



**East Penn School District
Department of Athletics**

East Penn School District's Protocol for Management of Mild Traumatic Brain Injury





East Penn School District Department of Athletics

UNDERSTANDING OF RISK OF CONCUSSION AND MILD TRAUMATIC BRAIN INJURY

What is a concussion? A concussion is a brain injury that:

1. is caused by a bump, blow, or jolt to the head or body.
2. can change the way a student's brain normally works.
3. can occur during practices and/or contests in any sport.
4. can happen even if a student has not lost consciousness.
5. can be serious even if a student has just been "dinged" or "had their bell rung."

All concussions are serious. A concussion can affect a student's ability to do schoolwork and other activities (such as playing video games, working on a computer, studying, driving, or exercising). Most students with a concussion get better, but it is important to give the concussed student's brain time to heal.

What are the symptoms of a concussion? Concussions cannot be seen; however, in a potentially concussed student, ***one or more*** of the symptoms listed below may become apparent and/or that the student "doesn't feel right" soon after, a few days after, or even weeks after the injury.

- Headache or "pressure" in head
- Nausea or vomiting
- Difficulty concentrating or remembering
- Balance problems or dizziness
- Blurred vision
- Confusion, "don't feel right," feeling in a fog
- Sensitivity to light or noise
- Nervous or anxious

What should a student do if he/she believes they may have a concussion?

- Students feeling any of the symptoms set forth above should immediately tell their coach, athletic trainer and their parents.
- The student should be evaluated. A licensed health practitioner (CRNP, PA, DO, MD) familiar with current concussion management, should examine the student, determine whether the student has a concussion, and determine Return to Play Protocol.
- Concussed students should give themselves time to get better. If a student has sustained a concussion, the student's brain needs time to heal. During this time, it is important to avoid any head contact. Repeat concussions can increase the time it takes for an already concussed student to recover and may cause more damage to that student's brain. Such damage can have long term consequences.

Protocol for Management of a Traumatic Brain Injury

East Penn School District's Department of Athletics has developed a protocol for the staff to follow in the event of a traumatic brain injury (TBI), a.k.a. concussion, sustained by a student-athlete whether in athletic activity or otherwise. The purpose of this protocol is to educate and minimize the risk and potential injury that can be sustained during athletic activities. As stated by the Center for Disease Control (CDC), *a TBI is caused by a bump, blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain.*¹ Traumatic brain injuries



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can cause many health and mental problems throughout life, and possible risk of death. The protocol is in place so that we as an Athletic Department, student-athletes, and parents are aware of the severity and consequences that can develop from second-impact syndrome, which is caused by repeated trauma to the brain in a short period of time resulting in catastrophic injuries or are even fatal.

All EPSD athletes are required to have an up-to-date ImPACT baseline test prior to the start of the first practice of their sports season.

- EPSD defines an up-to-date baseline as:
 - A baseline that has been taken within the last two years (except middle school).
 - Baselines will be completed in 9th and 11th grade or anyone new to sport.
 - If a student experiences a concussion, another baseline will be administered prior to the start of the next season regardless of the grade.
 - 7th and 8th grade students are required to complete a baseline test prior to each year.

RECOGNITION

Recognizing a TBI is the very next step in treating a student-athlete behind prevention as the first. The list of signs/symptoms below are divided into three categories to differentiate the variety of signs/symptoms that can result from a traumatic brain injury. An injury to the head resulting in one or more of the following symptoms should be treated as a TBI.

➤ **Cognitive Signs/Symptoms:**

- Difficulty concentrating, difficulty remembering, increased symptoms with mental activity, and/or confusion.

➤ **Physical Signs/Symptoms:**

- Headache, dizziness, trouble falling asleep, balance problems, nausea, blurred vision, sensitivity to light or noise.

➤ **Behavioral Changes:**

- Irritability, more emotional, sadness, nervous or anxious, fatigue or low energy.

Once athlete reports symptoms they should not participate in any physical activity until evaluated by a healthcare professional (CRNP, PA, DO, MD). Examples: physical education, aquatics, high school sports, or club/recreational sports.

1. The athletic trainer will email the athletic director, school nurse, school counselor and/or their respective coach about your child's injury.
2. Athletes are to be followed on a daily basis by the EPSD Athletic Trainers.

NO ATHLETE WHO IS SUSPECTED TO HAVE SUFFERED A CONCUSSION SHALL RETURN TO PARTICIPATION ON THE SAME DAY.



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RETURN-TO-PLAY

A student-athlete is ready to return to full participation following a TBI injury when he/she has been fully progressed through the Return to Play Protocol under the supervision of one of the EPSD Athletic Trainers. A student-athlete **will not** be permitted to progress through the Return to Play Guidelines until they meet all of the following criteria:

- The student athlete must be symptom free during regular activities of daily living, without the use of any medications taken to treat concussion related symptoms.
- Must have written clearance from healthcare practitioner (CRNP, PA, DO, MD) to begin Return to Play Protocol.
 - Must be from a treating clinician; notes from the Emergency Department **WILL NOT** be accepted.
 - **Written clearance must be consistent with EPSD and Lehigh Valley Health Network/Jefferson approved protocols.**
- Asymptomatic before progressing through day 4 and 5 of the Return to Play Protocol.
- **IF** student-athlete is participating in Physical Therapy and/or Occupational Therapy, final clearance must be accompanied by written documentation from the overseeing practitioner (CRNP, PA, DO, MD).
- Post injury ImPACT testing will be determined on a case-by-case basis by the overseeing physician.

Physical Exertion Steps

- 1.) Light aerobic activity
- 2.) Moderate aerobic exercise
- 3.) Sports specific functional exercises
- 4.) Return to a non-contact training session/practice
- 5.) Return to a full contact training session/practice
- 6.) Full game participation



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**EPSD PROTOCOL FOR MANAGEMENT OF MILD TRAUMATIC BRAIN INJURY
ACKNOWLEDGEMENT FORM**

Following a concussion, **REST IS THE KEY**. Limitations regarding physical activity and academic accommodation will be provided by the overseeing physician.

Returning to School:

1. EPSD Athletic Trainer's will inform the athletic director, school nurse, school counselor and/or their respective coach about your child's injury. Your child's teachers will then be notified by the appropriate individual.
2. Students who experience symptoms of concussion often need extra help to perform school-related activities. The academic accommodations, if needed, will be provided by overseeing physician.

Returning to Sports & Recreation:

1. Your son/daughter should **NEVER** return to sports participation or active recreation with **ANY** symptoms, including practices and games.
2. No return to physical education.

It is OK to:	There is No Need to:	DO NOT:
Use Tylenol for headaches Use ice pack for headaches Eat a regular diet Sleep	Check eyes with flashlight Wake up every hour Test reflexes	Drive Take Advil, Motrin, aspirin, Naproxen or other NSAID

Serious Signs to Watch For:

Please watch carefully for any of the following serious signs and/or symptoms. The best guideline is to note symptoms that worsen, and behaviors that are a change in your son/daughter. If you observe any of the following signs, call your doctor or go to your emergency department immediately.

Headaches that worsen	Look very drowsy, can't awaken	Can't recognize people, places
Unusual behavior change	Seizures	Repeated vomiting
Significant irritability	Increasing confusion	Loss of consciousness
Slurred speech	Weakness/numbness in legs/arms	Neck pain

Acknowledgement of this protocol is dictated by the signature below, and therefore is to be followed by the person(s) applicable.

_____ Athletic Director _____ Date

_____ Parent/Guardian _____ Date

_____ Student-Athlete _____ Date