

# The Bronxville School Concussion Management Policy/Protocol

Danielle M. Annis, MAT, ATC, LAT  
Head Athletic Trainer, Bronxville High School  
Physician Extender, Columbia Orthopaedics

# On-Location Management of Concussions

## **Loss of Consciousness**

- Duration of LOC doesn't matter, still treated as **MEDICAL EMERGENCY**
- Transported to ER by EMS
- Student must sit out 7 days and be symptom free before beginning return-to-play protocol

## **No Loss of Consciousness**

- Removed from activity and evaluated by appropriate staff member with concussion checklist
- If student has any symptoms, they may not return to activity that day
- Doctor referral for concussion

**\*\*In both cases, parents and Concussion Management Team will be notified\*\***

# Concussion Checklist

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Grade: \_\_\_\_\_ Sport: \_\_\_\_\_  
 Date of Injury: \_\_\_\_\_ Time of Injury: \_\_\_\_\_ Location: \_\_\_\_\_

**HISTORY:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Did athlete lose consciousness?	Yes	No	Unclear
Does he/she remember the injury?	Yes	No	Unclear
Was the athlete unresponsive?	Yes	No	Unclear
Did he/she experience a seizure?	Yes	No	Unclear
Has the athlete ever had a head injury before?	Yes	No	Unclear

**SYMPTOMS:**

Headache?	Y	N	Nausea/Vomiting?	Y	N
Dizziness?	Y	N	Drowsy/Sleepy?	Y	N
Blurred Vision?	Y	N	Tinnitus?	Y	N
Memory Problems?	Y	N	Feeling Silly/Giddy?	Y	N
Problems focusing?	Y	N	Depressed/Emotional?	Y	N
Slurred Speech?	Y	N	Stars/Flashing Lights?	Y	N
Diplopia?	Y	N	Fatigue/Low Energy?	Y	N
Feeling Dazed/Confused?	Y	N	Problems Walking/Standing?	Y	N
Loss of Orientation?	Y	N	Sensitive to Light?	Y	N
Sensitive to Sound?	Y	N	Feeling Aggressive?	Y	N
Pain in Neck?	Y	N	Pain Radiating down arms?	Y	N
Loss of Appetite?	Y	N	Nervousness?	Y	N
Numbness/Tingling?	Y	N	Sleep Disturbance?	Y	N

**Re-Evaluation of Symptoms After 15 Minutes:**

Headache?	Y	N	Nausea/Vomiting?	Y	N
Dizziness?	Y	N	Drowsy/Sleepy?	Y	N
Blurred Vision?	Y	N	Tinnitus?	Y	N
Memory Problems?	Y	N	Feeling Silly/Giddy?	Y	N
Problems focusing?	Y	N	Depressed/Emotional?	Y	N
Slurred Speech?	Y	N	Stars/Flashing Lights?	Y	N
Diplopia?	Y	N	Fatigue/Low Energy?	Y	N
Feeling Dazed/Confused?	Y	N	Problems Walking/Standing?	Y	N
Loss of Orientation?	Y	N	Sensitive to Light?	Y	N
Sensitive to Sound?	Y	N	Feeling Aggressive?	Y	N
Pain in Neck?	Y	N	Pain Radiating down arms?	Y	N
Loss of Appetite?	Y	N	Nervousness?	Y	N
Numbness/Tingling?	Y	N	Sleep Disturbance?	Y	N

Having any of the above symptoms present denotes a positive test, and a suspected concussion, thus the student MUST be removed from all activity and proper protocol should be followed.

# Off-Location Management (Out of School Concussions)



- Parent/Guardian MUST notify the Nurse's office
- Nurses will notify the Concussion Management Team
- Student must be seen by the school doctor

# Physician Clearance

- Students suspected with a concussion should be evaluated by a private licensed MD (preferably neurologist) for diagnosis and appropriate medical care
- Once student is asymptomatic for 24 hours, should be re-evaluated to return to activities (PE and sports).
- Must have written clearance!
- Once written clearance is obtained from PMD, student must be cleared by the school physician to begin return-to-play

# Return-to-Play Protocol



- 6 Phases
- 24 hours is recommended between each phase
- **MUST HAVE WRITTEN CLEARANCE FROM PMD AND SCHOOL PHYSICIAN PRIOR TO BEGINNING RTP**

# Phase 1-Rest and Recovery

- Physical and cognitive rest until SYMPTOM-FREE
- Physical rest-adequate sleep, wake up without alarm
- Cognitive rest-avoid TV, video games, computer, texting, reading, bright lights, loud noises, studying/homework



# Phase 2-Light Aerobic Exercise



- Light activity such as walking on treadmill or riding stationary bike for 15 min
- Objective is to increase heart rate and maintain asymptomatic state



# Phase 3-Moderate Aerobic Exercise/Sport Specific Drills

- Jogging for 20 minutes
- Skills necessary for sport (ex. shooting drills for basketball)
- Objective is to further increase heart rate and add movement while remaining asymptomatic

# Phase 4-Non-Contact Practice

- Student may participate in all aspects of practice that don't require contact
- Examples-passing and shooting drills in lacrosse as opposed to scrimmaging
- Objective is for exercise, coordination, and add a cognitive aspect to return-to-play

# Phase 5-Full Contact Practice

- Allowed to participate in full practice with no restrictions and intense aerobic activity
- Objective is to increase confidence, assess functional skills while remaining asymptomatic

# Phase 6-Return-to-Play

- Student must be seen again by school physician after successfully completing phases 1-5 and remaining asymptomatic
- Once cleared, may return to all practices and games with no restrictions

# Return-to Play Protocol

- If any symptoms should return during RTP, student must rest until symptom-free for 24 hours, then begin RTP from previous phase.