



## Major League Soccer to Use ImPACT Concussion Management Program During 2007 Season

ImPACT Applications, Inc. (ImPACT) and Major League Soccer (MLS) have announced a strategic partnership to launch a formal Concussion Management Program that will promote testing, education, awareness, and state-of-the-art standards of care to each of MLS' 13 teams.

The ImPACT™ Concussion Management Program is a computerized series of neurocognitive tests that help medical staffs determine the severity of concussions and when it is safe for injured athletes to return to play. The ImPACT program, the world's most widely used computerized sports concussion evaluation system, has been adopted by team doctors and athletic trainers for numerous top sports leagues in the world, including the National Football League, Major League Baseball, and the NCAA and is now available for the first time via the Internet to all of MLS teams and players.

Our ultimate goal is to create a safer environment for soccer players of all ages through education, awareness, and clinical care," said David Hall, chief executive officer of ImPACT. "Now, through the leadership displayed by Major League Soccer, the national soccer community can strive to implement standards of care on par with those being used by the sport's elite teams and players."

ImPACT was designed to provide a comprehensive brain injury management system that provides valuable information to players, coaches, parents and doctors," said ImPACT developer Mark Lovell, Ph.D., director of the UPMC Sports Medicine Concussion Program, who also directs the neuropsychological testing programs for the NFL and NHL.

Concussion is any change in mental status caused by a sudden violent rocking back and forth of the brain inside of the skull due to a blow to the head or upper body. Symptoms can include headache, amnesia, dizziness, confusion, lack of hand-eye coordination, and in some cases, loss of consciousness. Generally, an athlete can safely recover from an initial concussion as long as the brain has had time to heal. If a second concussion occurs prior to full recovery from the first, an athlete may experience long-term symptoms in the form of chronic headaches, sleep difficulties, personality changes or memory problems. In rare cases, a second concussion may even result in death from 'second impact syndrome.'

This type of innovative tool is extremely beneficial to MLS athletes and can help us to objectively determine when full recovery from concussion has occurred," said Larry Lemak, M.D., medical director of Major League Soccer. "By using ImPACT, a concussion can be more accurately diagnosed, and based on objective data a proper return time can be determined to reduce the risk of a secondary concussion."

ImPACT evaluates and documents multiple aspects of brain functions, including memory, processing speed, reaction time and post-concussive symptoms. Through a 20-minute test, baseline data on an athlete's neurocognitive functional state is collected and stored. When a concussion is suspected during the season, the athlete is re-tested and the baseline neuropsychological data is compared to post-concussion data to help determine the athlete's post-concussion neurocognitive status, as well as when it is safe for the player to return to play.



Proper assessment of the injury and the determination of existing symptoms that may indicate incomplete recovery is critical to the safe management of an athlete suffering from a concussion,” said Chris Annunziata, M.D., D.C. United’s team physician. “Imaging techniques such as CT scans or MRIs identify anatomic changes in the brain but are not helpful in measuring the effects of concussion, which are functional and not anatomic alterations in the brain. A thorough medical examination is vital and use of neurocognitive tests such as ImPACT are useful in assessing brain function. With neurocognitive testing a physician has an objective tool to help determine concussion subtleties, thereby assisting with medical management and return to play decisions.”

Major League Soccer continues to place the highest priority on the safety of its athletes,” said Ivan Gazidis, deputy commissioner of Major League Soccer. “Utilization of this program places our league at the forefront of the management relating to this particular sports injury. MLS is proud to participate in the innovative program and looks forward to working with ImPACT and the national soccer community as we strive to create the safest possible environment for soccer players of all ages.”

## About Major League Soccer

Major League Soccer is the premier professional soccer league in the United States and features stars from the United States and around the globe. Having entered its 12th season in April 2007, the League is preparing for a year like none before, as two new soccer-specific stadiums open and a new team kicks off in Canada. Toronto FC, the 13th team in MLS, begins play this season at soccer-specific BMO Field in Toronto. The Colorado Rapids also opened their new stadium, Dick’s Sporting Goods Park. The League now features six soccer-specific stadiums that are home to seven of the League’s 13 teams. Major League Soccer’s national television partners are ABC/ESPN, Univision, Fox Soccer Channel/Fox Sports en Español and HDNet. The 13 teams in MLS are: the Chicago Fire, Colorado Rapids, Chivas USA, Columbus Crew, D.C. United, FC Dallas, Houston Dynamo, Kansas City Wizards, Los Angeles Galaxy, New York Red Bulls, New England Revolution, Real Salt Lake and Toronto FC.

For more information about MLS, log on to the League’s official Web site at [www.MLSnet.com](http://www.MLSnet.com)

## About ImPACT™

ImPACT (Immediate Post-concussion Assessment and Cognitive Testing) was developed over the past decade by sports concussion researchers Mark Lovell, Ph.D., Michael Collins, Ph.D., and Joseph Maroon, M.D., from the University of Pittsburgh Medical Center (UPMC) Sports Medicine Concussion Program. ImPACT, headquartered in Pittsburgh, PA, is used by numerous teams in the National Football League and Major League Baseball; all MLB umpires; more than 300 colleges and universities and more than 1,000 high schools nationwide; the USA Olympic Training Center; USA Hockey and the U.S. Women’s Olympic Ice Hockey team; U.S. Soccer Federation; the U.S. Ski Team; Championship Auto Racing Teams and the Indianapolis Racing League as well as numerous other national and international professional athletic organizations and sports medicine programs.

For more information about ImPACT, log on to their Web site at [www.impacttest.com](http://www.impacttest.com)