



## **Concussions in Minor Hockey**

### **Examining the Incidence of Head Injury in the South West Area Two (SWAT) and Confederation Minor Hockey Club (CONFED) in Edmonton, Alberta.**

#### **What is a Concussion?**

Concussions are brain injuries caused by a blow to the head. This changes the way brain cells function, leading to symptoms that can be physical (headaches, dizziness), cognitive (problems remembering or concentrating), or emotional (feeling depressed). Concussions can have short-term or long-term impact on athletic performance.

#### **Why Study Concussion?**

Hockey is one of the most popular sports world-wide. Current research suggests head injuries account for about 3%-11% of injuries in most sports including hockey. Although concussions are common injuries, they cannot be identified on X-rays, or CT scans and therefore, have been difficult to study and understand. Many concussions improve on their own; however, some athletes are at greater risk for complex and long-term problems. The medical community has also learned a great deal about concussions in recent years, leading to changes in the way these injuries are identified and managed. Thus, all concussions should be treated carefully and in consultation with appropriate medical personnel.

#### **The Purpose of the Present Study**

Researchers from the University of Alberta in conjunction SWAT and CONFED will examine the incidence of concussion among PeeWee & Bantam level athletes. The primary goals of this project are to measure the frequency and outcomes of concussions and to provide education about concussions to coaches, parents, and athletes. Ultimately, our goal is to reduce the number of concussions.

#### **What will be involved?**

Several short seminars about concussions will be offered to parents, coaches and athletes. Seminars will provide information about the incidence of concussions in minor hockey, signs/symptoms of concussions, current guidelines regarding the management of concussions, evidence-based practices return-to-play guidelines, and up-dated information regarding helmet technology.

Second, athletes with consent from their parents and/or guardians will be asked to complete pre-season baseline evaluations with a new internet-based system called: Immediate Post Concussion Assessment and Cognitive Testing (ImPACT). ImPACT is a 30 minute computerized battery measuring cognitive functioning including attention, memory, processing speed, and reaction time. For more information, go to: [www.impacctest.ca](http://www.impacctest.ca).

If an athlete sustains a concussion during the 2010-2011 hockey season and misses more than one game, they will undergo subsequent testing with ImPACT to evaluate symptoms and potential readiness for return-to-play. In keeping with guidelines for use of ImPACT, athletes must be also be evaluated by a family physician prior to post-injury testing with ImPACT. Moreover, an athlete must have been restricted from participation in any hockey-related activities for 5 days prior to post-injury testing with ImPACT.

## Who to Contact for Further Information?

Dr. Martin Mrazik is the primary researcher. He is an assistant professor at the University of Alberta. He has worked with athletes clinically for over 12 years and been involved in various research projects. He currently consults with the NHL and CFL regarding concussions. He can be contact at [mrazik@ualberta.ca](mailto:mrazik@ualberta.ca) or 780- 492-8052.

## ImPACT Test – New User Instructions

**NOTE: DO NOT use a wireless connection for your computer**

Step 1: go to: [www.impacttestonline.com/CMRG](http://www.impacttestonline.com/CMRG)

Step 2: under “select your organization” select “Alberta” then click “launch”

Step 3: It will then ask you what language you prefer to take the test, English or French

Step 4: Continue going through screens.

Step 5: When you get to “Sport and Health History”; under “school/organization: find “Confederation Hockey”

Step 6: Continue to fill in information and take the test

Step 7: At the end of the test, just close out and you are done.