-factsheet-a.pdf

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
- Pre-season programs
 - 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:

http://health.usf.edu/medicine/orthopaedic/sicklecell/index.htm

longer periods of rest NO performance tests!

Additional Concerns

Diabetes

- Alert the coaching staff and athletic trainer if your teen is diabetic
- Ensure your teen has access to glucose or sugar in the event of a diabetic emergency
- For more information:

http://www.diabetes.org/

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/

• Lightning

TUSD follows the "flash-to-bang" protocol (if within 6 miles athletes are moved indoors)

 THS AT also uses Thunderbolt lightning meter and NOAA weather alerts

• All the rest...

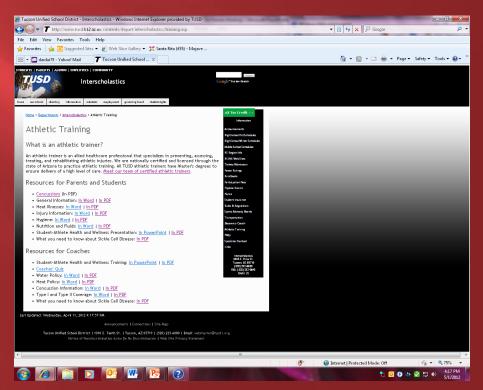
- OTC meds (antacids, antifungal cream, Benadryl, cough drops, ibuprofen, and Tylenol), can be distributed from the Training Room only if athlete has signed Medication Permission Form on file.
- If your child requires an inhaler, please send me an extra one with his/her name on it.
- If your child goes to the DR, he/she MUST bring a script signed by the MD, PA or NP to the athletic trainer. Script should state the athlete's condition, treatment/rehabilitation advice, and practice limitations. If athlete sees MD for any injury or illness that requires them to miss practice/competition, athlete must be cleared by MD prior to returning to play.

TUSD Athletic Training Webpage

http://www.tusd.k12.az.us/contents/depart/interscholastics/training
.asp

OR

- **Go to TUSD website**
- **Go to "Directory"**
- **Go to "Departments"**
- Go to "Interscholastics"
- Find "Athletic Training" on right-hand side



THANK YOU!

 Please contact your school's licensed athletic trainer with any questions or concerns

