



Cold Spring Harbor Sports Medicine



Athletic Director: Jim Amen

Certified Athletic Trainer: Diego Garcia

Concussion Protocol

This document outlines the proper procedure for all Cold Spring Harbor (CSH) Athletes who suffer a concussion during their season. This will be set forth and executed by the CSH medical staff, consisting of Dr. Karl Friedman (School Physician), Evelyn Pendel (School Nurse) and Diego Garcia (Certified Athletic Trainer). The following will constitute the **ONLY** protocol for concussion injuries at Cold Spring Harbor, and **MUST** be followed by **ALL** athletes and coaches without exception. Complete and total recovery is the absolute goal for all athletes.

Pre-Screening

Most High School athletes, who participate in contact and collision sports, will undergo a baseline testing of their cognitive brain function prior to the start of their first season, utilizing imPACT Head Injury Software. This will be repeated at the beginning of the player's Junior (11th grade) season.

Collision Sports: Football, Boys Lacrosse, Ice Hockey, Wrestling

Contact Sports: Baseball, Basketball, Field Hockey, Gymnastics, Girls Lacrosse, Soccer, Softball

imPACT

The software subscribed to and utilized by Cold Spring Harbor Athletics is used to measure cognitive brain function. This test compares an athlete's healthy, uninjured brain before a season to a post concussive brain, should the athlete get injured. The system tests athletes in reaction time, non-verbal problem solving, working memory and attention span. It provides CSH medical staff with an objective analysis of brain function to determine a return to play guideline.

Evaluation

Most CSH athletes will be initially evaluated by the Certified Athletic Trainer (ATC). **Only the aforementioned medical staff may evaluate and assess a concussion of a Cold Spring Harbor athlete.** Athletes at away games may be evaluated by another Certified Athletic Trainer. In this case the athlete will see the Cold Spring Harbor Athletic Trainer as soon as he or she is available. It will be determined by the ATC that a concussion occurred. Severity of concussion and all immediate care will be rendered at the discretion of the Athletic Trainer. All head injuries which require immediate medical attention will be managed as outlined in the Cold Spring Harbor Emergency Action Plan. If no Athletic Trainer is available upon return from an away contest, it will be the responsibility of the coach to contact the Athletic Trainer to apprise him of the situation and allow for follow up with the athlete and parents.

Post Concussion Management

Athletes will undergo another imPACT test to evaluate cognitive function 24-48 hours after injury. Some Athletes may be asked to take the test more than 48 hours after injury, depending on severity of symptoms, and availability of the athlete or administrator. This data will be recorded by the Athletic Trainer. In the event that no impact test exists for a particular athlete, the CSH medical staff will determine return to play based on symptoms and cognitive ability on an individual basis, still utilizing imPACT software and compared to same age and gender national averages. Tests not passed may be retaken after a 3-4 day waiting period. This 3-4

day waiting period will be observed for every subsequent failed test. Return to play will not be allowed unless symptoms have subsided completely, **AND** the athlete has obtained medical clearance.

Medical Clearance

In order for an athlete to return to physical activity, they must get medical clearance by **BOTH** a private physician **AND** the Cold Spring Harbor Medical Staff. The medical staff will consist of Dr. Karl Friedman, Diego Garcia ATC, CSCS, and Evelyn Pendel. A written note **MUST** first be provided to the school by an outside Physician. The CSH medical staff shall then utilize neurocognitive test results and clinical evaluation to outline return to play status for each individual athlete/case. Clearance will only be given when the athlete has exhibited complete recovery from concussion injury, completed a gradual progressive exertion program **AND** the CSH medical staff deems it appropriate. The exertion test will ensure that symptoms do not return as a result of physical activity, and will contain sport specific non contact drills supervised by the Athletic Trainer. **ALL RETURN TO PLAY CRITERIA MUST BE MET TO THE SATISFACTION OF THE ENTIRE COLD SPRING HARBOR MEDICAL STAFF IN ORDER FOR AN ATHLETE TO RETURN TO COMPETITION.**

Special Considerations

All concussions are treated on an individual case by case basis. The Cold Spring Harbor Medical Staff may suggest further evaluation or recommend an athlete not participate further in a season or school year based on varying criteria and evidence. Athletes with multiple concussions may be required to seek consultation with a specialist (neurologist) in order to obtain clearance. Likewise, athletes with long lasting symptoms may not be allowed to participate based on the recommendation of the CSH Medical Staff.

Non Cold Spring Harbor Events

If an athlete is restricted from participating at any Cold Spring Harbor sanctioned event, it is the recommendation by the Medical Staff that the student also not participate in ANY athletic competition where the risk of further head injury may occur. This includes ALL organized and unorganized athletic activities.

Same Day Return to Play

ABSOLUTELY NO ATHLETE SHOULD RETURN TO PLAY THE SAME DAY A CONCUSSION HAS BEEN OBSERVED. ANY ATHLETE SUSTAINING A CONCUSSION WILL STOP PLAYING IMMEDIATELY AND MUST SIT AT LEAST THE REST OF THAT GAME.

Second Impact Syndrome

Recent research has shown the importance of return to play protocol for athletes, particularly in the adolescent brain. Second Impact Syndrome occurs when an athlete returns to play, with remaining symptoms of a concussion, and receives more external forces to the head. The initial concussion remains unhealed in the brain and even minor forces to the brain cause trauma on top of the existing concussion. These repetitive forces cause the brain to swell further and pressure is applied to the brain stem. **Second Impact Syndrome has been shown to cause permanent brain damage, decreased brain function, and death.** The safest course of action in preventing Second Impact Syndrome is appropriate concussion management and rest following a concussion.

Concussion Information

Journal of Clinical Neuroscience

Consensus statement on concussion in sport – The 3rd International Conference on concussion in sport, held in Zurich, November 2008 ^q

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