

Soccer Injury Prevention

Injuries

- Forward and goalkeeper are the most dangerous positions
- Forwards- 28% of injuries
- Goalkeepers- 18% of injuries
- Only 18% of injuries are related to a foul
- 62% of injuries occur at practice

Commonly Seen Injuries

- ACL tears
- Ankle Sprains
- Hamstring Strains
- Shin Splints
- Concussions

Treatment

- P- protection
- R- rest
- I- ice
- C- compression
- E- elevation
- S- support

ACL Tears

Anterior Cruciate Ligament

- Main stabilizer of knee
- Prevents anterior movement of lower leg
- Connects tibia to femur
- More common in females
- Caused by change of direction or cutting maneuvers
- Can be contact or non-contact
 - Typically non-contact
- Athlete typically feels or hears a pop
- Signs/symptoms: immediate loss of function, pain, swelling

Ankle Sprains - "Rolled ankle"

- Lateral sprains most common
- Caused by inversion & plantarflexion
- Signs/symptoms: swelling, bruising, pin point pain, deformity
- Refer to physician if severe or fracture suspected
- Anterior talofibular ligament frequently injured
- Calcaneofibular most commonly injured in soccer
- Return to play: walk-jog-run-sprint-cut-shoot progression
- Bracing is suggested

Hamstring Strains

“muscle pull”

- Pre-season injury
- Frequently reoccur
- Athletes return too soon after injury

-Causes:

- Poor flexibility
- Improper warm up
- Improper form
- Strength imbalances

Signs/Symptoms: pain, loss of function, swelling, bruising, deformity

- Athlete may have a divot or knot in hamstring
- Refer to physician if severe

Return To Play: walk-jog-run-sprint-cut-shoot progression

- Add back pedal into progression!!
- Do not allow athlete to return too soon!
- Neoprene sleeve may be beneficial

Shin Splints

- Anterior shin pain during & after activity
- Caused by lack of deceleration control, poor biomechanics, change in activity, surface or intensity
- Athlete can typically “play through pain”
- Ice cups to decrease inflammation
- NSAIDs to help with pain
- Refer to physician if pain increases or does not improve after 2 weeks

Concussions

- 29,000 concussions occur annually in youth soccer
- Caused by collisions with players, goalposts, ground or ball
- Most commonly occurs from heading the ball
- Head injuries account for 4-22% of soccer injuries
- Concussions make up 2-3%
- Fewer than 10% will result in loss of consciousness
- 78% of concussions occur in games
- 47% of concussed athletes WILL NOT report symptoms

- Females more prone to concussion due to neck weakness
- 40% more likely to receive a concussion than male athletes
- Females are more likely to take longer to recover
- Soccer has the highest concussion risk for females
 - 50% chance of concussion
- Average soccer player heads the ball ~6x per match
- Impact speed of a soccer ball being head by a player can reach 60-70 mph
- When in doubt, **SIT THEM OUT!**

Concussion Symptoms

- Headache
- Nausea
- Dizziness
- Memory loss
- Ringing in ears
- Mental confusion/behavior changes
- Blurry or double vision
- Balance problems
- Nystagmus
- Slurred speech
- Vomiting
- Altered levels of consciousness
- Seizures
- Decreased or irregular pulse or respiration
- Difference in pupil size from left to right
- Dilated pupils

Concussions- Headgear

- Does not prevent concussions
- Invincibility syndrome
- Proper technique necessary
- Head and neck rigid while using body's forward momentum to propel the ball up and away

Prevention

- Use properly fitted equipment
- Cleats and shin guards
- Keep fields in good condition
- Properly sized SYNTHETIC soccer balls
- Leather balls can become waterlogged and heavy
- Secure goals at all times
 - Goals can easily fall on athletes if not secured

Warm up and cool down

- Dynamic stretching for warm up
- Static stretching for cool down
- Hydrate!
 - Once you feel thirsty, you are already becoming dehydrated
- Maintain fitness
 - Unconditioned athletes are more likely to sustain injury

ACL Prevention

- 100,000+ ACL tears/ year
- \$17-25,000 for surgery and rehabilitation
- Females 4-10 times greater risk
- Ligament dominance
- Quadriceps dominance
- Limb dominance
- Core dysfunction
- PEP/Sportsmetrics
 - Warm-up vs. Training
 - Decrease injury risk
 - Performance enhancement

Locations:

Charles Town	(304) 728-9090
Hedgesville	(304) 754-5000
Inwood	(304) 229-4141
Shepherdstown	(304) 876-8600
Spring Mills	(304) 271-8895
Hagerstown	(301) 733-1700