

Pueblo City Schools & District 70

High School and Middle School

Concussion Management Program

Basic philosophy: We will never, under any circumstances, allow a student athlete who may have suffered a concussion to prematurely return to play when doing so may put that athlete at an increased risk for the future development of neurodegenerative changes.

Initial management after concussion

1. Any student athlete who is felt to have had a concussion must be removed from play immediately and may not be returned to play or practice until cleared by a qualified medical professional as defined in the Jake Snakenberg Youth Concussion Act.
2. If the concussed student athlete is felt to be medically or neurologically unstable at the scene of practice or play, the nearest emergency medical response team must be contacted, and the student athlete should be transported to the nearest appropriate medical facility.
3. If the concussed student athlete is felt to be medically and neurologically stable, but the student athlete is markedly symptomatic, every attempt should be made to contact the student athlete's primary care provider who will then direct the patient's further medical care. If the student athlete does not have a primary care provider or his/her provider is unavailable, then the student athlete should be transported to a medical care facility such as an emergency room or an urgent care facility. Transportation via ambulance should be accomplished rapidly if the student athlete is markedly symptomatic, but may be accomplished via private vehicle if the athlete's parent/guardian is comfortable assuming this responsibility.
4. If the concussed student athlete is felt to be medically and neurologically stable, and is not markedly symptomatic, the student athlete will be placed into the concussion management protocol as described below. The student athlete and his/her

parents/guardians will be provided information regarding the concussion, and will be instructed to follow-up with their own primary care provider or an alternate provider as specified below as soon as possible, preferably within 72 hours of the concussion.

The concussion management protocol

1. The coach of the concussed student athlete will inform the school's concussion team leader of the student athlete's condition as soon as possible.
2. The concussion team leader of the school will be in charge of the school's concussion management team.
3. The concussion team leader will choose members that will comprise the concussion management team. This team may be made up of the athletic director, athletic trainer, school nurse, school behaviorist, or other members of the school staff as felt necessary by the concussion team leader.
4. The concussion team leader will be responsible for making sure that the concussed student athlete gets evaluated by his or her primary care provider in a timely fashion. If the primary care provider is unable or unwilling to evaluate the patient in a timely fashion, then the concussion team leader may arrange for the athlete to be evaluated by a qualified medical provider as spelled out in the Jake Snakenberg Youth Concussion Act. Once the concussed athlete has been evaluated and cleared to proceed by the primary care provider or alternate medical provider, the concussed student athlete will begin participation in the graduated return to activity after concussion plan as described below.

Graduated return to activity after concussion plan

1. The concussion team leader will, upon permission of the student athlete's primary care provider or other provider as mentioned above, enroll the athlete in the graduated return to activity after concussion plan.
2. Components of the graduated return to activity after concussion plan may include;
 1. Temporary academic accommodations to allow the concussed student athlete cognitive rest. The student athlete may be excused from hard classes, excessively demanding homework, test taking, etc.
 2. Encouraging the student athlete to minimize use of cell phones, televisions, texting, and watching movies.

3. No physical activity until most if not all of the symptoms of a concussion have resolved.
4. Neurocognitive testing using ImPACT or similar systems to compare post-injury scores to baseline scores if available.
5. Progression to light aerobic activity such as walking, swimming, stationary cycling for 10-15 minutes/day. The athlete may proceed to the next level after 24 hours if asymptomatic.
6. Progression to sport specific exercise such as running drills for 20-30 minutes/day with no weight lifting or head contact. The athlete may proceed to next level after 24 hours if asymptomatic.
7. Progression to non-contact drills such as more complex training drills, and progressive resistance training. The athlete may proceed to the next level after 24 hours if asymptomatic.
8. If the athlete becomes symptomatic at any stage, that athlete has to return to the previous stage for at least 24 hours and only proceed to the next stage when asymptomatic.

Full contact practice/return to play after concussion

The student athlete who has suffered a concussion will be allowed to participate in full contact practice /return to play only when **all** of the following conditions have been met:

1. The student athlete is free of any significant symptoms from the concussion at rest.
2. The student athlete is free of any significant symptoms from the concussion with exertion.
3. The student athlete has returned to baseline on neurocognitive testing if baseline testing was done, or appears to have normalized on post concussion testing based on his or her age and scholastically based normative data.
4. The student athlete's school based concussion management team, led by the concussion team leader feels that the athlete can safely participate in full contact practice and return to play.
5. The athlete's primary care provider or similarly qualified alternate provider feels that the athlete can participate in full contact practice and return to play.

The Red – Yellow – Green Framework

In order to simplify the various steps in going from the point of presumed concussive injury to return-to-play, we will be utilizing the red-yellow-green framework as follows:

1. **Red form**: once a student athlete is identified as having suffered a possible concussion, that student athlete will be immediately removed from any further athletic activity. If the student athlete does not show any signs of medical urgency, the coach or another member of the school's athletic department will fill out the red form, and a copy of this red form will be given to the student athlete or student athlete's parent/guardian or representative, who will then give this form to the school's concussion team leader.
2. **Yellow form**: The concussion team leader will retain the red form and transcribe pertinent information to the yellow form. The concussion team leader will have the student athlete fill out the concussion symptom sheet present on the back of the yellow form, and will put this score on the yellow form along with the date of the symptom assessment. The concussion team leader will then give this yellow form to the student athlete with directions to have this form given to his or her primary care provider or alternative qualified medical provider. Once the yellow form is signed and returned to the concussion team leader, the student athlete will begin the graduated return to play protocol as described above.
3. **Green form**: Once the student athlete has gone through the graduated return to play protocol, is largely asymptomatic at rest and with exercise, and is felt to have a normalized post-injury ImpACT test, the concussion team leader will provide the student athlete with the green form. The green form will then be taken by the student athlete to his or her primary care provider or alternative qualified medical provider. Once the green form has been signed by the student athlete's primary care provider or alternative qualified medical provider, the student athlete will return this form to the concussion team leader, who will then give the student athlete a "return-to-play" card. The student athlete will then present this card to his or her coach, and only then will the student athlete be allowed to return-to-play. The concussion team leader may not allow the student athlete to proceed from the yellow to the green form if he or she suspects that the student athlete may be trying to minimize his or her post concussive symptoms, if the student athlete has not normalized on the post-injury ImpACT test, or if there are any significant concerns for the safety of the student athlete.

Special considerations in concussed student athletes

A certain number of student athletes may continue to have symptoms of a concussion for a prolonged period of time after the concussion. These student athletes may benefit by consultation with more specialized consultants in neurocognitive functioning. Clearly, these student athletes will not be allowed to return to play until released by these specialized consultants.

Some student athletes may suffer repetitive concussions, and it is believed that there is cumulative damage to the brain with successive concussions. These student athletes may benefit from consultation with more specialized consultants in neurocognitive functioning, and it may be in the student athlete's best interest to consider withdrawing from further contact-collision sports in some of these cases.

Clarification of special circumstances:

- A. If the primary care provider or alternative medical provider as described previously clears the concussed athlete to participate in full contact/return to play after the initial visit, the athlete will be placed in the graduated return to play after concussion plan. The athlete will be allowed to participate in full contact/return to play only after he or she has successfully completed the entire red-yellow-green protocol as described above.
- B. If the concussed athlete is initially evaluated by an emergency room/urgent care provider and cleared to participate in full contact/return to play, the athlete will be placed in the graduated return to play after concussion plan. The athlete will be allowed to participate in full contact/return to play only after he or she has successfully completed the entire red-yellow-green protocol as described above.
- C. **Since the potential for possible short and long term neurological impairment in athletes with concussion who are mismanaged is so high, the following will apply:**

In a student athlete with a presumed concussion, if the student athlete refuses to participate in the concussion management protocol or the student athlete's parents/guardians or representatives refuse to allow the athlete to participate in the concussion management protocol, the athlete will not be allowed to participate in any contact/collision sporting activities through the student athlete's school district.