

TRAUMATIC BRAIN INJURY / CONCUSSION PARENT INFORMATION SHEET

Dear Parents,

This is a guideline to help communicate and provide educational information related to Traumatic Brain Injuries/Concussions. Please understand that every athlete is different and responds differently. It is our goal to insure, based on the latest research that your child is returned safely to activity in the event they sustain a traumatic brain injury/concussion.

It is important to note that studies show that adolescents' **brains take several weeks to heal following a concussion**, although 20% of all high school concussions can take 3+ weeks to return to baseline. Studies also show that symptoms tend to worsen with physical and cognitive exertion, therefore special attention needs to be made when beginning physical activity following a concussion

Rest is key. The athlete should not participate in any high exertion activities (sports, physical education, riding a bike, etc) if the athlete has any symptoms. It is important to limit activities that require a lot of thinking or concentration (homework, video games, computer, driving, job-related activities), as this can also make the symptoms worse and delay healing.

Students and athletes will need help from the athletic trainer, treating physician and team physician at your school to help monitor their recovery and return to activities. In the event your school does not have such personnel, then the coaches have to help monitor this recovery under the direction of the treating/team physician.

Returning to Daily Activities

1. Get lots of rest. Be sure to get enough sleep at night – no late nights. Keep the same bedtime weekdays and weekends.
2. Limit social activities: movies, parties, etc
3. Take daytime naps or rest breaks when you feel tired or fatigued.
4. Limit physical activity as well as activities that require a lot of thinking or concentration as mentioned above.
5. Repeated evaluations of your symptoms by your school's athletic trainer, team physician or physician with experience in treating traumatic brain injuries/concussions is recommended to help guide recovery.

Returning to School

1. If you/your child are still having symptoms of a concussion, extra help to perform school-related activities may be needed. As the symptoms decrease during recovery, the extra help or supports can be removed gradually.
2. Inform the teacher(s), school counselor or administrator(s) about the injury and symptoms. School personnel should be instructed to watch for:
 - a. Increased problems paying attention
 - b. Increased problems remembering or learning new information
 - c. Longer time needed to complete tasks or assignments
 - d. Greater irritability, less able to cope with stress
 - e. Symptoms worsen (headache, tiredness) when doing schoolwork
3. Attempt to minimize the length of continuous time spent studying by taking multiple breaks in order to diminish the onset of symptoms.
4. The athlete may need to initially return to school in a limited basis. He/she may need to initially attend school for only half days, but this should be done only under the supervision of a physician or athletic trainer.

Returning to Sports

1. The return to play protocol becomes very specific for each person, depending on sport, so the physician and/or athletic trainer will give you and your child specifics of exactly what to do and not to do. It is crucial that you, your child and child's coach follow these instructions carefully.
2. You should NEVER return to play if you still have ANY symptoms. (Be sure that you do not have any symptoms at rest and while doing any physical activity and/or activities that require a lot of thinking or concentration).
3. Be sure that the athletic trainer, coach and physical education teacher are aware of your injury and symptoms.
4. Gradual return to sports practices under the supervision of athletic trainers and physicians with experience in concussion management is required. If an athletic trainer is not available, the physician will instruct the athlete on return to play based on the 5 stage guideline and it should be adhered to at all times.

5-STAGE RETURN-TO-PLAY ACTIVITY PROGRESSION
RECOMMENDED ACTIVITY LEVEL FOR EACH DAY*

Generally, each step should take a minimum of 24 hours so that an athlete would take approximately one week to proceed through the full rehabilitation protocol once they are asymptomatic at rest and with provocative exercise.

STAGE

- 1** Low levels of aerobic physical activity, provided NO SYMPTOMS return during or after activity. (Examples: walking, light jogging, and easy stationary biking for 20-30 minutes)
- 2** Moderate physical activity, provided NO SYMPTOMS return during or after activity. (Examples: moderate jogging, brief sprint running, moderate intensity stationary biking, light calisthenics, and sport-specific drills without contact or collisions for 30-45 minutes)
- 3** Heavy, non-contact physical activity, provided NO SYMPTOMS return during or after activity. (Examples: extensive sprint running, high intensity stationary biking, resistance exercise with machines and free weights, more intense non-contact sport-specific drills, agility training, plyometrics, and repetitive jumping drills for 45-60 minutes)
- 4** Full contact in controlled practice or scrimmage; game simulation
- 5** Full contact in game play

*If symptoms are provoked on any given day, stop exercising that day, rest for 24 hours, and attempt a return at the same level.

COMMON SYMPTOMS THAT YOUR CHILD MAY EXPERIENCE WITH A TRAUMATIC BRAIN INJURY/CONCUSSION

Physical Symptoms

- Headache (does not matter the severity of the headache)
- Headache that gets worse as the day goes on or is physically/mentally exerted
- Nausea
- Fatigue
- Visual problems (blurred vision, double vision, trouble focusing, etc.)
- Balance problems
- Sensitivity to light and/or noise
- Numbness or tingling
- Vomiting
- Dizziness

Thinking/Cognitive Symptoms

- Feeling mentally foggy
- Problems concentrating
- Problems remembering

Emotional Symptoms

- Irritability
- Sadness
- Feeling more emotional
- Nervousness

Symptoms Related to Sleep

- Drowsiness
- Sleeping more than usual
- Sleeping less than usual
- Trouble falling asleep

RETURN TO PLAY CRITERIA:

1. The athlete must not be experiencing any signs or symptoms at rest or with activity
2. The athlete must have completed a 5 phase exercise based exertional progression, under the direction of the athletic trainer or treating/team physician
3. The athlete must be returned fully to the classroom, homework, etc.
4. If a neurocognitive test is available, the athlete must be back at baseline score on all tests per the treating/team physician or athletic trainer
5. Written release using the OHSAA Traumatic Brain Injury/Concussion Return to Play form by a physician or athletic trainer with experience in traumatic brain injury/concussion management.

Traumatic Brain Injury/Concussion Guidelines for Parents: What can you do to help your child's recovery?

These guidelines are designed to assist parents of concussed athletes in managing their child's recovery at home. While returning athletes to sports is a high priority for medical personnel, we have learned not to take traumatic brain injuries/concussions lightly.

An adolescent's brain should not be treated the same way as an adult's. The human brain is not fully developed until age 25, and studies have shown that young brains take longer to heal following a traumatic brain injury/concussion. The brain is the body's most complex and delicate organ; therefore, brain injuries merit special attention. Recent research has shown that "shutting down" the brain as early as possible promotes faster recovery. The more the brain is stimulated after a concussion, the longer it takes to repair itself.

By following the guidelines outlined below, we believe that young athletes with traumatic brain injuries/concussions will be able to return to sports as soon as safely possible.

Responsibilities of the Coach

1. Remove any child from participation if there is any question that they have sustained a traumatic brain injury/concussion immediately.
2. Contact the parents of the child and notify them that a brain injury has occurred and that they will not be permitted to participate in practices or contests until:
 - a. he/she is released by the athletic trainer and/or team/treating physician who is experienced in traumatic brain injury/concussion management
 - b. Has completed an exertional return to play progression w/o symptoms under the direction of the athletic trainer and/or team/treating physician
 - c. A written release utilizing the OHSAA Traumatic Brain Injury/Concussion Return to Play form from the athletic trainer and/or team/treating physician is received clearing them for full participation
3. Insure that the athlete does not participate in any activity at practice or competition that goes against the recommendations of the treating healthcare professional.

Responsibilities of the Athletic Trainer, Team Physician or Treating Physician

1. Initial assessment of the athlete and referral as appropriate
2. Notification of school principal, who notifies the athlete's school counselor and physical education teacher (if they are currently taking PE).
3. Monitoring of the athlete's progress as he/she recovers
4. Supervision of the athlete through an approved, Return-to-Play protocol, which advances athletes back to exercise as tolerated after getting medical clearance to exercise
5. Athletic trainer will notify the principal and coach when cleared.

Guidelines for Parents

1. Download information from either the OHSAA or National Federation of State High School Association websites related to this topic: www.ohsaa.org or www.nfhs.org
2. Contact the principal or school counselor regarding academic accommodations, such as reduced workloads, no timed tests and pre-printed class notes during the time of recovery.

3. Encourage frequent study breaks to avoid provoking symptoms (for example, try studying for 15 minutes then resting for 10-15 minutes then studying, etc.).
4. Try to limit screen time (television and computer) as much as possible. A good rule of thumb is no screen time in the early stages of healing.
5. Do not allow driving until medically cleared.
6. Avoid video games and text messaging as much as possible.
7. No physical education or physical exertion until cleared by the Athletic Trainer and/or Treating/Team through the Return-to-Play protocol.
8. Try to limit extra-curricular activities, such as dating, parties, yard work, after school clubs and entertaining as much as possible.

Finally, medical clearance for returning to sport **MUST** come from a trained physician or someone who specializes in concussion management. Check with your family doctor or pediatrician to see if they feel comfortable caring for your child's concussion, or if they have a concussion specialist they prefer. Because concussion symptoms often evolve over time, clearance to play from the Emergency Room is not in the best interest of the athlete's care. We recommend proper follow-up with a concussion specialist. OHSAA has a specified form that must be used to clear your child back to participation in the event of a traumatic brain injury/concussion.

Special neuropsychological and/or neurocognitive tests may be used at your child's school in the pre-season to establish baseline data. In the event your child sustains a traumatic brain injury/concussion, they will need to have the test administered again and the results interpreted by a qualified healthcare provider who is trained in such interpretation.

The information in this document was prepared by the Ohio Athletic Trainers' Association (OATA) and their Physician Advisory Committee. This document was submitted to the Ohio High School Athletic Association to use as an educational piece for parents. For more information on the OATA, visit www.oata.org