

CONCUSSION MANAGEMENT

At Christian Brothers Academy, we utilize a comprehensive return to play protocol for concussion management. We combined New York State educational guidelines for concussion management in conjunction with an innovative concussion management program called ImPACT (Immediate Post Concussion Assessment and Cognitive Testing).

New York State educational guidelines mandate that return to play following a concussion involves a stepwise progression once the individual is symptom free, due to the increased risk of complications. The current return to play recommendations are based on the most recent international expert opinion. No student athlete should return to play while symptomatic and are prohibited from returning to play the day of the concussion. Once the student athlete is symptom free at rest for 24 hours and has a signed release by a physician, the student athlete may begin the return to play progression below.

Stage 1: No activity for complete physical and cognitive rest (recovery)

Stage 2: Light aerobic exercise such as walking, swimming or stationary cycling keeping intensity < 70% maximum predicted heart rate (increase heart rate)

Stage 3: Sports specific exercise such as skating drills in hockey or foot drills in soccer. No head impact activities (add movement)

Stage 4: Non contact training drills such as passing drills in football and hockey and may start resistive training (exercise, coordination, and cognitive load)

Stage 5: Full contact practice following medical clearance to participate in normal training drills (restore confidence and assess functional skills by coaching staff)

Stage 6: Return to play (no restrictions)

Each step should take 24 hours before progressing to the next step to insure the does not become symptomatic. The return to play protocol will take approximately one week to proceed through the full rehabilitation and the student athlete is asymptomatic at rest and with provocative exercise. If any post concussion symptoms occur while in the stepwise program, then the student should drop back to the previous asymptomatic level and try to

progress again after a further 24-hour period of rest has passed.

ImPACT is administered by our certified athletic trainer (ATC) or by a trained member of our concussion management team. It is a web-based software program designed to assess baseline neurocognitive functioning. The test itself takes approximately 30 minutes to complete and will be given to student-athletes prior to their season in order to obtain a baseline measurement. The program measures multiple aspects of cognitive functioning, including:

Section I: Subject Profile & Health History Questionnaire

Section II: Current Symptoms & Conditions

Section III: Neuropsychological Tests (Baseline & Post Concussion)

Module 1 - Word Discrimination

Module 2 - Design Memory

Module 3 - X's & O's

Module 4 - Symbol Matching

Module 5 - Color Match

Module 6 - Three Letters

Section IV: Injury Description

Section V: Graphic Display of Data

If a student-athlete is believed to have sustained a concussion during competition, the test is taken again and the data is compared to the baseline exam. This information will then be used as a tool to assist the treating physician, athletic trainer (ATC) and coaching staff in determining the extent of the injury, monitoring recovery and developing a return to play strategy. If an injury of this nature occurs, we will be in contact with the parent / guardian throughout the process.

We conduct baseline tests on all contact sport student-athletes grades 7-12. Moving forward, a new baseline test will be given to our student-athletes every two years. This is due to the changes that occur in an adolescent brain.

For additional resources for parents, caregivers, coaches and students, visit the New York State Department of Health site on concussions.