

# Concussion Care Protocol

## General Information:

Continued research has shown cognitive rest to be helpful in the quick resolution of concussion symptoms. Cognitive stimulation includes: driving, playing video games, computer use, text messaging, cell phone use, loud and/or bright environments, watching television, reading, and studying. These stimuli might be limited, and in most cases, completely avoided for a period of time during recovery. Physical activity such as physical education, athletics, strength or cardiovascular conditioning, and fine art practices/performances might be completely avoided or regulated while recovering from a concussion.

## Stages of Concussion Recovery and Academic/Athletic Participation:

1. Complete Rest (not always necessary)
2. Return to School
3. Full Day of School Attendance
4. Full Academic and Athletic Participation

**Return to Learning:** Process to return to full cognitive/academic activities

**Return to Play:** Process to return to full sports participation

## Points of Emphasis:

- It is important to note that the recovery from a concussion is a very individualized process. Caution must be taken not to compare students with concussions as they progress through the recovery process.
- For the concussion care protocol to be used for more than 3 days the student must be evaluated by a primary care physician (licensed to practice medicine) and documentation must be provided to the school nurse. An emergency room/acute care note is only temporary until seen by the student's medical care provider. A student may be referred to a physician specializing in concussion care for further recommendations and eventual clearance for full return to learning (academics) and return to play (athletics).
- The student's missed academic work will be reviewed and granted extra time to complete, in conjunction with the physician recommendations and school nurse guidance.
- As the student's recovery progresses through Stages 1-3, teachers should identify essential academic work in each subject, as needed, to determine potential reduction in course workload. This will promote healing, and help reduce the student's anxiety level related to the perceived volume of work that will be required once the student is medically cleared to resume a full academic load.
- The teacher has the option of assigning the student a grade of incomplete for the progress mark, final exam, and/or semester grade.
- For the student athlete: It is important upon return to school the student report to the athletic trainer and school nurse daily to monitor symptoms and determine progression to the next stage within the concussion care protocol.
- For the non-athlete student: report only to the school nurse daily.

## Four Stage Progression to Full Return to Academic and Athletic Activity

**STAGE 1 : COMPLETE REST** (*Usually lasts no longer than 2-4 days*)

- Characteristics

- Severe symptoms at rest
- Symptoms may include but are not limited to:
  - Headache or pressure in head, dizziness, nausea, photosensitivity, auditory sensitivity, inability to focus/concentrate, memory/lack of recall, feeling mentally foggy, unusual changes in mood, fatigue
  - Students may complain of intense and continuous/frequent headaches
  - Students may not be able to read for more than 10 minutes without an increase in symptoms
- Initial evaluation by primary care physician (not ER)
- No PE/athletic, Behind the Wheel (Driver's Ed.), Fine Arts participation (includes practices and attending events)
- Interventions:
  - No school attendance per private medical provider recommendation
  - Sports: does not attend practice/games
  - No tests, quizzes or homework (may begin to collect homework/assignments)
  - Parent and student receive copy of Concussion Care Protocol
  - School nurse will notify student's teachers and appropriate staff

**\*Progress to stage 2 when:**

- Decreased sensitivity to light or noise
- Decreased intensity and frequency of headaches and dizziness
- Ability to do light reading for 10 minutes without increased symptoms
- Decreased feeling of foggy or confusion

\*If the student remains in Stage 1 longer than 2 weeks, the school nurse will consult with the primary care physician.

**STAGE 2: RETURN TO SCHOOL** (*Options for altered daily class schedule*)

- Characteristics
  - Mild symptoms at rest, but increasing with physical and mental activity
- Modified class schedule
  - limited attendance for 1-2 weeks. Example: alternate afternoon classes and morning classes, repeat as symptoms warrant
- No PE or athletic participation (may attend practices or PE class but no participation)
- No Behind the Wheel (Driver's Ed) until cleared by primary physician.
- No participation in Fine Arts practices or performances until cleared by primary physician.
- For the student athlete: report daily to the athletic trainer and school nurse.
- For the non-student athlete: report daily to the school nurse for assessment.
- Interventions may include with direction from school nurse or medical provider:
  - Avoid choir, band, PE areas, cafeteria
  - Rest in nurse's office to offer breaks between academic classes
  - Reduce weight of backpack or provide second set of textbooks (teachers)
  - Obtain a "five minute pass" from the school nurse to avoid noisy, crowded hallways between class periods
  - Limit computer work, videos/movies in class
  - Divide up work into smaller portions (15-20 mins. at a time)
  - Wear sunglasses when viewing Smart Boards, PowerPoint presentations as needed
  - No tests, quizzes or homework
  - Math and science computations may be more difficult during recovery
  - Provide student with printed or copies of class notes (teacher or student generated)

- Audio versions of texts are helpful for students struggling with visual processing
- May wear hat or sunglasses to reduce light sensitivity

**\*Progress to stage 3 when:**

- School activity does not increase symptoms
- Overall symptoms continue to decrease

**STAGE 3 : FULL DAY OF SCHOOL ATTENDANCE**

- Characteristics
  - Symptom free at rest
  - Mild to moderate symptoms with cognitive and school day activity
- No PE/athletic, Behind the Wheel (Driver's Ed.), Fine Arts participation (may attend practices, events, or classes, but no participation)
- For the student athlete: report daily to athletic trainer and school nurse.
- For the non-athlete student: report daily to the school nurse for assessment.
- Interventions:
  - Continue with interventions listed in Stage 2 as needed
  - Progress to limited homework, tests, quizzes (give 1 page/section of an assessment at a time, limit to 1 test per day)
- If unable to progress to Stage 4 after 3 weeks, and it is unlikely the student will be able to make up required work, staff, and parents will consider possible course level changes, or class withdrawal.
- Consider a 504 Plan after 8-10 weeks of residual symptoms with educational impact

**\*Progress to stage 4 when:**

- Symptom free with cognitive and physical activity
  - Student should report any return of symptoms with cognitive or school day activity
- Written clearance by primary care physician (primary physician or neurologist) preferred for return to physical and full cognitive/academic activities.
- Some students are cleared by primary care physician for full cognitive activity before receiving clearance for full physical activity.

**STAGE 4: FULL ACADEMIC AND ATHLETIC PARTICIPATION**

- Characteristics:
  - Asymptomatic with academic/cognitive and physical activities
- For the student-athlete: report daily to the athletic trainer and school nurse. Student will begin Return to Play Protocol with the athletic trainer. For the non-athlete student: report daily to the school nurse for assessment. Daily check ins discontinued at direction of school nurse.
- Interventions:
  - Resumption of full academic responsibilities once symptoms have resolved completely as determined by primary care physician. School nurse will notify teachers.
  - Create plan for possible modification and gradual completion of required make-up work (school counselor, teacher)
  - Teachers have the discretion to identify essential academic work for their course.

- o For the non-athlete student: written clearance to full participation from primary care physician will be requested for return to Fine Arts, Behind the Wheel, and PE participation. Upon receipt of clearance, school nurse will consult with PE teacher regarding appropriate return to full participation within current activity (*no formal gradual return to physical activity*).
- o For the student athlete: follow the Return to Play Protocol under the direction of the athletic trainer.
- o School nurse will follow up with student approximately 1 week after being cleared to full cognitive and physical activity.

**Follow Up**

- The athletic trainer and/or school nurse will conduct a follow-up assessment with the student one week after the student returns to full academic and athletic activity.
- The student is encouraged to meet with school counselor regularly to discuss progress, grades, and status of make-up work.
- The student is encouraged to meet with the athletic trainer or school nurse to assess any recurring symptoms.

**Resources:**

American Academy of Pediatrics - Clinical Report on Returning to Learning - 2013  
HEADS UP to Brain Injury Awareness, Centers for Disease Control