

# Western Dubuque Community School District - Concussion Guidelines

In accordance with Iowa administrative code 280.13C. For this guideline, the term student athlete is defined as a Western Dubuque Community School District (WDCSD) student participating in extracurricular activities. This guideline helps the safety of student athletes who have sustained a concussion or mild traumatic brain injury (MTBI) in a WDCSD-sponsored extracurricular activity. This guideline is designed to return concussed athletes to competitive sports in a manner that will reduce the likelihood of Second Impact Syndrome. The guidelines outlined below will assist the human brain in healing and repairing itself before another possible injury can occur. No guideline can guarantee future incidents, but this guideline will help increase the likelihood that the concussed brain heals before they return to play, thus making Second Impact Syndrome much less likely.

March 4, 2010 - The National Federation of State High School Associations changed its position on concussion to the following:

***“Effective with the 2010 high school football season, any player who shows signs, symptoms or behaviors associated with a concussion must be removed from the game and shall not return to play until cleared by an appropriate health-care professional.”***

## **WDCSD Concussion Guidelines**

- A student/athlete with signs and symptoms of a concussion, or a student/athlete believed to have sustained a MTBI, will be removed from play until evaluated and cleared by a qualified health care professional specifically trained in concussion evaluation and management. The WDCSD employs Certified Athletic Trainers (ATCs) working under the WDCSD Team Physician. The ATCs and WDCSD Team Physician will serve as qualified individuals in this area within the WDCSD. This does not exclude other health care professionals from evaluating or treating concussions within the WDCSD student athlete population outside of the school setting. If parents/guardians choose to take their student athlete for evaluation to other health care professionals outside of the school setting, it is encouraged that those health care professionals evaluating and treating concussions be qualified and trained in concussion and MTBI management
- All suspected concussions, or those showing signs or symptoms of having a concussion (listed below), will be removed from competition/practice. They will then be evaluated as soon as possible by the district ATCs or WDCSD Team Physician. If those healthcare professionals are not available, the parents will be notified and suggested to take their son/daughter to their primary physician (if specifically trained in concussion evaluation and care) for evaluation or to the emergency room if symptoms dictate so. If another medical professional, such as an MD/DO, performs an evaluation and treatment at the emergency room or a family physician's office, the qualified health care providers' orders will be reviewed and followed unless the WDCSD Team Physician or the ATCs feel the athlete needs further evaluation and screening. The WDCSD Medical Staff will be acting in the best interest of the athlete and the school district.
- The district will utilize electronic neurocognitive baseline testing. All WDCSD High School Athletes (all levels) will be required to complete neurocognitive baselines while maintaining a current baseline within 2 years of their current athletic season. In the event of a suspected or diagnosed concussion, the athlete will be tested again after injury. The scores will be evaluated by the WDCSD Medical Team. This will act as another tool for the WDCSD Team Physician and ATCs to use as a guide to safe return to play (RTP). Athletes must return to their pre-injury baseline status before full participation clearance (Step 4 of Return to Play Protocol). Electronic Neurocognitive Tests will not be the sole determining factor for RTP decisions.

· If the athlete is deemed to have suffered a concussion, the athlete will not be allowed to return to participation until cleared by the ATCs, WDCSD Team Physician, or other qualified health care professionals. The athlete must follow the return to play (RTP) protocol and procedure as appears in this guideline. Assessment and evaluation of the athlete will take place, and a comparison of pre- and post-injury electronic neurocognitive testing scores will be performed to help determine RTP status. No student-athlete will be allowed to return to play without following the RTP protocol and procedure.

· **The ATCs will have the ultimate return-to-play authority.** The ATCs will take into consideration all other health care providers' qualifications and directions and will decide as to the athlete's return to play status. The ATCs may agree to follow other health care providers' scripts or choose to overrule those providers if believed to be in the best interest of the school district or the athlete. The ATCs will not overrule a conservative or more cautious note in any circumstance.

· Written parental consent to return to sport participation following a concussion will be attained and recorded during the stepwise return to participation protocol. This form appears later in this document.

· Situationally, it may be required that the student athlete requires their cognitive activities to be reduced or removed with the intent to eliminate the signs, symptoms, or behaviors of brain injury. The WDCSD Medical Team will notify the student's educational team via district email with an academic accommodations form. As part of the regular check-in process, the WDCSD will update or remove academic accommodations as necessary. Students are responsible for making up any missed work promptly. Scheduling missed work with each of their teachers, once they have returned to baseline cognitive and physical status.

### **Definition of Concussion:**

· **Concussion is defined as a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces. Several common features that incorporate clinical, pathological and biomechanical injury constructs that may be utilized in defining the nature of a concussive head injury include:**

1. Concussion may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an "impulsive" force transmitted to the head.
2. Concussion typically results in the rapid onset of short-lived impairment of neurologic function that resolves spontaneously.
3. Concussion may result in neuropathological changes, but the acute clinical symptoms largely reflect a functional disturbance rather than a structural injury.
4. Concussion results in a graded set of clinical symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follows a sequential course; however, it is important to note that, in a small percentage of cases, post-concussive symptoms may be prolonged.
5. No abnormality in standard structural neuroimaging studies is seen in concussion.

The preceding definition is from the Consensus Statement on Concussion in Sport 3rd International Conference on Concussion in Sport Held in Zurich, November 2008.

### **Signs and Symptoms of a Concussion:**

**Signs observed-**

- Appears to be dazed or stunned
- Is confused about assignment
- Loses consciousness (even temporarily)
- Shows behavior or personality change
- Forgets events prior to hit (retrograde amnesia)
- Forgets events after hit (anterograde amnesia)
- Signs reported by athlete
- Headache
- Nausea

### **Additional Concussion Information:**

**Second Impact Syndrome (SIS)** is also a very real concern and can be potentially catastrophic. According to the Center for Disease Control and Prevention (CDC) a repeat concussion that occurs before the brain recovers from the first, usually with a short period of time (hours, days, or weeks), can slow recovery or increase the likelihood of having long term problems. In rare case, repeat concussions can result in brain swelling, permanent brain damage, and even death. The CDC refers to this more serious condition as Second Impact Syndrome. SIS in short is suffering a second MTBI or concussion while the brain is recovering from an initial MTBI or concussion, and thus potentially lead to a higher level of brain damage and catastrophic consequences. SIS is believed to have been the cause of approximately 30-40 deaths over the last decade. The risk of SIS is real, and following a gradual return to play protocol after sustaining a MTBI or concussion can greatly reduce the chances of this potentially life-threatening condition sustaining a MTBI or concussion can greatly reduce the chances of this potentially life-threatening condition.

In addition, with every MTBI or concussion there is a risk of developing **Post-Concussion Syndrome (PCS)**. According to the Mayo Clinic, PCS is a complex disorder in which a combination of post-concussion symptoms may last for weeks and sometimes months after the injury that caused the initial concussion. Symptoms of PCS may include, but are not limited to chronic headaches, fatigue, sleep difficulties, personality change, increased irritability, increased emotional feelings, sensitivity to light and noise, dizziness, and deficits in short-term memory and general academic functioning. PCS can be very disabling for an athlete and may be permanent in some cases. The majority of athletes who experience MTBI or concussion are likely to recover fully without experiencing long term detrimental effects of MTBI or concussion.

In accordance with Iowa Administrative code **641—54.2(280) Return-to-play protocol.**

This protocol will be based on current evidence-based practice and will include the following process:

54.2(1) Return-to-play process.

- No student will return to contest or practice the same day as a suspected concussion or other brain injury.
- A student suspected of having a concussion will be evaluated by a licensed health care provider trained in the evaluation and management of concussion and other brain injuries as soon as feasible
- A student who has been removed from participation will receive written medical clearance prior to starting the return-to-play protocol.

- The return-to-play steps shall be conducted under the guidance of a licensed health care provider following current best practice and as set forth by the Iowa high school athletic association and Iowa girls' high school athletic union, with provision for delayed return-to-play steps as necessary.
- Return-to-play may begin when the student is still symptomatic, after a brief period of rest.
- No contact- or collision-related activities will be performed as part of the return-to-play steps until the student has written medical clearance from a licensed health care provider and has returned to pre-injury academic function.