

Township High School District 214 Head Injury Care and Return-to-Activity* Guidelines for Co-Curricular Participants

Sport related concussion (SRC) is a traumatic brain injury induced by biomechanical forces. Several common features that may be utilized in clinically defining the nature of a concussive head injury include:

- SRC may be caused by either a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the head
- SRC typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over a number of minutes to hours.
- SRC may result in neuropathological changes, but the acute clinical signs and symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies.
- SRC results in a range of clinical signs and symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive features typically follows a sequential course. However, in some cases symptoms may be prolonged.

The clinical signs and symptoms cannot be explained by drug, alcohol, or medication use, other injuries (such as cervical injuries, peripheral vestibular dysfunction, etc) or other comorbidities (eg, psychological factors or coexisting medical conditions).

In conjunction with state laws and mandates from the Illinois High School Association, the following are guidelines that are to be followed when a co-curricular participant incurs a head injury.

Acute Assessment

- The student will be evaluated onsite by a licensed athletic trainer and/or Team Physician.
- If no athletic trainer or Team Physician are available, the student will not return to co-curricular activity. The coach/sponsor/supervisor will decide if 9-1-1 should be called. The parent(s)/guardian(s) should be called and informed of their child's condition. If 9-1-1 is called, an athletics/activities administrator should be contacted immediately.
- The student will not be left alone following the injury. Monitoring of the student for deterioration is essential over the initial few hours following the injury.
- The athletic trainer and/or Team Physician (if available) must determine the appropriate disposition of the student.

Post-Injury Care Guidelines

- Prior to returning to any co-curricular activity* (including co-curricular activity* taken as an academic class), the student must report to the athletic trainer for further evaluation. The student should not participate in any co-curricular activities* until cleared by the school's licensed athletic training staff.
- Relative cognitive and physical rest is recommended in the acute phases of injury and may vary from individual to individual based on symptom burden. After the acute phase, the student can become gradually and progressively more active while staying below their cognitive and physical symptom exacerbation threshold (Activity should not worsen their symptoms).
- District 214 licensed athletic trainers may use the ImpACT neurocognitive screening tool to evaluate a student's post-injury status. No more than two ImpACT tests will be administered within a seven day period. The initial post-injury test will be administered under the direction and at the discretion of a licensed athletic trainer according to the prescribed protocol which has been described below.
 - o The student will be given the ImpACT test post-injury, and these scores will be compared to the athlete's baseline scores or normative data if baseline scores are not available. ImpACT is not a diagnostic tool, and there may be circumstances in which its use is individualized for the student. The ImpACT test is one of the factors used in determining the readiness of a student to return to play. After assessing all factors, the athletic trainer as an approved agent of District 214 will determine when the student is ready to return to play.

Graduated Return-to-Activity* Strategy

After a student is removed from activity* for a suspected concussion, the return-to-activity* progression should not start until the student no longer reports concussion-related symptoms at rest and has a normal clinical examination. Under the direction of the athletic trainer, the student may start low level physical exertion while minimally symptomatic.

Stage	Aim	Activity	Goal
1	Symptom-limited activity	Daily activities that do not provoke symptoms	Gradual reintroduction of work/school activities
2	Light aerobic exercise	Walking or stationary cycling at slow to medium pace. No resistance training	Increased heart rate
3	Sport/activity-specific exercise	Running or skating drills. No head impact activities	Add movement
4	Non-contact training drills	Harder training drills (eg, passing drills). May start progressive resistance training	Exercise, coordination and increased thinking
5	Full contact practice	Following medical clearance, participate in normal training activities	Restore confidence and assess functional skills by coaching staff
6	Return to sport/activity	Normal game play/activity participation	

Each stage will be separated by a minimum of 24 hours, and must be supervised by the District 214 athletic trainer. If any concussion-related symptoms occur during the stepwise approach, the student should drop back to the previous asymptomatic level and attempt to progress again after being free of concussion-related symptoms for a further 24-hour period at the lower level. All students who report a head injury to District 214 must complete the District 214 return to play protocol prior to returning to a co-curricular sport or activity*.

For a list of physicians familiar with concussion management programs and neurocognitive testing, please contact your school's licensed athletic training staff.

Reference:

McCrary, P. et al., (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *The British Journal of Sports Medicine*, 0, 1-10. doi: 10.1136/bjsports-2017-097699