



## **NORTHWEST CHRISTIAN SCHOOLS RETURN-TO-LEARN PROTOCOL**

### **BACKGROUND**

Northwest Christian Schools (NWCS) desires to support students who have experienced concussive events and who are trying to manage a return to full activity either on the field, court, or in the classroom. The strategies contained within this document are based upon research-based protocols and best practice techniques in use throughout the country and are meant to be informative and not prescriptive. As research expands within this area, NWCS will continue to involve and suggest new strategies to support our students' physical and cognitive health.

A concussion is a brain injury that may be caused by direct or indirect blows, bumps, or jolts to the head or by a fall or accident that jars the brain. Concussions can be invisible injuries, yet their symptoms include slight-to-significant reductions in reaction time, short-term memory, working memory, and mental processing speed. In short, concussions are serious brain injuries that have a significant influence on the brain's ability to function at its normal capacity.

### **Concussion Facts:**

- Every brain is different and therefore every concussion is different. One student's recovery may look dramatically different from another's.
- The young brain is in a formative stage. Research concludes that young brains take longer to heal from a concussion than an older brain.
- With each successive concussion, the recovery time is longer.
- Learning differences such as ADHD, dyslexia, and others may complicate or slow the recovery following a concussion.
- NWCS conducts baseline testing on high school athletes who are involved in high contact sports including football, basketball, and soccer. This information helps only to gather data about the concussion, it does not help in the treatment of concussions.

**Concussion Symptoms:**

<b>COMMON CONCUSSION SYMPTOMS</b>			
<b>PHYSICAL</b>	<b>COGNITIVE</b>	<b>EMOTIONAL</b>	<b>SLEEP</b>
Headache	Feeling Mentally "Foggy"	Irritability	Trouble Falling Asleep
Dizzines	Feeling "Slow"	Sadness	Sleeping More than Usual
Balance Problems	Difficulty Concentrating	Nervousness	Sleeping Less than Usual
Nausea / Vomiting	Difficulty Remembering	More Emotional than Usual	
Fatigue	Difficulty Focusing		
Sensitivity to Light			
Sensitivity to Noise			
Vision Problems			

**SIGNS AND SYMPTOMS OF A CONCUSSION AND POTENTIAL STUDENT IMPLICATIONS**

<b>SIGN/SYMPTOM</b>	<b>POTENTIAL STUDENT IMPLICATIONS</b>
<b>Headache</b>	<ul style="list-style-type: none"> <li>• Most common symptom reported in concussions</li> <li>• Can distract the student from concentration</li> <li>• Can vary throughout the day and may be triggered by various exposures, such as fluorescent lighting, loud noises, and focusing on tasks</li> </ul>
<b>Dizziness/Lightheadedness</b>	<ul style="list-style-type: none"> <li>• May be an indication of injury to vestibular system</li> <li>• May make standing quickly or walking in crowded environment challenging</li> <li>• Often provoked by visual stimulus (rapid movements, videos, etc)</li> </ul>
<b>Visual Symptoms: Light Sensitivity, Double Vision, Blurry Vision</b>	<ul style="list-style-type: none"> <li>• Troubles with various aspects of the school building and technology including:               <ul style="list-style-type: none"> <li>Slide Presentations</li> <li>Movies</li> <li>Smart Boards</li> <li>Computers</li> <li>iPads &amp; Cell Phones</li> <li>Artificial Lighting</li> </ul> </li> <li>• Difficulty reading and copying</li> <li>• Difficulty paying attention to visual tasks</li> </ul>
<b>Noise Sensitivity</b>	<ul style="list-style-type: none"> <li>• Troubles with various aspects of the school building including:               <ul style="list-style-type: none"> <li>Lunchroom</li> <li>Music Classes (band/choir)</li> <li>Physical Education classes</li> <li>Hallways/Passing Periods</li> <li>Athletic Practices</li> </ul> </li> </ul>
<b>Difficulty Concentrating or Remembering</b>	<ul style="list-style-type: none"> <li>• Challenges learning new tasks and comprehending new materials</li> <li>• Difficulty with recalling and applying previously learned material</li> <li>• Lack of focus in the classroom</li> <li>• Troubles with test taking</li> <li>• Troubles with standardized testing</li> <li>• Reduced ability to take drivers education classes safely</li> </ul>
<b>Sleep Disturbances</b>	<ul style="list-style-type: none"> <li>• Excessive fatigue can hamper memory for new or past learning or ability to attend and focus</li> <li>• Insufficient sleep can lead to tardiness or excessive absences</li> <li>• Difficulty getting to sleep or frequent waking at night may lead to sleeping in class</li> <li>• Excessive napping due to fatigue may lead to further disruptions of the sleep cycle</li> </ul>

Source: American Academy of Pediatrics: Pediatrics Volume 132 Number 5, November 2013

## TEAM APPROACH

NWCS believes that a team approach is the best way to support a student's complete recovery and will work with families and medical professionals to ensure that proper accommodations are made to support recovery. Based upon this approach, NWCS identifies three (3) teams involved in this process:

**The Family:** This includes the student and his/her immediate family or guardians who are most familiar with the student.

**The Medical Team:** This includes the student's pediatrician or primary care physician, the attending neurologist (if applicable), the School Nurse, and the Athletic Director (if applicable).

**The Academic Team:** This includes the student's primary administrator (principal), teachers, the school registrar (secondary school) and a Learning/Literacy Center or ESS faculty member (if appropriate).

Recognizing that student health and safety is a priority, NWCS will incorporate the School Nurse and school level administrator to work with families and medical professionals to assist students in returning to the classroom and athletic activities. The school administrator will act as the point person to coordinate integration back into the classroom, while the Athletic Director (in conjunction with attending physicians) coordinate integration back into athletic activities.

NWCS teachers are apprised of this protocol and will coordinate with the school administrator to remain informed of each student's condition and recovery. Accommodations will be made and supported by NWCS faculty based upon the best practice protocols as contained herein and as research expands on this subject.

## RETURN-TO-LEARN FRAMEWORK

### PHASE 1: NO SCHOOL

**Symptoms:** In this phase, concussion symptom severity is high and interferes with even basic tasks.

**Treatment:** The student is to stay at home and rest and should not participate in any school activities or activities of other kinds. The student should be under the care of a physician and must provide medical verification of a concussion to the school nurse. Based upon medical research, it is recommended that with doctor approval, the student take fish oil supplements and other types of anti-oxidant supplements.

#### **Student Actions/Interventions:**

- Rest: This is the most critical part of recovery. Do not try to "push through" symptoms
- No cognitive effort
- No screen time (computer, cell phone, iPad, TV, video games, etc.)
- No physical activity that increases the heart rate
- Avoid any other "triggers" that increase or worsen the symptoms

#### **Academic & Teacher Accommodations:**

- No school attendance or work
- Teachers will keep a list of information/assignments that the student misses during this phase
- The school counselor will act as liaison between individual teachers and the student/family based upon information provided from the family and/or medical experts to the school nurse.

## **PHASE 2: PARTIAL SCHOOL DAYS (half days)**

**Symptoms:** In this phase, concussion symptom severity is moderate, and symptoms have dropped to manageable levels. The added stimulation of the school environment including lights, noise, etc. may cause symptoms to increase. In addition, symptoms may be exacerbated by certain cognitive activities that are complex. The student and family should communicate with the school nurse regarding level of symptoms.

**Treatment:** NWCS will provide accommodations that balance rest with re-introduction to school activities by limiting activities that trigger symptoms. The administrator and school nurse will work with student, family, and faculty to determine the student's schedule on any given day to determine the best time of day for the student to attend school.

### **Student Actions/Interventions:**

- Part-day school attendance with focus on core subjects with typical late starts to allow time for student to wake up, move around, and assess their symptoms
- Student to report to school nurse if any increase in symptoms
- The goal is to sit in class and listen and engage in moderate social activities to see how student is transitioning back into the environment
- If symptoms return during the school day, the student should go to the nurse immediately and lie down or return to home
- Limited screen time
- If symptom free at home, student can try some homework. It is recommended that a homework regimen at this phase involve 20 minutes of homework followed by 30 minutes of rest.

### **Academic & Teacher Accommodations:**

- Teacher understands that main purpose at this stage is for student to be in class and listen with limited involvement
- No tests or quizzes to be given
- No participation in physical activities including PE or athletics
- Reduce or eliminate homework
- No requirement to work on laptop or iPad in class and limited exposure to Smart Board or videos.
- Teacher will continue to monitor missed assignments and content concentrating on mastery of important content and not smaller assignments

## **PHASE 3: FULL SCHOOL DAYS WITH ACCOMMODATIONS**

**Symptoms:** Symptom severity is low with only intermittent or occasional symptoms. Student is typically feeling better, but cognitive stamina may still be limited. This phase will continue until the student is able to complete work with accommodations without any worsening or triggering of symptoms.

### **Student Actions/Interventions:**

- Full-day school attendance with good communication by student with each of their teachers letting them know what, if anything triggers symptoms
- Continue to stop activities the moment symptoms flare up
- Take regular breaks while studying
- Make sure to get adequate sleep (8-9 hours/night)
- Slowly re-introduce screen time
- Coordinate with teachers and counselors a plan to make up missed work and assignments

**Academic & Teacher Accommodations:**

- Teacher can engage students in quizzes and tests. Based upon student's symptoms, teacher may want to consider alternative testing methods including:
  - Only give a few pages of a test at a time. Let student take portions of test in shorter blocks of time
  - Give an oral rather than a written assessment
  - Consider giving quizzes as an "open book" assignment to help students catch up and prepare for bigger assessments
- Limit tests to one test per day for student across all subject areas
- Gradually increase amount of homework
- Teachers will determine which assignments are crucial to mastering material and concepts and concentrate on those with student
- Prolonged symptoms may require the creation of a 504 Accommodations plan for the student

**PHASE 4: FULL SCHOOL DAYS WITH MINIMAL OR NO ACCOMODATIONS**

**Symptoms:** Symptom severity is mild and intermittent or nonexistent.

**Student Actions/Interventions:**

- Student and Family Team will meet with the Academic Team (administrator and teachers) to construct a plan for completing any remaining missed schoolwork or exams in a manner that does not increase stress or symptoms of student
- No physical activity until released by a qualified healthcare professional

**Academic & Teacher Accommodations:**

- Student and Family Team will meet with the Academic Team to construct a plan for completing any remaining missed schoolwork or exams in a manner that does not increase stress or symptoms of student
- Normal academic activities and loads going forward with minimal or no accommodations

**PHASE 5: FULL SCHOOL AND EXTRACURRICULAR INVOLVEMENT**

**Symptoms:** Symptoms are non-existent.

**Student Actions/Interventions:**

- Students should return to physical activities and athletics in a gradual fashion as approved by Medical Team and NWCS' Athletic Director

**Academic & Teacher Accommodations:**

- None

**DEFINITIONS AND RESOURCES**

**504 PLAN:** under Section 504 of the Rehabilitation Act (Pub L No. 93-112, 1973) and the Americans with Disabilities Act (Pub L No. 101-336, 1990), provides for a student who is not eligible for special education under an IEP but who requires accommodations in regular education on the basis of bona fide medical need, as documented by a physician and validation by the educational home.

**BASELINE TESTING:** Baseline testing can assist in diagnosis and guide rehabilitation if a concussion were to occur. Oculomotor function tests assess the eyes' ability to move smoothly and accurately. Vestibular function tests assess the inner ear's ability to maintain balance. Cervical spine strength tests assess the strength of the neck muscles. This information can help to ensure that students are able to return to the classroom and sports safely and without further injury. Here are some specific examples of how baseline testing can help students:

- A student who experiences a concussion may have difficulty with balance and coordination. Baseline testing can help to identify these problems and can help to develop a plan to improve the student-athlete's balance and coordination.
- A student who experiences a concussion may have difficulty with memory and concentration. Baseline testing can help to identify these problems and can help to develop a plan to improve the student-athlete's memory and concentration.

Baseline testing is an important tool for concussion management in high school athletics. By obtaining baseline testing, coaches and medical personnel will have additional information to assist in diagnosis and track recovery after a concussion.

**Link to the American Association of Pediatrics Research:** [concussion research | Page 1 | Search Results | American Academy of Pediatrics \(aap.org\)](#)

## SIGNS AND SYMPTOMS OF A CONCUSSION AND STRATEGIES TO HELP IN SCHOOL

SIGN/SYMPTOM	POTENTIAL ADJUSTMENTS IN SCHOOL SETTING
<b>Headache</b>	<ul style="list-style-type: none"> <li>● Frequent breaks</li> <li>● Identifying aggravators and reducing exposure to them</li> <li>● Rests, planned or as needed in nurses office or quiet area</li> </ul>
<b>Dizziness/Lightheadedness</b>	<ul style="list-style-type: none"> <li>● Allow student to put head down if symptoms worsen</li> <li>● Give student early dismissal from class and extra time in passing periods to avoid crowds</li> </ul>
<b>Visual Symptoms: Light Sensitivity, Double Vision, Blurry Vision</b>	<ul style="list-style-type: none"> <li>● Reduce exposure to computers, smart boards, videos, iPads, etc.</li> <li>● Reduce brightness on the screens</li> <li>● Allow the student to wear sunglasses in school</li> <li>● Consider use of audio books</li> <li>● Turn off fluorescent lights as needed</li> <li>● Seat student closer to the center of classroom activities</li> </ul>
<b>Noise Sensitivity</b>	<ul style="list-style-type: none"> <li>● Allow the student to have lunch in quiet area with a classmate</li> <li>● Limit or avoid band, choir or other loud classes</li> <li>● Avoid noisy gyms and organized athletic events</li> <li>● Consideration of the use of earplugs</li> <li>● Give student early dismissal from class and extra time in passing periods to avoid crowds</li> </ul>
<b>Difficulty Concentrating or Remembering</b>	<ul style="list-style-type: none"> <li>● Avoid testing or completion of major projects during early stages of recovery</li> <li>● Provide extra time to complete nonstandardized tests</li> <li>● Postpone standardized testing (requires a 504 Plan be in place)</li> <li>● Consider 1 test per day during early stages of recovery</li> <li>● Consider the use of preprinted notes and allowing a reader for oral test taking</li> </ul>
<b>Sleep Disturbances</b>	<ul style="list-style-type: none"> <li>● Allow for late start or shortened school day to allow for required sleep</li> <li>● Allow rest breaks</li> </ul>

Source: American Academy of Pediatrics: Pediatrics Volume 132 Number 5, November 2013

## Health Care Plan following a suspected concussion

Student Name: \_\_\_\_\_ School: \_\_\_\_\_ Date: \_\_\_\_\_ Date of Injury: \_\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_ Parent/Guardian Phone: \_\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_ Parent/Guardian Phone: \_\_\_\_\_

\*Healthcare Provider Name: \_\_\_\_\_ Clinic's Name: \_\_\_\_\_ Clinic Phone: \_\_\_\_\_

**Date of Concussion Diagnosis:** \_\_\_\_\_ **(Accommodations can be modified as the student's symptoms improve/worsen)**

\*The above named student has been diagnosed with a concussion (a brain injury) and is currently under our care. Classroom flexibility, accommodations and additional supports are needed during recovery. The following are suggestions for academic accommodations to be individualized for the student as deemed appropriate in the school setting.

Area	Requested Accommodations RETURN TO LEARN PROTOCOL - RTL	Comments
<b>Attendance</b>	<input type="checkbox"/> No School <input type="checkbox"/> Partial school day as tolerated by student—emphasis on core subject work <i>encouraged classes:</i> _____ <i>discouraged classes:</i> _____ <input type="checkbox"/> Half school days (alternate half days mornings and afternoons, if possible) <input type="checkbox"/> Full school days as tolerated by student (note accommodations in comment section) <input type="checkbox"/> Allow water bottle in classes and a snack every 2 - 4 hours	
<b>Breaks</b>	<input type="checkbox"/> If symptoms appear or worsen during class, allow student to go to a supervised quiet area or nurse's office. <i>*If no improvement in symptoms within 30-60 minutes, allow dismissal home.</i> <input type="checkbox"/> <i>Mandatory Breaks:</i> _____ <input type="checkbox"/> Allow breaks during day as deemed necessary by student or teachers/school personnel	
<b>Visual Stimulus</b>	<input type="checkbox"/> Enlarged print (18 font) copies of textbook material/assignments/preprinted notes. Use of soft colored paper for reading (pastels) <input type="checkbox"/> Note taker for in class materials <input type="checkbox"/> Limited computer/TV screen, bright screen use (reduce brightness setting on monitors/screens), limit PowerPoint presentations <input type="checkbox"/> Allow handwritten assignments (as opposed to typed on a computer) <input type="checkbox"/> Allow student to wear brimmed hat in school, seat student away from windows and bright lights <input type="checkbox"/> Change classroom seating to front of room as needed	
<b>Auditory Stimulus</b>	<input type="checkbox"/> Avoid noisy classroom activities and loud classes and/or places (i.e. music or shop class, cafeteria, gym, etc.) <input type="checkbox"/> Lunch in a quiet place (with a friend - avoid social isolation) <input type="checkbox"/> Allow student to wear earplugs (or unplugged earbuds) as needed <input type="checkbox"/> Allow class transitions <b>before</b> the bell (avoiding noisy, congested hallways)	
<b>School Work</b>	<input type="checkbox"/> Simplify tasks (i.e. three (3) step instructions) <input type="checkbox"/> Short breaks (5 min.) between tasks <input type="checkbox"/> Reduce overall amount of in-class work <input type="checkbox"/> Prorate workload (only core or essential tasks) and/or <i>eliminate non-essential work</i> <input type="checkbox"/> No homework <input type="checkbox"/> Reduce amount of nightly homework (ex: _____ minutes/class, _____ minutes max/night, break every _____ minutes) <input type="checkbox"/> Attempt homework, will stop if symptoms occur <input type="checkbox"/> Extra tutoring/assistance requested <input type="checkbox"/> May begin make-up of essential class work	
<b>Testing</b>	<input type="checkbox"/> No Testing <input type="checkbox"/> Additional time for testing/untimed testing <input type="checkbox"/> Alternative testing methods: oral delivery of questions, oral response, and/or scribe <input type="checkbox"/> No more than one test a day <input type="checkbox"/> No standardized testing	
<b>Educational Plan</b>	<input type="checkbox"/> Student is in need of a formal site-based academic support plan <input type="checkbox"/> Consider evaluation for a 504 plan if prolonged symptoms (usually >month) are interfering with academic performance	
<b>Physical Activity</b>	<input type="checkbox"/> No physical exertion - including athletics, gym/PE, recess, band, choir and/or other _____ <input type="checkbox"/> Untimed walking in PE class/recess ONLY <input type="checkbox"/> <b>May begin graduated Return to Play protocol</b>	
<b>Other</b>		

The patient will be reevaluated at a follow up appointment for revision of these accommodations in \_\_\_\_\_ weeks. (date of appointment: \_\_\_\_\_)

*If student fails to follow up as scheduled, the student may not be allowed to progress to the return to participation stage, and accommodations may be removed*

I, \_\_\_\_\_, give permission for the licensed healthcare provider (LHP) to share the above information with my child's school & for communication to occur between the school & LHP for changes to this plan.  
 (parent/legal guardian name printed)

Parent/Guardian Name (Print): \_\_\_\_\_ Sign: \_\_\_\_\_ Date: \_\_\_\_\_

School Nurse Name (Print): \_\_\_\_\_ Sign: \_\_\_\_\_ Date: \_\_\_\_\_

LHP - Licensed Healthcare Provider (Print): \_\_\_\_\_ Sign: \_\_\_\_\_ Date: \_\_\_\_\_

**The student is now released back to academic activities without accommodations & may begin the physically exertional return to play protocol on \_\_\_\_\_**

LHP Initial & date