

A-Z: 26 INJURY PREVENTION & CARE APPLICATIONS FOR COACHES

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A: Abrasions

- ⦿ Scraping away of skin
 - Often do not bleed much
 - Very high infection rate
- ⦿ Must be cleaned thoroughly
 - Soap & Water
 - Cinder Suds
- ⦿ Keep covered with antibiotic ointment & bandage
 - Prevent scab formation to reduce scarring



B: Blister Care

- ⦿ Open vs. Closed
- ⦿ Donut pad & cover
- ⦿ If open – treat as an open wound
 - Apply antibiotic ointment & bandage
- ⦿ Check shoes for wear issues
- ⦿ Moleskin for protection in shoe or on feet



C: Concussions

- ~3.5 million/year
- Leading cause of death due to sport
- **If in doubt, sit them out!**
- Never return to play same day
- Individual states now implementing laws/rules on this topic
- REST needed – physical & mental



D: Diabetic Athlete

- Be aware of who is on your team and any medical conditions that they may have
- Carry a sugar source
- Always give sugar, will help or make no difference



E: Epi-Pen

- ⦿ Anaphylaxis issues (bee stings, nuts, etc.)
- ⦿ Be aware of athletes who have allergies
- ⦿ Know if they carry an Epi-Pen
- ⦿ If difficulty breathing:
 - Remove protective cap
 - Press firmly against outside of thigh
 - Hold 10 seconds
 - Dispose of in sharps container
 - Call 911



F: Football Equipment Fitting

◎ Helmets

- Check hair style
- Measure circumference of head
- Check safety of helmet (NOCSAE & Warning labels)
- Assess fit
 - Chin strap centered
 - Facemask: 2-3 finger widths from nose
 - Forehead pad: 1 finger width from eyebrows
 - Ear holes aligned with auditory canals
 - Covers base of skull
 - Cheek pads: snug to face



F: Football Equipment Fitting

⦿ Helmets cont'd

- Stress fit

- Push on crown of helmet: recoil & pressure
- Face mask: side-to-side, up-and-down
- Push on back of helmet
 - Look for <math><1/4</math> inch gap in front
- Push on front of helmet
 - Look for <math><1/4</math> inch gap in back



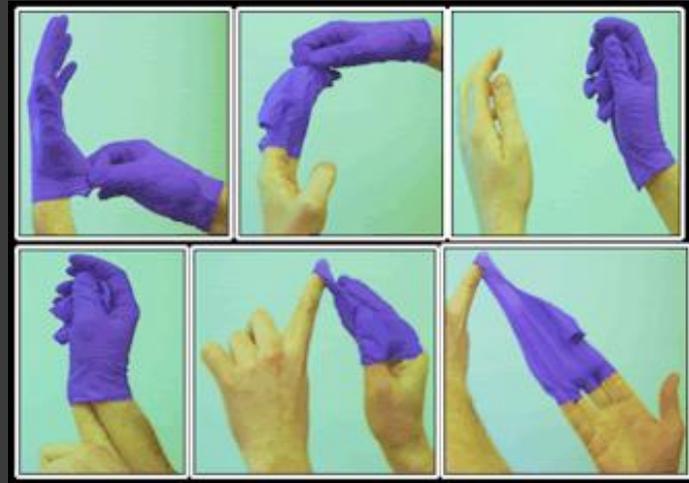
F: Football Equipment Fitting

○ Shoulder Pad Fitting

- Measure shoulder tip to tip
- Inspect pads for safety
- Lace up and secure straps
 - Chest plates touch, 2 finger widths – straps
- Check for coverage
 - Front: Pecs, sternum, clavicle, anterior deltoid
 - Top shoulder: AC joints, middle deltoid
 - Back: Scapula
- Stress
 - Raise arms to 90° – check for pinching at neck



G: Gloves



- Protection against Hepatitis and HIV
- Carry extra pairs with you
- Never touch the outside of the glove with bare hands
- To remove, pinch outside of glove & pull inside out, but keep fingers covered
- Use fingers of partially removed glove to pinch again and remove 2nd glove
- Or pull off and hold in hand while ungloved hand goes UNDER gloved hand to remove
- Wash hands immediately after glove remove

H: Heat Illness & Hydration

- ⦿ Athletes are still dying each year -Preventable
- ⦿ Humidity prohibits ability to sweat, therefore lose ability to cool self
- ⦿ 65% humidity impairs evaporation
- ⦿ 75% humidity stops evaporation
- ⦿ 1-2% drop in BW (dehydration) = thirst
- ⦿ 3-5% loss BW = ↓ blood volume – health threat
- ⦿ Often stop drinking before replenish water loss



I: Insect Bites & Bee Stings

- Careful not to mistake MRSA for a bite
- Watch for allergic reactions
- Prepare to support respirations
- Use credit card to remove a stinger if present
- Always clean area & apply ointment
- Can use ice and elevation
- Avoid strenuous exercise & heat



J: Jumper's Knee

- ⦿ Patellar Tendinitis
 - Overuse injury - Pain at the bottom of patella
- ⦿ Cho-pat strap or Patellar check strap
- ⦿ Easy to make with prewrap



K: Knee Injuries (ACL)

- ⦿ Need to teach landing skills first
 - Land soft with knees flexed
- ⦿ Jump stops and plant and turns can be susceptible MOI for ACL tears
- ⦿ Most injuries are deceleration problems



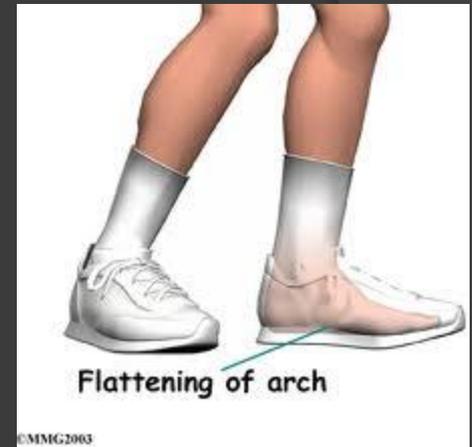
L: Lightning

- ⦿ #2 cause of weather-related deaths
- ⦿ ~60 deaths/year (May-Sept = prime time)
- ⦿ Flash-to-Bang Method
 - Estimates distance away for the storm
 - From time see lightning, count until hear thunder and divide by 5 = # of miles
 - 30 sec (6 mi) = inherent danger
 - 15 sec (3 mi) = must seek shelter



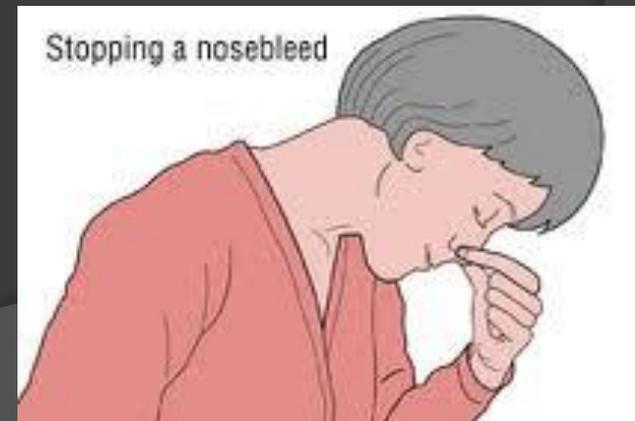
M: Medial Tibial Stress Syndrome

- Shin Splints
- Stress reaction, stress fracture, compartment syndrome
- Flat feet, over-pronation=
Biomechanical changes
- Tight posterior structures (calf)
- Weak gluts
- Eccentric exercises are helpful
- Taping: Try arch taping 1st



N: Nose Bleeds

- ⦿ Direct Pressure
- ⦿ Chin to Chest
- ⦿ Ice to Nose
- ⦿ Pressure Point
 - Inside upper lip



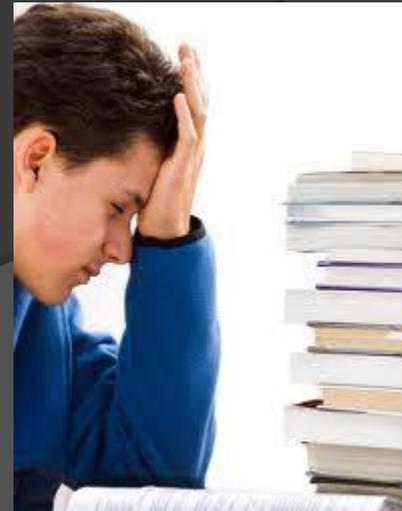
0: Over Training

- Fatigue
- Injuries
- Monitor morning heart rates



P: Post-Concussion Syndrome

- 25% of all patients with concussion
- S&S can persist days, weeks, months
- Migraines, depression, dizziness, tinnitus, fatigue, irritability, anxiety, memory, visual/eating/sleeping disturbances
- May be more prone to seizures



Q: Quad Contusion

- ⦿ Hematoma limits ROM
 - Mild = >90 ; Moderate = 45-90 ; Severe = < 45
- ⦿ Bone can “bleed” into tissue
- ⦿ Myositis Ossificans is a complication
- ⦿ Avoid massage and heat
- ⦿ Apply ice with mild stretch 1-2 times every 2 hours for 48-72 hours
- ⦿ Apply compression pad, compression wrap, and crutches



R: Rhabdomyolysis

- ⦿ Muscles breakdown & release contents into bloodstream
- ⦿ Can cause kidney failure & death
- ⦿ Results from: exertion with dehydration, heat stroke, extreme muscle strain, drugs, crushing injuries
- ⦿ Signs & Symptoms
 - Dark cola-colored urine
 - Muscle soreness (pain intensity does not correlate to exercise intensity)
 - Decreased range of motion
 - Bruising
 - Fatigue
 - Fever
 - Confusion
 - Nausea/Vomiting
- ⦿ Refer to hospital immediately

S: Sever's Disease/Syndrome

- Heel pain in children (ages 8-14)
- Growth of bone is taking place faster than the tendons
- Achilles tendon pulls on growth plate
- Treatment
 - Gel Heel lifts/cups to take stress off region
 - Ice
 - NSAIDs
- Heel cord stretching
 - straight leg & flexed knee



T: Tennis Elbow

- ⦿ Lateral Epicondylitis
- ⦿ Equipment issues
 - Grip width
 - Stiffness of strings
- ⦿ Technique
 - Backhand
 - Point of impact
- ⦿ Care
 - RICE
 - Strengthening & stretching exercises



U: Urticaria

- ⦿ Hives
 - swollen, red bumps, patches, welts
- ⦿ From allergies, foods, meds, cold
- ⦿ May itch or burn/sting
- ⦿ Can last for hours to days
- ⦿ Tx: find source via MD referral
- ⦿ Can try an antihistamine (Zyrtec, Allegra, Benadryl), lukewarm water, mild soaps, cool compress, loose-fitting clothing



V: Vital Signs

- Heart Rate (Pulse)
- Respirations
- Blood Pressure
- Pupils
- Temperature



W: Water or Sports Drinks

- ⦿ Hydration is always a concern
 - Even in cooler temperatures
- ⦿ Water is best to replenish dehydration issues
- ⦿ Sports drinks add carbohydrates & electrolytes
- ⦿ If causes athlete to drink more because it tastes good, then good idea
 - Watch amount of CHO present



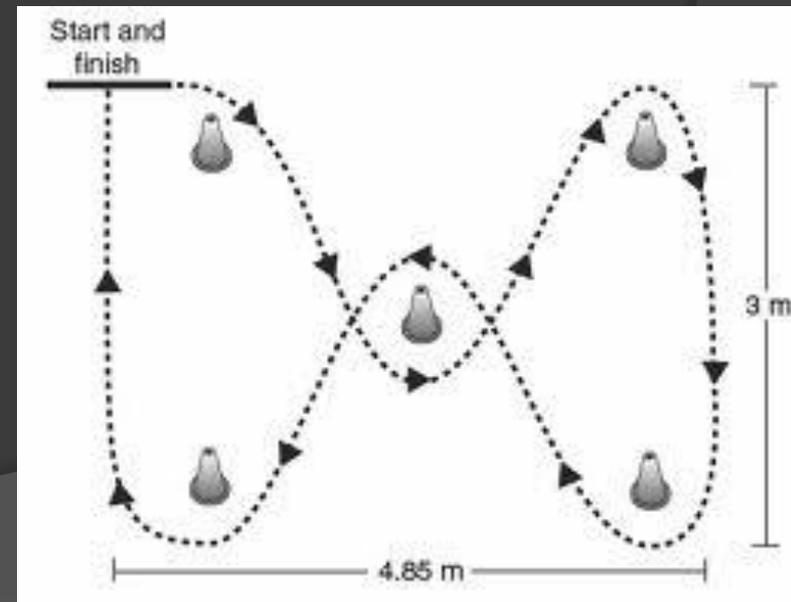
Y: Young Athletes

- ◎ Unique bodies
- ◎ Growth plates more susceptible
 - Little League Elbow
 - Osgood Schlatter's
 - Sever's Disease
- ◎ Use body weight activities over adding external weights
- ◎ Be conscious of body image comments, derogatory verbal and body language, and athlete-to-athlete bullying



Z: Zig Zag Testing

- Way to confirm ankle/knee injury athlete is ready for competition
- Big “Z”, half speed
- Increase speed then shorten “Z”
- Causes greater stresses to the joint and athlete must demonstrate confidence in cutting moves



Thank You

