



## General Considerations: Return to School Following a Concussion

### What is a mild brain injury or concussion?

A mild brain injury or concussion is commonly defined as an injury caused by a bump, jolt or blow to the head that results in a period of altered consciousness (such as disorientation, confusion, inability to follow simple commands) or brief loss of consciousness of no more than 15 minutes. The Centers for Disease Control and Prevention (CDC) indicates that up to 75% of all TBIs that occur each year are categorized as concussions or other forms of mild TBI. Although approximately 90% of all concussions/mild brain injuries resolve within the first three months, optimal recovery may actually take longer. Recovery can depend upon a number of factors, including the severity of the concussion, age, relative health, and follow-up care. In some cases, concussion can cause a wide range of functional short- or long-term changes that affect cognition, sensation, language, or emotions. Repeated concussions occurring over an extended period of time (i.e., months, years) can result in cumulative neurological and cognitive deficits. Experiencing repeated concussions within a short period of time (i.e., hours, days, or weeks) can be catastrophic or fatal.

Children aged 0 to 4 years and older adolescents aged 15 to 19 years are two of the highest risk groups for mild TBI/concussion, with incidence higher for males than females. Studies have revealed that, even though they are labeled *mild*, an injury to the head and brain can have significant impact on a child or teen. A concussion can be caused by a fall, motor vehicle crash and/or whiplash injury, sports injury (hockey, soccer, football, etc.), physical violence, jarring or shaking. The potential for a concussion in the school setting is greatest during activities where collisions can occur, such as during physical education (PE) class, recess or playground activities, or youth sports activities. Students may also sustain a concussion outside of school but may then exhibit symptoms in the following days. Research shows that concussions can have a more serious effect on a young developing brain and need to be addressed quickly, as recognition and response to concussion symptoms can prevent further injury and help with recovery. Children who return to activities without proper care have an increased risk for more serious secondary injuries with longer term consequences. Careful consideration should be given before allowing a student to return to activities that could result in further injury.

*When a child or youth has experienced a concussion, some important considerations for educators and parents include the following.*

### **First hours and days following a concussion are critical.**

In the case of a child or teen who has recently sustained a concussion, physicians generally recommend complete rest for the first few days- plenty of sleep and avoid all activities that are mentally and physically demanding. Only when symptoms have reduced significantly, and with agreement from the health care professional, should the student slowly and gradually return to daily activities and school. If symptoms return or worsen (or new symptoms occur with increased activity), stop these activities and take more time to rest and recover. As the days go



by, there should be gradual improvement. The student's progress should be monitored closely by parents during the first days and weeks following return to school, with a return visit to the physician if warranted.

### **Open communication and a timely return to school are beneficial for the student.**

When a concussion is first reported to school staff, this information should immediately be shared with an identified point of contact, such as the school nurse. In turn, this individual should serve as a liaison to the parents and classroom teacher, relaying updated information on the student's condition and anticipated return to school. This liaison should also be aware of who the school district's 504 coordinator and assigned TBI specialist are, what their services entail, when and how to access those services, if needed.

When considering the issue of when the student should return to school, it is helpful to inform the parents that a student's school schedule can be customized to ease the transition and accommodate such factors as ongoing fatigue and other persistent physical symptoms.

### **Close monitoring by the school and parents will be required.**

School interventions can vary from general accommodations in the classroom to more extensive modifications that may require customized special education services and the development of an Individual Education Plan (IEP). Determining appropriate accommodations often depend upon the severity of the injury, how the injury impacts the student's functioning, and the length of time the student is symptomatic.

Educational needs and accommodations can change quickly in the first weeks and months following a TBI, including a concussion. This may require frequent checking in with the student to assure general classroom accommodations are sufficient or need to be changed. This will ensure that the plans are reflective of current educational needs.

### **Be aware of available school supports and services.**

The information below briefly defines the spectrum of services available to a student returning to school following a concussion.

- **General Accommodations:** Upon their return to school, most students with a concussion may only require short term accommodations in the general education setting before their symptoms resolve. Examples of such accommodations may include a shortened school day schedule, minimal/no homework, rest breaks, quiet environment, extended transitions between classes, and preferential seating. Symptoms resulting from *most* concussions are temporary and resolve within a few days or weeks. However, if symptoms persist, close monitoring by the child's physician is recommended, and the school and family may need to explore additional accommodations and supports for the student, including an adjusted timeline for returning to a full academic schedule.



- **504 Plan:** Section 504 of the Rehabilitation Act of 1973 is a Civil Rights statute that protects persons of all ages with disabilities from discrimination and covers public and private agencies which receive federal financial assistance, such as public schools. According to Section 504, and the Americans with Disabilities Amendments Act of 2008, the term ‘disability’ means, with respect to an individual:

*...A physical or mental impairment that substantially limits one or more major life activities of an individual. Documented sources may include aptitude and achievement tests, teacher recommendations, physical condition, social and cultural background and adaptive behavior by those knowledgeable about the meaning of the evaluation data and placement options.*

34 C.F.R. § 104

The law provides that the school makes a determination of need on a case-by-case basis, and as outlined in the Eligibility Analysis process in the Minnesota Compliance Manual for Section 504 of the Rehabilitation Act of 1973. The school district has a legal responsibility for learners who qualify for support under this Act, and once eligibility has been determined, a 504 Plan is prepared and implemented in accordance with applicable regulations, including the identification of accommodations to the environment, curriculum, materials and instruction in the least restrictive environment.

Accommodations are defined as *“adjustments and/or modifications that enable the learner to have equal access and opportunity to benefit from the educational program.”*

Each school district has an assigned 504 coordinator who coordinates the development and implementation of the 504 Plan; it may be a principal or dean, school nurse, counselor, special educator and/or program coordinator. If it is determined that a student requires specially designed instruction in addition to accommodations, the team should then initiate a special education evaluation. More information on Section 504 of the Rehabilitation Act of 1973 as it relates to school services can be found in the Minnesota Department of Education Compliance Manual and available on the Department website. In addition, refer to the listed resources on the following pages.

- **IDEA/Special Education Services:** If the student’s educational needs resulting from a concussion are chronic and/or severe, a parent or education staff can request a special education evaluation. IDEA (special education services) has more definitive criteria for qualification than a 504 Plan. Determination of eligibility for special education services must be established before those services can be provided, including, but not limited to: general accommodations, modified curriculum, customized instruction, emergency evacuation procedures, an Individual Health Plan, etc. Once qualification has been established, an Individual Education Plan (IEP) will be written and annually reviewed by the educational team.



## **Special Education Evaluation and Services**

When conducting a special education evaluation, it is suggested that the school team utilize whatever pertinent information can be gathered, including recent reports or evaluations completed by physicians, nurse practitioners, therapists, psychologists, neuropsychologists, or hospital school staff; anecdotal information provided by the parent/guardian; previous school records; and observations conducted in the medical and/or home settings. School personnel will be required to obtain a release of information from the parent/guardian before they are allowed to access confidential information from other agencies. Collaboration and careful planning between medical/therapy providers, school, family and the student with a concussion is critical for success in school. Considerations for educational planning and resources are included on the following pages.

## **Special Education Category of TBI**

Minnesota educational criteria defines Traumatic Brain Injury as “*an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability and/or psycho-social impairment that may adversely affect a child’s educational performance and result in the need for special education and related services.*” To be eligible for special education services under the TBI category, there must be documentation of the TBI by a physician, and evidence of a functional impairment in one or more of seven listed areas that are not a result of a previously existing condition. A school TBI specialist should be involved in the special education evaluation and development of an IEP when there is documented evidence that a TBI (including a concussion), has resulted in functional disability and/or psycho-social impairment that is impacting the student’s educational performance.

## **Lack of Medical Documentation**

Occasionally, a student may have an undiagnosed brain injury, either because it was not initially reported, or because of other extenuating circumstances, i.e., the child sustained a TBI when living in another country in which there was insufficient medical care, resulting in no medical documentation. Other related factors may also complicate matters, such as having a primary language other than English, cultural issues, etc. Given these complex scenarios, the school is encouraged to work with the family and primary care physician to determine if medical documentation of the injury can be obtained to support eligibility for a 504 Plan or IEP services if recommended by the evaluation team.

## **School Checklist: Returning to School Following a Concussion**

Please refer to a separate fillable form entitled, *Checklist: Return to School Following a Concussion*.



## Educational Accommodations & Strategies

(Some of the following information has been taken from a brochure entitled, *Guidelines for School Re-Entry*, published by Hennepin Healthcare's Pediatric Brain Injury Program.)

### Possible Post-Brain Injury Behaviors

The characteristics of students with mild brain injury are variable. *These behaviors represent changes and should be considered relative to a student's functioning before the injury.*

- Medical appointments or recovery-related fatigue may result in intermittent or unexpected absences.
- Expect the student to show positive and rapid variation in school performance from day to day or morning to afternoon.
- The student may require more time to process directions and complete tasks.
- The student may demonstrate distractible or inattentive behaviors.
- Academic performance may be different than before the injury.
- The student may not tolerate, or may become more irritable with, increased stimulation.
- The student may have difficulty organizing large tasks (term papers, book reports) and may have difficulty comprehending large reading assignments.
- The student may be challenged by higher level subjects (algebra, geometry) and/or cumulative learning (foreign language study).
- Relationships with friends may change.
- The student may demonstrate new behaviors including impulsivity, excessive moodiness, disrespectful/ inappropriate comments, aggressive behavior, decreased frustration tolerance, or depression.
- The student may complain of headaches; may close one eye, squint, or hold head.
- The student may have side effects from medications that result in fatigue, impaired memory and organization, or unexpected behaviors.
- Transitions from one class or activity to another may take extra time or preparation.
- The student may have difficulty attending to two tasks simultaneously (e.g., note taking and listening).

**NOTE:** If behaviors and/or cognitive issues persist, and the severity is such that it results in a substantial limitation of one or more major life activities for six or more weeks, it may be appropriate to consider a 504 Plan or a special education evaluation.



## **Some Examples of Educational Accommodations & Strategies**

The strategies below are grouped by areas of need and listed alphabetically and have been found to be helpful when a student with a TBI returns to school following an injury. One or more strategies may apply.

### **Attention**

The student may benefit from:

- Shortened assignments, breaking tasks down into smaller parts, or modifying due dates.
- Altering the seating assignment and/or proximity to the teacher(s) to promote focused attention.
- Minimizing distractions in the student's auditory/visual space.
- Re-direction to tasks with verbal, physical or gestural prompts.
- Taking tests in a quiet area, with additional time provided for completion.

### **Behavior/Emotional Adjustment**

The student may benefit from:

- Minimizing changes in student's routine.
- Providing choices, and flexibility with expectations.
- Self-review of behavior at the end of the day (e.g., diary or teacher-student contact).
- Pro-active behavior intervention strategies that identify and avoid triggers, structure a positive learning environment, and help the student return to baseline emotional functioning.
- Contact with the TBI specialist, school counselor, social worker, or psychologist to facilitate student insight into emotional changes, and assist in developing coping and problem-solving strategies.

### **Expressive/Receptive Language**

The student may benefit from:

- Homework assignments in written and verbal/recorded form.
- Modifying the length of verbal directions and verifying understanding of directions.
- Use of specific vs. open-ended questions, which may decrease student frustration with language formulation and word retrieval.

### **Family Involvement**

The student may benefit from:

- Parents contacting the school prior to the student's return.
- Help with organizing school materials, assignments, homework and projects.



- Arrangements for additional tutoring if recommended.
- Scheduling medical appointments, when possible, around school attendance.

## **Fatigue**

The student may benefit from:

- Shorter days when first returning to school.
- More time to pass in hallways or pass when there is less congestion.
- A modified class schedule to optimize peak energy levels for most difficult subjects.
- A short nap or an opportunity for rest in a quiet area.

## **Math**

The student may benefit from:

- Additional help, tools, or methods for recalling math facts, formulas, etc.
- Customized instruction in applied calculation skills.
- The use of grid paper to organize columns for multiplication/division (if there are visual-perceptual difficulties).
- Short-term remedial math if they are struggling with the curriculum.

## **Medical Management**

The student may benefit from:

- Communication between the home and school regarding medications and possible side effects; include the school nurse in such conversations.
- Reminders about when to go to the nurse's office to take medications or follow other prescribed health care procedures.

## **Memory/Organization/Processing Speed**

The student may benefit from:

- Organizing information in advance to assist with transitions.
- Assistance with completing missed work/make-up assignments and cumulative subjects such as foreign languages, algebra, etc.
- Decreasing extraneous or non-essential information from worksheets.
- An extra set of text books and/or access to electronic texts.
- A daily schedule, a homework sheet, and labeled organizational system to assist with information retrieval, and documenting assignments and routines.
- Initially reducing changes in the daily routine and maintain consistency and structure.
- Simplifying and breaking down multiple-step directions or large projects into smaller steps or chunks and being asked by teacher to restate directions to assure understanding.



- Varied methods of lesson presentation (e.g., smaller groups, electronic presentations, demonstrations, hands-on activities and experiments, simulations, and games).
- Individualized instruction addressing memory and organizational strategies.
- Use of a buddy system, which may be helpful with task organization.
- Use of assistive technology such as word processors, computers, interactive white boards, smart phone applications, PDAs, electronic tablets, recorders, calculators, digital pens, etc.
- Instruction addressing study skills, such as the “survey, read, recite, revise” strategy; review definitions of new vocabulary words; summarize or highlight main points, etc.

### **Physical and Coordination Difficulties**

The student may benefit from:

- Assistance with written tasks.
- Reduction in written work and utilizing dictation and audio/video recordings
- A buddy system for written work and physical safety.
- Extra time for assignment completion and getting from place to place.
- Additional safety considerations in activities such as climbing, jumping, and contact sports during recess and physical education class.
- An emergency evacuation plan for learners with associated mobility impairments.
- Assurance that the school environment is fully accessible, including hallways, classrooms, restrooms, lunch room, main door entry, etc.

### **Reading/Visual**

The student may benefit from:

- Electronic books and text-to-speech tools to supplement existing reading materials.
- Orally presented tests.
- Opportunities to review/receive copies of other students’ notes in alternative formats.
- Short-term remedial reading instruction and modified expectations, due to decreased reading speed and comprehension.
- Modifications to print/font size and provision of a large key calculator.

### **Social Support**

The student may benefit from:

- Identification of a staff person to monitor student’s readjustment to school (attendance, assignment completion, or other potential concerns).
- A buddy system to model appropriate social skills, particularly in unstructured situations.
- Supervision & support in unstructured settings (lunchroom, playground, locker room).





- Participation in community clubs or after-school programs.
- Provision of older-grade friend or peer tutor for specific academic or social activities, tutoring, homework, and lunch time.
- Discussions centering on conflict resolution if conflicts with peers arise.

### **Sports/Recreational Activities**

It is recommended that students:

- Follow guidelines related to returning to physical education or sports, including *obtaining doctor's prior approval*.
- Avoid contact sports (football, hockey, soccer) or in-line skating, skiing/skateboarding for at least 6 months, or as directed by your medical provider.
- Obtain medical clearance before resuming operation of mechanical vehicles.
- Wear protective gear, including helmets designed and rated for the activity, when engaging in sports/recreational activities or using motorized vehicles.

### **District/Policy Support**

It is recommended that schools:

- Allow an increase in the number of excused absences for health reasons and allow resulting modifications to the grading policy.
- Approve early dismissal for outside appointments.
- Modify course load requirements or completion if the student is unable to complete.



## Concussion Resources for Children and Youth

### School Resources:

- Visit the MN Low Incidence Projects website to find more information and resources on the topic of concussion: [www.mnlowincidenceprojects.org](http://www.mnlowincidenceprojects.org)  
View the Online Presentation: Concussion in Children & Youth: A Guide for School Personnel (2017)  
<http://www.mnlowincidenceprojects.org/onlineLowIncidencePresentations.html>
- For local support, training and resources in the school setting, ask that the administrative staff contact the area school TBI specialist or Physical /Health Disabilities (P/HD) teacher; or
- For *statewide* technical support, training & resources for schools, contact:  
Kelly Bredeken, Statewide TBI Specialist  
MN Low Incidence Projects  
Metro ECSU, 2 Pine Tree Drive, Suite 101  
Arden Hills, MN 55112  
Phone: (612) 638-1506  
Web: [www.mnlowincidenceprojects.org](http://www.mnlowincidenceprojects.org)  
E-mail: [Kelly.Bredeken@metrocsu.org](mailto:Kelly.Bredeken@metrocsu.org)

### Community and Online Resources:

- **Minnesota Brain Injury Alliance**  
2277 Highway 36 West, Suite 200  
Roseville, MN 55113  
Phone: (612) 378-2742 or (800) 669-6442  
Web: [www.braininjurymn.org](http://www.braininjurymn.org)
- **Hennepin Healthcare: Pediatric Brain Injury Program**  
Minneapolis, MN  
Resource: *Return to Learn: A Guide for School Success Following a Traumatic Brain Injury;2015*  
Phone: (612) 873-2259  
Web: [www.hennepinhealthcare.org](http://www.hennepinhealthcare.org) (search Pediatric Brain Injury Program)



- **Gillette Children's Specialty Healthcare**  
St. Paul, MN  
Resource: *About Traumatic Brain Injuries/Concussions*; 2013  
For program information: (651) 788-0647  
To schedule appointments: Phone: (651) 290-8707 or (800) 719-4040  
Web: [www.gillettechildrens.org](http://www.gillettechildrens.org)
  
- **Children's Hospitals & Clinics of Minnesota**  
Minneapolis and St. Paul  
Neuroscience Program/Pediatric Concussion Clinic  
For program information: (651) 220-5230  
Web: [www.childrensmn.org](http://www.childrensmn.org)
  
- **Mayo Clinic**  
[www.mayoclinic.org](http://www.mayoclinic.org)  
Booklet: *Understanding Brain Injury: A Guide for Parents and Teachers*
  
- **U.S. Dept. of Health & Human Services: Centers for Disease Control & Prevention (CDC)** [www.cdc.gov/headsup/index.html](http://www.cdc.gov/headsup/index.html)  
*Facts About Concussion and Brain Injury*  
*Heads Up to Schools: Know Your Concussion ABCs*
  - *Concussion Signs and Symptoms Checklist*
  - *Concussion Signs and Symptoms Poster*
  - *Concussion Fact Sheets for Parents, School Nurses, Educators & Coaches*

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