

**PROCEDURE FOR MANAGEMENT OF CONCUSSIONS
AND OTHER BRAIN INJURIES**

CONCUSSION

The word “concussion” comes from the Latin verb *concutere* “to shake violently”. A concussive brain injury may be caused by a bump, blow or jolt to the head or by a blow to another part of the body with the force transmitted to the head. Concussive brain injuries can range from mild to severe and can disrupt the way the brain normally works. Anterograde amnesia is the inability to retain new information after suffering a brain injury. Retrograde amnesia is the inability to remember events preceding a traumatic injury. Content experts agree that all concussions and brain injuries mandate evaluation by a physician.

**CONCUSSION IN SPORTS: ON FIELD* RECOGNITION AND
MANAGEMENT OF CONCUSSIVE BRAIN INJURY**

Signs: Appears dazed or stunned
 Confusion about assignment
 Forgets sports plays
 Unsure of game, score, opponent
 Moves clumsily
 Answers questions slowly
 Loses consciousness
 Shows behavior or personality changes
 Cannot recall events prior to hit or fall
 Cannot recall events after hit or fall

Symptoms: Headache or pressure in head
 Nausea
 Balance problems or dizziness
 Double or blurred vision
 Sensitivity to light
 Sensitivity to noise
 Feeling sluggish or slowed down
 Feeling foggy or groggy
 Does not “feel right”

On-Field Mental Status Evaluation:

Orientation: What period/quarter/half are we in?
 What stadium/field is this?
 What city is this?
 Who is the opposing team?
 Who scored last?
 What team did we play last?

- Anterograde Amnesia:** Repeat the following words: Girl, Dog, Green
Remember the three words for later
- Retrograde Amnesia:** Do you remember the hit?
What happened in the play prior to the hit?
What happened in the quarter/period prior to the hit?
What was the score of the game prior to the hit?
- Concentration:** Repeat the days of the week backwards (starting from today)
Repeat the months of the year backward (starting from today)
Repeat these numbers backward 63(36), 419(914), 6294(4926)
- Word List Memory:** Repeat the three words from earlier: Girl, Dog, Green

Signs of Deteriorating Neurological Function:

- Headaches that worsen
- Seizures
- Focal Neurological Signs
- Looks very drowsy or cannot be awakened
- Repeated vomiting
- Slurred speech
- Cannot recognize people or places
- Increasing confusion or irritability
- Weakness or numbness in arms or legs
- Neck pain
- Unusual behavioral changes
- Significant irritability
- Any loss of consciousness

POST CONCUSSIVE BRAIN INJURY MANAGEMENT

No Return-to-Play/Return-to-Function: Any student who exhibits signs and symptoms of concussive brain injury should be removed from the activity and should not participate in activity until s/he has been evaluated and given permission by an appropriate health care provider, as defined as a licensed physician or health care provider who is trained in the evaluation and management of concussions, and/or a licensed psychologist who is neuropsychologically trained in the evaluation and management of concussions, and/or the student's Primary Care Provider, not the Emergency Department Physician. Research indicates that high school athletes with less than 15 minutes of on-field symptoms exhibited deficits on formal neuropsychological testing and re-emergence of active symptoms, lasting up to one week post-injury. RSU 19 student athletes will complete ImPact Scoring prior to participation in sports activities.

Exertion: Symptoms will typically worsen or re-emerge with exertion, indicating incomplete recovery. If the student is symptom-free, provoking exertion is recommended before returning to full participation.

Return-to-play should occur gradually. Individuals should be monitored by an appropriate health care provider for symptoms and cognitive function carefully during each stage of increased exertion. If symptoms re-occur, the player will be removed from the activity and re-evaluated by medial personnel.

Repeated Evaluation: Periodic follow-up evaluations are important as signs and symptoms of concussion may evolve over time.