Get Your School Prepared to Manage Traumatic Brain Injuries (TBI) and Concussions



Example TBI Management Plan for Schools and School Districts

TBIs including concussions, are common among K-12 students, not just among student-athletes. When students are in school, the chance for getting a TBI is greatest during school sports practices and games, physical education (PE) class, and playground time. However, students commonly get TBIs outside of school too, such as from a fall from a bike or a car crash.

When students receive temporary school support services, most students recover well and return to their regular academic and extracurricular activities within a couple of weeks. Formal school support services may be needed when symptoms persist for 4 weeks or longer.

This document provides an example of a TBI management plan that schools or school districts can use to help identify a possible TBI and help students safely return to school, sports, and other physical activities. It is based on the latest information and <u>guidelines</u> for managing TBIs among school-age children. Below is a snapshot of the four topic areas and their related strategies and resources covered in the example TBI management plan.

Topic	Strategies	Resources for School Professionals
Identifying a Possible TBI that Occurred During School	 Remove students with a possible TBI from sports and other physical activities during physical education (PE) class or playground time for the remainder of the day. Ensure that at least one person at your school is trained in TBI management. Notify the student's parent(s) or guardian(s) of the suspected TBI. Observe the student for signs and symptoms of TBI and danger signs for a minimum of 30 minutes. Keep the student out of sports and other physical 	 ✓ HEADS UP to Schools online training ✓ TBI symptoms and danger signs ✓ Concussion Signs and Symptoms Checklist ✓ TBI or Concussion incidence report form ✓ Letter to request
Responding when a TBI Diagnosis is Reported to the School	 Reep the student out of sports and other physical activities during PE class or playground time until the school receives written approval from their health care provider stating they can do these activities. Request details from parents or guardians about the types of symptoms the student is experiencing. 	details from parents or guardians on a student's TBI symptoms Written instructions for the school from the student's health care provider
Returning to School After a TBI	 Identify a TBI management team or case manager to manage the student's recovery after a TBI. Provide academic adjustments based on the student's symptoms. Use a stepwise return to school protocol. Offer formal school support services to students who experience TBI symptoms for 4 weeks or longer. 	 ✓ Returning to School After a Concussion ✓ Helping Students Recover from a Concussion: Classroom Tips for Teachers ✓ Letter from the TBI Management Team to school staff
Returning to Sports and Other Physical Activities After a TBI	 Use a stepwise return to sports and physical activity protocol. Ask for written approval from the student's health care provider before they begin the return to sports and physical activity protocol. 	 ✓ Returning to Sports ✓ HEADS UP resources for high school coaches

Traumatic Brain Injury (TBI) and Concussion Management Plan for Schools and School Districts

TBIs including concussions, result from a hit or jolt to the head that can lead to short- or long-term changes in a child's brain. These changes are linked to a variety of symptoms that affect thinking, learning, behavior, and emotions during recovery—all critical to school participation.

Identifying a Possible TBI that Occurred During School

If a student gets a possible TBI (including concussion) during school or a school-related activity, a school nurse, athletic trainer, or other designated school professional trained in TBI identification and management may take the following actions.

- ✓ Notify the student's parents or guardians of the possible TBI. Schools may use a <u>TBI or Concussion Incident report form</u>. A student with a possible TBI should be seen by a health care provider. Parents, guardians, school professionals, and coaches are not expected to diagnose a TBI. Only a health care provider can diagnose a TBI. Parents and guardians may visit the Centers for Disease Control and Prevention's Where to Get Help webpage to get information on finding medical care for their child.
- ✓ Observe the student for signs and symptoms of TBI and danger signs for a minimum of 30 minutes. Common symptoms of a TBI may include headache, dizziness, or blurry vision while examples of TBI danger signs may include the inability to stay awake, seizures, unusual behavior, or increased confusion. A complete list of TBI symptoms and danger signs can be found on the CDC website. School professionals may use a checklist to assist with monitoring TBI symptoms and danger signs.
 - Danger signs after a TBI are rare. School professionals will initiate emergency medical services if a student shows one or more TBI dangers signs.
 - If TBI signs or symptoms are present, the student may return to class. They will not be allowed to participate in sports or other physical activities during physical education (PE) class or playground time for the remainder of the day. A student should only return to sports and participate in physical activities during PE class and playground time with written approval from their health care provider. See page 5 for information on "Returning to Sports and Other Physical Activities After a TBI."
 - If TBI signs or symptoms are not present, the student may return to class. However, they will not be
 allowed to participate in sports or other physical activities during PE class or playground time for the
 remainder of the day. Parents and guardians may watch for signs and symptoms of a TBI at home. The
 signs and symptoms of a TBI may show up right after an injury or may not appear or be noticed until
 hours or days after the injury.

Responding When a TBI Diagnosis is Reported to the School

A student's parents or guardians may notify the school if a student has been diagnosed with a TBI. School professionals may take the following actions to support the student.

- ✓ Keep the student out of sports and other physical activities during PE class or playground time until the school receives written approval from their health care provider stating that they can do these activities.
- Request details from parents or guardians about the symptoms the student is reporting and that the parents or guardians are observing.
- √ Ask whether the student's health care provider shared written information on the student's symptoms or considerations for academic adjustments.

Additional information on supporting students returning to school with a TBI is outlined in the next section.

Returning to School After a TBI

Most students can return to school within 1 to 2 days of a TBI and will only need temporary school support services. Students do not need approval from a health care provider to return to school after a TBI. However, they will not be allowed to participate in sports or physical activities during PE class or playground time until the school receives written approval from their health care provider stating that they can do these activities. Sports and other physical activities can put them at risk for another injury to the head and brain during their recovery. Students can do non-physical activities during sports practices and games, PE class, and playground time. Some examples may include helping to keep score of games and cheering on other students. See page 5 for information on "Returning to Sports and Other Physical Activities After a TBI."

TBI Management Team

The school's TBI management team or a case manager should manage a student's TBI-related symptoms and academic progress. A TBI Management Teams may consist of school professionals (often appointed by the school principal), as well as the student's parent or guardian and health care provider. This team works to ensure that the student's needs are being met and monitored. They also help coordinate communication with other school staff involved in the student's recovery, such as PE and classroom teachers. The CDC "Returning to School After a Concussion," handout provides more information, including roles and responsibilities for members of a TBI Management Team.

Academic Adjustments

The goal of the return-to-school process is to gradually increase the amount of time and intensity of a student's academic activities without making their TBI-related symptoms worse. Academic adjustments play an important role in this process. Academic adjustments are generally determined by school professionals. Sometimes the student's health care provider will also provide written guidance to assist school professionals. Academic adjustments should be based on the student's symptoms and monitored and adjusted on an ongoing basis. Academic adjustments can be removed once the student's academic performance has returned to pre-injury levels.

Examples of Academic Adjustments for Students Recovering from a TBI		
Symptoms that affect thinking and memory	 ✓ Reduce class assignments and homework to key tasks and base grades on adjusted work. ✓ Provide extra time to work on class assignments and homework. 	
Physical and sleep-related symptoms	 ✓ Provide rest breaks during the school day. ✓ Allow students to wear sunglasses inside and outside or sit in a place that is less bright (draw blinds, sit them away from window) if they are bothered by light. 	
Changes in emotion, mood, or behavior	 ✓ Develop an emotional support plan. ✓ Locate a quiet place for the student to go if they feel overwhelmed. 	

More examples of academic adjustments for students recovering from a TBI can be found in CDC's "Returning to School After a Concussion" and "Helping Students Recover From a Concussion: Classroom Tips for Teachers" handouts.

Return to School Protocol

A stepwise return-to-school protocol will support students with a TBI. The return-to-school protocol should be adapted based on the student's unique needs and symptoms. Most students will not need academic adjustments after 3 to 4 weeks following a TBI.

Example Return to School Protocol**		
Step 1	Start back to school	 The student can do schoolwork and light physical activity, like going for walks, even if they experience some mild symptoms. Provide academic adjustments based on the student's symptoms, allow them to attend school part-time, and take rest breaks if they need them. Lessen screentime during the first 1 to 2 days of school if this activity makes their symptoms worse.
Step 2	Monitor and change accommodations	 ✓ TBI symptoms often change during recovery. Monitor and change the student's academic adjustments based on their symptoms. ✓ Offer help with homework and extra time for tests as needed. ✓ The extra help and support can be slowly removed as their symptoms decrease.
Step 3	Get back to regular academic activities	 ✓ The student can return to most regular academic activities when their TBI symptoms are mild and nearly gone. ✓ Recovery from a TBI happens when a student can do all of their regular activities without experiencing TBI-related symptoms.

^{**}This protocol was adapted from return-to-school protocols published in:

Patricios JS, Schneider KJ, Dvorak J, et al. Consensus statement on concussion in sport: the 6th International Conference on Concussion in Sport-Amsterdam, October 2022. Br J Sports Med. 2023;57(11):695-711. doi:10.1136/bjsports-2023-106898

Reed N, Zemek R, Dawson J, et al. Living guideline for pediatric concussion care (PedsConcussion). 2022. https://doi.org/10.17605/OSF.IO/3VWN9

Prolonged Recovery

Formal school support services may be needed to assist students who experience a prolonged recovery from a TBI (generally 4 weeks or longer). This may include students with a TBI experiencing chronic cognitive or emotional effects that qualify as disabilities. The type of support will differ depending on each student's specific needs. However, the Individuals with Disabilities Education Act (IDEA) provides a federal mandate ensuring that students with health conditions that affect school performance, including those recovering from TBI, receive the necessary accommodations and services throughout their educational journey.

Formal school support services may include:

- Individualized Education Plan. These plans are used for students with certain classifications of disability that effect their educational performance.
- √ 504 Plan. These plans help students with persistent symptoms and who require assistance to be able to participate fully in school.

Returning to Sports and Other Physical Activities After a TBI

After a TBI, a student should only return to sports and participate in physical activities during PE class and playground time with written approval from their health care provider. Return to sports and other physical activities involves a stepwise progression.

Example Return to Sports and Physical Activity Protocol***

Step 1: Back to regular activities

• The student is back to school and has approval from their health care provider to begin the return to sports progression.

Step 2: Light aerobic activity

• Begin with light aerobic exercise only to increase a student's heart rate. This means about 5 to 10 minutes on an exercise bike, walking, or light jogging. No weightlifting at this point.

Step 3: Moderate activity

• Continue with activities to increase a student's heart rate with body or head movement. This includes moderate jogging, brief running, moderate-intensity stationary biking, moderate-intensity weightlifting (less time or less weight from their typical routine).

Step 4: Heavy, non-contact activity

Add heavy non-contact physical activity, such as sprinting/running, high-intensity stationary biking, regular
weightlifting routine, and non-contact sport-specific drills that do not put the student at risk for head
impacts.

Step 5: Practice and full contact

 Student may return to practice and full contact (if appropriate for the sport or activity) during a regular practice.

Step 6: Competition

Student may return to competition.

***This protocol was adapted from return-to-school protocols published in: Patricios JS, Schneider KJ, Dvorak J, et al. Consensus statement on concussion in sport: the 6th International Conference on Concussion in Sport-Amsterdam, October 2022. Br J Sports Med. 2023;57(11):695-711. doi:10.1136/bjsports-2023-106898

Each step in a return to sports and physical activity protocol typically takes a minimum of 24 hours. It is important for a student's coach, PE teacher, and parents or guardians to watch for TBI symptoms after each day's return to sports and physical activity progression activity.

A student should only move to the next step if they do not have any new symptoms at the current step. If a student's symptoms come back or if they get new symptoms, this may be a sign that they are pushing too hard. The student should stop these activities, and their health care provider should be contacted. After more rest and only mild symptoms, the student can start at the previous step.

More Information and Resources

Prevention

Protecting students from head impacts lowers their chance for TBI, as well as potential changes in the brain and brain diseases that are linked to long-term exposure to repeated head impacts.

- √ Actions to lower head impacts in youth football
- √ General TBI prevention tips
- √ Helmet safety information

Online Training

- √ Teachers and Other School Professionals
 - HEADS UP to School Professionals
- √ School Nurses
 - HEADS UP to Health Care Providers
- √ Coaches
 - · HEADS UP to Coaches
 - HEADS UP para entrenadores deportivos juveniles

- √ Athletic Trainers
 - HEADS UP to Athletic Trainers
- √ Sports Officials
 - HEADS UP to Sports Officials



Information for School Professionals

- √ Teachers, Counselors and Other School Professionals
 - Concussion fact sheet for teachers, counselors, and school professionals (English) (Español)
 - Helping students recover from concussion: classroom tips for teachers (English)
 - Returning to school after a concussion: a fact sheet for school professionals (English)
- √ School Nurses
 - Returning to school after a concussion: a fact sheet for school nurses (English) (Español)
 - · Concussion signs and symptoms checklist (English) (Español)
 - Concussion signs and symptoms card (English) (Español)
- √ Special Education Teachers
 - Concussion recognition and response for those with intellectual disabilities (English)
- ✓ PE and Health Teachers
 - Talking to parents and students about concussions (English) (Español)

Information for School Parents

- √ Fact sheet for parents (English) (Español) (Arabic)
- √ Video: Caring for your child's concussion (English) (Español)
- √ Caring for your child's concussion (English) (Español)
- √ How can I help my child recover after a concussion? (English) (Español)
- √ Letter to school on a child's concussion symptoms (English)
- √ Concussion conversation guide (English) (Español)
- √ Concussion Q&A (English) (Español)
- √ Post-play check-in (English) (Español)

Where to Get Help

Many organizations can help students and their families after a TBI. For more information, see the Centers for Disease Control and Prevention's Where to Get Help webpage.

The information in this document is based on current science and guidelines on TBI and may be updated as new information becomes available. The content and links to other sites are not a substitute for medical or professional care. Questions about diagnosis and treatment for TBI should be directed to student's health care provider.

Remember:

Once your TBI management plan is ready, it is time to make others aware of it. Be sure to:

- ✓ Post your TBI management plan on your school or school district website.
- ✓ Send parents, guardians, and staff a link to your TBI management plan at the start of the school year.
- ✓ Send parents and guardians of students participating in sports a reminder with a link to the plan at the start of each season.



Having a designated school professional trained on TBI at every school may help with identifying students with TBI signs and symptoms and using academic adjustments for students who may be struggling in the classroom after this injury. School professionals can complete the HEADS UP to School Professionals Online Training and get the latest tips on TBI identification and management.

Content Sources

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