

Pen Argyl Area School District

Current File: IGDJ-1

Policy

Date Adopted: 12/04/12

Date Revised:

## Pen Argyl Area School District Concussion Management Policy

A Concussion is a traumatic brain injury (TBI) caused by a direct or indirect blow to the head or body. The Center for Disease Control and Prevention estimates that as many as 3.8 million sports and recreation related concussions occur in the United States each year. In mid-November of 2011, Pennsylvania Governor Tom Corbett signed the Act of Nov. 9, 2011, P.L. 411, No.101, known as the Safety in Youth Sports Act, into law. This law makes certain requirements of Pennsylvania schools and the personnel who supervise the student athletes who represent these schools, as well as the medical personnel who support them when there is an injury.

Pen Argyl Area School District has outlined the following procedure for the management of traumatic brain injuries (concussion) sustained by any student athlete (Appendix B). Pennsylvania's "Safety in Youth Sports" Act was signed into law on November 9, 2011 and requires the following:

1. All student athletes suspected of sustaining a concussion must be evaluated and cleared by a licensed or certified healthcare provider trained in the management of concussions.
2. Yearly informational meetings are to be held for coaches, student athletes, parents, and other school officials.
3. Educational information must be made available to coaches, parents, and student athletes from the CDC and the Pennsylvania Department of Health.
4. Pen Argyl Area School District requires the following:
  - a. All student athletes must complete a baseline ImPACT test prior to participation in any athletic activity.
  - b. All student athletes must be symptom free for a minimum of two consecutive days prior to beginning a 5-phase return to play protocol. During this time student athletes will complete post injury ImPACT tests as needed, and keep a daily log of symptoms through a graded concussion symptoms checklist.

Due to recommendations of the "Safety in Youth Sports Act," the Pen Argyl Area School District has adopted the following requirements for its athletics program:

1. Once each school year, a coach shall complete the concussion management certification training course offered by the Centers for Disease Control and Prevention, the National Federation of State High School Associations or another provider approved by the Pennsylvania Department of Health. A coach shall not coach an athletic activity until the coach completes the training course required under this subsection.
  - All coaching staff personnel must complete the training course from an approved provider and submit a completion certificate after July 1st of each year to be eligible to coach any sport.
2. The school will hold an informational meeting, once each school year, for all competitors regarding concussion management and how pre-season baseline assessments can aid in evaluation, management and recovery process. These meetings may also include parents, guardians, coaches, physicians, neuropsychologists, athletic trainers, and physical therapists.
  - Pen Argyl Area School District will hold pre-season informational meetings regarding head injuries, the importance of proper concussion management and how preseason baseline assessments can aid in the evaluation, management and recovery process. Pre-season ImPACT baseline testing will occur on advertised dates, and are mandatory for any students who have not yet participated in school-sponsored activities as well as students in 7th, 9th, and 11th grades.
3. A student desiring to participate in any athletic activity and the student's parent or guardian shall, each school year, sign and return to the school an acknowledgement of their receipt and review of concussion and traumatic brain injury information.
  - Pen Argyl Area School District requires all student athletes and parent/guardian to review and sign the Comprehensive Initial Pre-Participation Physical Evaluation (CIPPE) Section 3 required by the PIAA.

4. All medical personnel authorized to make decisions on when the student athlete can return to play must complete, or have completed, training in the evaluation and management of concussion. Material for this training is available on-line through the Pennsylvania Department of Education or Health ([www.state.pa.us](http://www.state.pa.us)) and through the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)).
  - All Pen Argyl Area School District licensed athletic trainers and team physicians will be required to complete, at a minimum, one of the above on-line training courses. In-person training opportunities may also be available at certain times.
5. Authority is granted to game officials, the coach, licensed athletic trainers, licensed physicians, physical therapists, or other individuals trained in the recognition of the signs and symptoms of a concussion and designated by the school, to determine that a student athlete exhibits signs or symptoms of a concussion or traumatic brain injury.
  - The Pen Argyl Area School District will designate licensed athletic trainers, licensed team physicians, and coaches in the determination of an athlete's concussion signs or symptoms. These individuals are the only individuals that the Pen Argyl Area School District can guarantee are trained in the recognition of the signs and symptoms of a concussion. Other appropriate medical professionals (as defined in the Safety in Youth Sports Act) with training in the evaluation and management of concussion may be granted authority on the recognition of concussion signs and symptoms upon receipt of the proper documentation.
6. Once a student athlete has exhibited signs or symptoms of a concussion/traumatic brain injury, he/she must be removed from participation. The student athlete cannot return to practice or competition until the student athlete is evaluated and cleared for return to participation in writing by an appropriate medical professional (as defined in the Safety in Youth Sports Act) with training in the evaluation and management of concussion.

- Removal of any student athlete from participation due to a suspected concussion will be the responsibility of the team physician, Licensed Athletic Trainer(s), or coach. Any student athlete who is suspected of sustaining a concussion must be evaluated by a licensed health care professional trained in the evaluation and management of concussions and must obtain a written medical release from that healthcare professional before they will be allowed to return to play. Those student athletes must also satisfactorily complete a post injury ImPACT test and the 5-phase return to play program as defined in this policy under return to play. All student athletes must complete a return to play program under the supervision of the Licensed Athletic Trainer(s) at Pen Argyl before they can return to any sports participation.
7. Any coach who violates this policy will be suspended from coaching any athletic activity for the remainder of that season. For a second violation the coach will be suspended from coaching any athletic activity for the remainder of that season and for the next season. For a third violation, the coach will be permanently suspended from coaching any athletic activity.
  8. A student athlete diagnosed with a concussion shall be withheld from competition or practice and not return to activity for the remainder of that day.
    - Any athlete who is suspected of sustaining a concussion will NOT be permitted to return to practices or games that day or until further evaluation and testing have been completed by an appropriate medical professional (as defined in the Safety in Youth Sports Act).
  9. The student athlete should receive serial monitoring for deterioration. Athletes should be provided with written instructions upon discharge; preferably with a roommate, guardian, or someone that can follow the instructions.
    - All student athletes who have suffered a known concussion at a Pen Argyl Area School District athletic event, where a Licensed Athletic Trainer(s) is present, shall receive written instructions for their parents/guardians. They will also be provided with a copy of the graded concussion symptoms checklist.

10. A licensed physician as outlined in the concussion management policy should evaluate the student athlete. Once asymptomatic AND post-exertion assessments are within normal baseline limits, return to play should follow a medically supervised stepwise process.
  - As part of the Pen Argyl Area School District Concussion Management Policy, all student athletes must satisfactorily complete the 5-phase return to play (RTP) exertion program with the Pen Argyl Area School District Licensed Athletic Trainer(s) before they can return to full participation.
11. FINAL AUTHORITY FOR RETURN TO PLAY SHALL RESIDE WITH THE TEAM PHYSICIAN OR THE PHYSICIAN'S DESIGNEE.

### **Definitions**

Concussion or Mild Traumatic Brain Injury (MTBI) - A Concussion or MTBI is the common result of a blow to the head or body which causes the brain to move rapidly within the skull. This injury causes brain function to change which results in an altered mental state (either temporary or prolonged). Physiologic and/or anatomic disruptions of connections between some nerve cells in the brain occur. Concussions can have serious and long term health effects, even from a mild bump on the head. Symptoms include, but are not limited to, brief loss of consciousness, headache, amnesia, nausea, dizziness, confusion, blurred vision, ringing in the ears, loss of balance, moodiness, poor concentration or mentally slow, lethargy, photosensitivity, sensitivity to noise, and a change in sleeping patterns. These symptoms may be temporary or long lasting.

Second Impact Syndrome (SIS) - Refers to catastrophic events which may occur when a second concussion occurs while the athlete is still symptomatic and healing from a previous concussion. The second injury may occur within days or weeks following the first injury. Loss of consciousness is NOT required. The second impact is more likely to cause brain swelling with other widespread damage to the brain. This can be fatal. Most often SIS occurs when an athlete returns to activity without being symptom free from the previous concussion.

### **Prevention Strategies**

- All headgear must be NOCSAE certified.
- Make sure the headgear fits the individual properly.
- For all sports that require headgear, a coach or appropriate designee with knowledge of equipment fitting should check headgear before use to make sure air bladders work and are appropriately filled. Padding should be checked to make sure they are in proper working condition.
- Make sure helmets are secured properly at all times.
- Mouth guards should fit and be used at all times for those sports that they are required.
- All coaching staff personnel must take a concussion training course each year, beginning July 1st.
- Neuro-psychological testing on student athletes that participate in all sports prior to the start of the season.

### **Best practices for managing concussions**

- **Student athletes who are exhibiting any of the signs or symptoms of a sports-related concussion or other head injuries during practice or competition shall be immediately removed from play and may not return to play until he/she is evaluated and cleared for return to participation in writing by an appropriate medical professional. Some of the signs and symptoms are as follows.**

#### Signs of Concussion:

(Could be observed by Coaches, Athletic Trainers, Team Physicians, School Nurse, other athletes.)

1. Appears dazed, stunned, or disoriented, demonstrates decreased alertness.
2. Forgets plays, or demonstrates short term memory difficulty
3. Slurs words
4. Exhibits difficulties with balance or coordination
5. Answers questions slowly or inaccurately
6. Exhibits seizures or vomiting
7. Changes in levels of consciousness (less than 10% of concussions result in the loss of consciousness).

Symptoms of Concussion:

(Reported by the student athlete to Coaches, Athletic Trainers, Team Physicians, School Nurse, Parent/Guardian.)

1. Headache
2. Nausea
3. Balance problems or dizziness
4. Double vision or changes in vision
5. Sensitivity to noise or light
6. Feeling sluggish or foggy
7. Difficulty with concentration and short term memory
8. Sleep disturbance
9. Irritability or changes in personality and behavior

- **Once a student athlete has been removed from competition or practice because of signs or symptoms of a concussion, the following Concussion Management Protocol must be followed:**

1. At the time of injury one of the following assessments must be administered
  - a. Sports Concussion Assessment Tool (SCAT2)
  - b. Graded Symptoms Checklist
  - c. Sideline Functional and Visual Assessments
  - d. On-Field Cognitive Testing
2. Emergency medical treatment should be pursued if there is a deterioration of symptoms including seizure, altered level of consciousness, vomiting, altered pupillary findings, or direct neck pain associated with the injury.
3. Student athlete must not return to a game or practice if he/she displays any signs or symptoms consistent with a concussion.
4. Referral to the appropriate health care professional trained in the evaluation and management of concussion.
5. All appropriate school officials should be notified of the event, including the school physician, athletic trainer, athletic director, school nurse, school counselor, and all of the student's teachers. Classroom accommodations may be necessary until symptoms subside.

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6. School officials must make contact with the student athlete's parent/guardian and inform him/her of the suspected sports related concussion or head injury.
  7. School officials shall provide the student athlete and their parent or guardian with home instructions containing information on the continuing care of a person with concussion.
  8. When appropriate, a referral should be made to the regional BrainSTEPS Team. This team will consult with school teams and families in the development and delivery of educational services for the student who has sustained a concussion.
  9. The student athlete must receive written clearance from an appropriate medical professional, trained in the evaluation and management of concussions, that states that the student athlete is asymptomatic at rest and may begin a step wise medically monitored graduated return to play protocol.
  10. A return to participation protocol must be completed by the student athlete. If one is not provided by the student athlete's treating physician, the Pen Argyl Area School District Athletic Training 5-Phase RTP protocol will be provided to the student athlete.
  11. Student athlete must be symptom free for 2 full days and off of all school modifications before beginning the return to play protocol.
  12. ImPACT test administered 48 hours after injury and/or after symptoms have resolved.
- **Complete physical, cognitive, emotional, and social rest is advised while the student athlete is experiencing symptoms and signs of a concussion/traumatic brain injury. Minimize mental exertion, limiting overstimulation of the brain, limit cell phone or computer usage, testing, video gaming, multi tasking etc.**

### **Return To Play**

- **After written medical clearance is given by an appropriate medical professional, the student athlete may begin a step wise, medically supervised, graduated return to play protocol. The protocol should be monitored by the Pen Argyl Area School District Athletic Training Staff.**



## **5-Phase Return To Play Protocol**

Requirements to begin protocol:

1. Cleared for physical activity by an appropriate medical professional.
2. Completion of 2 full days of normal cognitive activities (school day, studying for tests, watching practice, interacting with peers) without re-emergence of any signs or symptoms.

### **Phase 1**

#### **Goal: 30-40 Minutes of non-impact aerobic activity**

- Exercise bike 15 minutes, maximum heart rate of 120bpm, cool down 5 minutes
- Increase intensity, maximum heart rate of 145-150bpm, maintain for 15 minutes, cool down 5 minutes
- No additional physical exertion
- If no return of symptoms progress to next phase the following day

### **Phase 2**

#### **Goal: 30-40 minutes of non-impact aerobic activity increased intensity**

- Exercise bike 10 minutes, maximum heart rate of 120bpm, cool down 5 minutes
- Increase intensity 145-150bpm, maintain for 25 minutes, cool down for 5 minutes
- No additional physical exertion
- If no return of symptoms progress to next phase the following day

### **Phase 3**

#### **Goal: 45 minutes of aerobic activity plus position specific athletic drills**

- 45 minutes of any combination of jogging, running, sprinting, and position specific drills (**full exertion, non-contact practice**)
- Rest at least 30 minutes
- May lift weights or continue non-impact practice if symptoms are not present after rest
- If no return of symptoms progress to next phase the following day

### **Phase 4**

#### **Goal: Full participation practice**

- Athlete may participate in ALL practice activities and situations
- If no return of symptoms progress to next phase the following day

### Phase 5

- Full Game Participation
- **If concussion symptoms re-occur during the graduated return to play protocol, the student athlete will return, at a minimum, to the previous level of activity that caused no symptoms, and the attending physician should be notified.**

### Return to Classroom

- **Temporary learning support accommodations may be needed for student athletes with sports-related head injuries to return to the classroom.**

Rest is the best "medicine" for healing brain injuries. The concussed brain is affected in many functional aspects as a result of the injury. Memory, attention span, concentration and speed of processing information can significantly impact learning. Further, exposing the concussed student athlete to the stimulating school environment may exacerbate symptoms and delay the resolution of symptoms needed for recovery. Accordingly, consideration of the cognitive effects in returning to the classroom is also an important part of the treatment of sports-related concussions and head injuries.

Students who return to school after a concussion may need to:

1. Take rest breaks as needed
2. Spend fewer hours at school (Have a shortened day)
3. Be given more time to take tests or complete assignments. (All courses should be considered)
4. Receive help with schoolwork (e.g. Pre-teaching, outlines, note taker)
5. Reduce time spent on the computer, reading, and writing.
6. Be granted early dismissal from each class to avoid crowded hallways.
7. No standardized testing (e.g. PSSA, SAT, ACT) during the initial recovery window of 2-4 weeks.

In Pennsylvania, BrainSTEPS teams are available to virtually any secondary school in the commonwealth. These teams have been developed by the Brain Injury Association of Pennsylvania with funding from the Pennsylvania Department of Health and the Department of Education. Brain STEPS teams are designed to support the staff, student, parents/guardians in return to school after a brain injury. These teams work with all parties to identify and implement appropriate accommodations and modifications to manage the student's symptoms and to support their learning needs throughout their secondary school career.

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The school (e.g. teachers, counselors, nurse) and family should monitor the performance of the student closely for two weeks after the return to school. If the return to the classroom causes concussion symptoms to re-occur or if the student demonstrates uncharacteristic performance (e.g. reduced attention span, inability to take tests, acting out in class), the school should initiate a formal referral to the local BrainSTEPS team ([www.brainsteps.net](http://www.brainsteps.net)).