

- **Policy and Procedures for the Management of Head Injuries**

A concussion is a traumatic injury to the brain resulting in temporary loss of normal brain function. Concussions can be caused by a direct blow to the head, neck, face, or anywhere else on the body with forces transmitted to the head. Symptoms may be cognitive, emotional, or physical and include but are not limited to:

- Headache
- Vision problems
- Feeling like “in a fog”
- Nausea
- Sensitivity to light
- Mental status change or confusion
- Vomiting
- Sensitivity to noise
- Problem concentrating
- Dizziness
- Fatigue
- Disoriented
- Loss of balance
- Irritability
- Seizures

Once a concussion is suspected, regardless of venue (home or away), the coach is obligated to remove the injured athlete from activity and report the injury to the Certified Athletic Trainer (ATC) or the school Nurse as per Section 136.5 of the Commissioner's Regulations. Thus the chain of communication is as follows:

The injured athlete must go through the following steps before returning to activity.

1- Evaluation by the Sacred Heart Academy's Certified Athletic Trainer

The ATC will administer the Scat3 test which examines signs and symptoms and cognitive function to be used by the licensed physician. If it is suspected that the athlete has sustained a concussion based on a physical examination and/or the Scat3 test, that athlete will be removed from practice or competition and parents and coaches notified.

2- Evaluation and clearance by a physician

Any athlete showing signs and symptoms of a concussion must be evaluated and cleared by a licensed physician before beginning the return to play plan. If an athlete remains symptomatic a minimum of 3 or a maximum of 5 days post physician clearance, they must be re-evaluated and cleared by a licensed physician.

3- Return to play (RTP) plan

RTP plan will commence once the athlete has been cleared by a licensed physician and is symptom free for at least 24 hours. The RTP plan is a six step progression where the athlete will proceed to the next step if asymptomatic at the current step. If an athlete remains symptomatic and cannot proceed to the next step for a total of 2 attempts they must be re-evaluated and cleared by a licensed physician regardless of where they are in the RTP plan.

Athletes exhibiting any signs and symptoms of a concussion cannot return without clearance from the school ATC or Nurse, and will **NOT** be allowed to return to play on the same day. Final authority rests with the ATC and Nurse.

If the following return to play plan is not followed appropriately, there will be an increased risk of suffering from second-impact or post-concussion syndrome.

- Second-impact syndrome (SIS) is a condition in which the brain swells rapidly and catastrophically after a person suffers a second concussion before symptoms from an earlier one have subsided. This deadly second blow may occur days, weeks or minutes after an initial concussion, and even the mildest grade of concussion can lead to SIS. The condition is often fatal, and almost everyone who is not killed is severely disabled.
- Post-concussion syndrome (PCS) occurs when any sign or symptom persists for weeks, months, or occasionally up to a year or more after the initial injury. PCS can occur after one or multiple concussions and does not depend upon severity of the concussion.

RETURN TO PLAY PLAN - Step 3

Athletes will **NOT** be returned to play same day as the injury

Returning to play **MUST** follow this 6-step process.

Table 1 Graduated return to play protocol

Rehabilitation stage	Functional exercise at each stage of rehabilitation	Objective of each stage
1. No activity	Complete physical and cognitive rest	Recovery
2. Light aerobic exercise	Walking, swimming or stationary cycling keeping intensity <70% maximum predicted heart rate No resistance training	Increase heart rate
3. Sport-specific exercise	Skating drills in ice hockey, running drills in soccer. No head impact activities	Add movement
4. Non-contact training drills	Progression to more complex training drills, eg passing drills in football and ice hockey (May start progressive resistance training)	Exercise, coordination, and cognitive load
5. Full contact practice	Following medical clearance participate in normal training activities	Restore confidence and assess functional skills by coaching staff
6. Return to play	Normal game play	

Each stage consists of at least 24 hours and if symptoms occur, then athlete goes back to stage 1.

References

McCroly, P et.al. Consensus statement on concussion in sport 3rd international conference on concussion in sport held in Zurich, November 2008. Clin J Sport Med. 19,3,2009.

Concussion guidelines/ procedures- NYS public high school athletic association website;
www.nysphsaa.org/safety.