# Nebraska Sports Concussion Network



www.NebSportsConcussion.org

# **RETURN TO LEARN GUIDELINES**

**Following Concussion** 

Concussion injuries can directly impact a student's learning ability. Conversely, the cognitive learning process can adversely affect a student's recovery from a concussion. Therefore, concussed students may need varying levels of instructional modifications and academic accommodations during their symptom recovery, particularly early on in the acute stage, but may extend several weeks or months.

Current concussion management guidelines recommend concussed students remain at rest, both physically and cognitively to facilitate their recovery from symptoms. Cognitive rest refers to the reduction in mentally taxing activity, i.e. analytical problem solving, mathematical equation work, focused or prolonged reading, computer use, particularly activities involving saccadic eye movements, i.e. using eyes to track objects, reading, smart board work. Playing video games, texting, watching TV, listening to music with earphones may also be strongly discouraged during the symptomatic phase.

Just as concussed athletes follow a stepwise progression for "Returning To Play", a progression back

to the learning environment is equally as important. A "Return To Learn" (RTL) process emphasizes a collaborative approach between team administration, school nurse, counselors, teachers, parents, and athletic staff including a school's athletic training staff when student-athletes are involved. Since concussions occurring in athletics are less prevalent those occurring on playgrounds, recreational activities as biking or skateboarding, accidents at home, falls, and motor vehicle accidents, a Concussion Management Team can be extremely beneficial for recovery and returning all concussed students, athletic and non-athletic, to the classroom.

School staff should be familiar with the *Signs and Symptoms* of concussion. Additionally, school staff should know how to monitor students knowingly having a concussion, as well as recognize those possibly having a concussion unknowingly. There is greater concern for "how long" symptoms last, more so than which ones, or how many might exist, but all 3 elements are important to the proper management of the concussed student.

# What Signs To Look For After A Concussion

When students return to school after a concussion, school staff should watch for:

- Increased problems paying attention or concentrating
- Increased problems remembering or learning new information
- Longer time needed to complete tasks or assignments
- Difficulty organizing tasks, or shifting between tasks.
- Inappropriate or impulsive behavior during class
- Greater irritability
- · Less ability to cope with stress
- More emotional than usual
- Difficulty handling a stimulating school environment (lights, noise, etc.)
- Physical symptoms (headache, dizziness, nausea, visual problems)

### Symptoms of a Concussion Indicated by the Student

#### **Physical**

- Headache
- Nausea
- Vomiting
- Balance problems
- Dizziness
- Visual problems
- Fatigue
- Sensitivity to light
- Sensitivity to noise
- Dazed or stunned

#### **Emotional**

- Irritability
- Sadness
- More emotional
- Nervousness

# Cognitive

- Feeling mentally "foggy"
- Feeling slowed down
- Difficulty concentrating
- Difficulty remembering
- Forgetful of recent information or conversations
- Confused about recent events
- · Answers questions slowly
- · Repeats questions

#### Sleep Related

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

CDC Heads UP: Returning to School After Concussion: A Fact Sheet for School Propfessionals.

#### **General Considerations for Return to Learn Progression**

In most cases, a concussion will not significantly limit a student's participation in school and usually involve temporary, informal instructional modifications and academic accommodations. The "Return to Learn" process encompasses "Step 1 of the Return to Play Progression" during the entire time one remains symptomatic. Completion of the "Return to Learn" process always precedes beginning "Step 2 of the Return to Play Progression".

In approximately 75% of cases, recover from symptoms occurs within 7 days, while ~90% recover from symptoms within 10 days. But nearly 15% of cases may take several weeks or months to recover from symptoms that experience Post-Concussion Syndrome, a chronic condition where symptoms persist long-term.

The school's athletic trainer or other licensed healthcare provider will help guide decisions for the Concussion Management Team about a student's need for and level of modifications and accommodations, or

adjustments, and their readiness to resume various classroom activities.

Symptoms are monitored at regular intervals using a Graded Symptom Scale. Symptom scale scores can remain elevated or increased by exceeding levels of physical and cognitive activity where school activity should then be reduced when symptoms increase as a result. Members of the Concussion Management Team are to help identify triggers that cause symptoms to worsen, and modify school activity accordingly. Thereafter, school activities can be gradually increased as symptoms subside or decrease.

If recovery becomes more prolonged (>3-4 weeks), there should be greater concern for a student feeling isolated or depressed, and anxiety from missed school, falling behind, and missing out on playing sports and other extracurricular activities. Additionally, a 504 Plan or an IEP may need to be considered for those having prolonged recovery extending beyond several months.

# **School Accommodation Options Based on Symptom Type**

Concussion Symptom	Modification & Accommodation Options
Headaches	Allow to lay head down at desk Allow frequent breaks Identify triggers that cause headaches to worsen
Sensitivity to Noise (phonophobia)	No PE, band, chorus, shop; meet in library Avoid lunch room; eat in quiet setting Avoid attending athletic events, gymnasiums Allow early hall pass to class avoiding loud corridors Refrain from using cell phone, headphones/ear buds
Sensitivity to Light (photophobia)	Allow to wear sunglasses  Move to area with low-lighting, dimly-lit room  Avoid seating with direct sunlight from windows  Avoid or minimize bright projector/computer screens
Other visual problems  i.e. blurred or double-vision  saccadic eye movements (tracking)  near-point convergence (close-up)	Limit computer use Reduce/shorten reading assignments Record lectures, use auditory learning apps Allow for more listening & discussion vs. Reading Increase font size on computer screens Desktop work only Refrain from texting, video gaming Refrain from watching TV close-up or from afar
Concentration or Memory (Cognitive) Problems	Place main focus on essential academic content/concepts Postphone major tests or participation in standardized testing Allow extra time for assignments, quizzes Allow extra time to complete tests, projects Reduce class assignments, homework
Sleep Difficulties	Allow late start to school Allow frequent rest breaks

# Levels of Instructional Modifications & Academic Accommodations

1	No School - Stay Home 3-4 or more ImPACT Summary Composite Scores exceed	Discourage texting, video gaming, watching TV, cell phone use, listening to music using head phones
	RCI	No homework or computer use
	*Exceedingly high Graded Symptom Scale Score; i.e.	Cognitve "shut-down"
	Score: >25-30	Use darkened, quiet room
		Typically 1-2 days, and usually not more than 5 days away from school
2	Limited School Attendance (half days/part-time)	Limit/partial class attendance; No PE, Band, Chorus, Shop classes
	Maximum Accommodations	Periodic rest breaks away from class in quiet area
	Able to tolerate up to 30 minutes mental extertion	Allow to lay head down at desk
	Symptomshave begun to decrease	Limit/modify academic classwork
		No major/standardized testing
		Provide extra help; Peer note taking
		"Clear desk", and listen
		Extra time for quizzes in quiet area
		Extra time for assignments; modify assignments
		Minimal or no homework
3	Full-Day Attendance; Limit class attendance	No PE
	Moderate Accommodations	Limit attendance in academically challenging classes
	Able to tolerate up to 45 minutes mental extertion	No major/standardized testing; modified testing
	No more than 1 or 2 ImPACT Summary Composite Score	Rest periods in classroom as needed
	exceeding RCI	Extra time for assignments, quizzes as needed
	Symptoms continue to decrease	Limited homework, i.e. <30 minutes
4	Full Class Attendance	No PE
	Minimal Accommodations	Increase return to normal class workload
	Able to tolerate up to 60 minutes mental extertion	Begin working on missed work/assignments
	*Graded Symptom Scale Score: <10	Moderate homework, i.e. <60 minutes
5	Full Academics	Resume normal homework assignments
	No Accommodations	Identify essential Content & Assignments to make-up
	*Graded Symptom Scale Score: <5	Develop realistic timeline for completing assignments
	Academic work does not trigger symptoms	Re-evaluate weekly until assignments completed
		When indicated by school's athletic trainer or a licensed health care provider, start Step 2 - Return to Play Progression
		No PE until completion of "Return to Play Progression
	* Graded Symptom Scale Score ranges shown are a general guide and are no	t intended as objective criteria for dilineating stages of recovery or indication for specific

<sup>\*</sup> Graded Symptom Scale Score ranges shown are a general guide and are not intended as objective criteria for dilineating stages of recovery or indication for specific instructional modifications or academic accommodations. Graded Symptom Scale Score ranges are extremely subjective and vary dramatically by individual, and are dependent on the selected Grading Symptom Scale used to derive a symptom score.

#### REFERENCES:

Oregon Concussion Awareness and Management Program, Max's Law: Concussion Management Implementation Guide for School Administrators. Center on Brain Injury Research & Training, Western Oregon University. <a href="http://www.ode.state.or.us/teachlearn/subjects/pe/ocampguide.pdf">http://www.ode.state.or.us/teachlearn/subjects/pe/ocampguide.pdf</a>.

Halstead ME, McAvoy K, Devore CD, Carl R, Lee M, Logan K, Council on Sports Medicine and Fitness, and Council on School Health. Returning to Learning Following Concussion. Am Acad Pediatrics, 132 (5) 948-957, Nov 2013. <a href="https://pediatrics.aappublications.org/content/132/5/948.full.pdf">https://pediatrics.aappublications.org/content/132/5/948.full.pdf</a>+html.

ImPACT Applications, Inc., September 2013. [Webinar] Almquist J, Connecting the Dots Between Clinical Assessment and Academic Accommodations.

Center for Disease Control, US Dept. of Health and Human Services, 2013. Heads Up to Schools: Know Your Concussion ABC's. Returning to School After a Concussion: A Fact Sheet for School Professionals. <a href="http://www.cdc.gov/concussion/pdf/TBI">http://www.cdc.gov/concussion/pdf/TBI</a> Returning to School-a.pdf.

The REAP Project. McAvoy K. REAP The Benefit of Good Concussion Management. Rocky Mountain Hospital for Children, Center for Concussion. <a href="http://issuu.com/healthone/docs/reap">http://issuu.com/healthone/docs/reap</a> oct21/1?e=1811185/5400960.