



NWC Concussion Return to Play Protocol

Introduction

Concussions received by participants in sports activities are an ongoing concern at all levels. Recent interest and research in this area has prompted reevaluations of treatment and management recommendations from the high school to the professional level. In order to ensure the safety of our student athletes NWC has developed the following Concussion Response Policy.

Definition of Concussion

"Concussion" means a complex pathophysiological process affecting the brain caused by a traumatic physical force or impact to the head or body, which may:

- (A) include temporary or prolonged altered brain function resulting in physical, cognitive, or emotional symptoms or altered sleep patterns; and
- (B) involve loss of consciousness.

Responsible Individuals:

At every activity under the jurisdiction of NWC in which the activity involved carries a potential risk for concussion, there should be a designated individual who is responsible for identifying student-athletes with symptoms of concussion injuries. That individual should be a physician or an advanced practice nurse, athletic trainer, neuropsychologist, or physician assistant with appropriate training in the recognition and management of concussion in athletes. In the event that such an individual is not available, a supervising adult approved by the school district with appropriate training in the recognition of the signs and symptoms of a concussion in athletes could serve in that capacity. When a licensed athletic trainer is available such an individual would be the appropriate designated person to assume this role. The individual responsible for determining the presence of the symptoms of a concussion is also responsible for creating the appropriate documentation related to the injury event. After it is established that a student does in fact have a concussion the NWC Athletic Director, Designated Team Trainer, or their designated representative is the person responsible to ensure that all aspects of the Return to Play Protocol are followed before the student returns to full participation.

Manifestation/Symptoms

Concussion can produce a wide variety of symptoms that should be familiar to those having responsibility for the well-being of student-athletes engaged in competitive sports. Symptoms reported by athletes may include: headache; nausea; balance problems or dizziness; double or fuzzy vision; sensitivity to light or noise; feeling sluggish; feeling foggy or groggy; concentration or memory problems; confusion.

Signs observed by parents, friends, teachers or coaches may include: appears dazed or stunned; is confused about what to do; forgets plays; is unsure of game, score or opponent; moves clumsily; answers questions slowly; loses consciousness; shows behavior or personality changes; can't recall events prior to hit; can't recall events after hit.

Any one or group of symptoms may appear immediately and be temporary, or delayed and long lasting. The appearance of any one of these symptoms should alert the responsible personnel to the possibility of concussion.

Response to Suspected Concussion

A student shall be removed from an interscholastic athletics practice or competition immediately if one of the following persons believes the student might have sustained a concussion during the practice or competition:

- (1) a coach
- (2) a physician
- (3) a licensed health care professional
- (4) the student's parent or guardian or another person with legal authority to make medical decisions for the student.'

Return to Activity/Play Protocol Following a Concussion

A student removed from an interscholastic athletics practice or competition by a doctor, trainer, or coach under suspicion of having a concussion may not be permitted to practice or compete again until they have completed each of the following 5 steps:

5 Steps of the NWC Return to Play Protocol

- (1) the student has been evaluated by a licensed Health Care Provider as defined by the WIAA to be a Medical Doctor, Doctor of Osteopathy, Advanced Registered Nurse Practitioner, Physicians assistant, or Licensed Certified Athletic Trainer using Neuro Cognitive testing with Impact or similar program before the athlete can be released for exercise stress testing.
- (2) the treating physician has provided a written statement indicating that, in the physician's professional judgment, it is safe for the student to return to play
- (3) The athlete has successfully completed exercise stress testing known as the Return to Activity Progression
- (4) The student's parent or guardian or another person with legal authority to make medical decisions for the student have signed the **Return to Play Form**
- (5) The coach receives a signed copy of the Return to Play Form

Return to Activity Progression (Stress Testing)

Once an athlete no longer has signs, symptoms, or behaviors of a concussion and has completed the first three steps of the return to play protocol, he or she should proceed in a step-wise fashion to allow the brain to re-adjust to exercise. In most cases, the athletes will progress one step each day dependent on the judgement of the athletic trainer or health care professional in charge. The return to activity progression may proceed **following medical clearance**. The student is not allowed to compete until they have completed all four steps of the Return to Play protocol under the oversight of the NWC Athletic Director, Official Team Trainer, or their designated representative

Step 1: Light Aerobic Exercise

The Goal: only to increase an athlete's heart rate.

The Time: 5 to 10 minutes.

The Activities: exercise bike, walking, or light jogging.

Absolutely no weight lifting, jumping or hard running.

Step 2: Moderate Exercise

The Goal: limited body and head movement.

The Time: Reduced from typical routine

The Activities: moderate jogging, brief running, moderate-intensity stationary biking, and moderate-intensity weightlifting

Step 3: Non-contact Exercise

The Goal: more intense but non-contact

The Time: Close to Typical Routine

The Activities: running, high-intensity stationary biking, the player's regular weightlifting routine, and non-contact sport-specific drills. This stage may add some cognitive component to practice in addition to the aerobic and movement components introduced in Steps 1 and 2.

Step 4: Practice

The Goal: Reintegrate in full contact practice.

Step 5: Play

The Goal: Return to competition

It is important to monitor symptoms and cognitive function carefully during each increase of exertion. Athletes should only progress to the next level of exertion if they are not experiencing symptoms at the current level. If symptoms return at any step, an athlete should stop these activities as this may be a sign the athlete is pushing too hard. Only after additional rest, when the athlete is once again not experiencing symptoms for a minimum of 24 hours, should he or she start again at the previous step during which symptoms were experienced.

The Return to Play Progression process is best conducted through a team approach and by a health professional who knows the athlete's physical abilities and endurance. By gauging the athlete's performance on each individual step, a health care professional will be able to determine how far to progress the athlete on a given day. In some cases, the athlete may be able to work through one step in a single day, while in other cases it may take several days to work through an individual step. It may take several weeks to months to work through the entire 5-step progression.