

**OPHA RESOLUTION #1:  
Sports Injuries (2011)  
November 15, 2011**

**Contents:**

Resolution.....	2
Background.....	3

### **OPHA RESOLUTION: Sports Injuries**

**Whereas**, in 2008 the morbidity rate of sports injuries in Ontario was 25.4 per 100,000 and Emergency Department (ED) visit rate was 1,071.1 per 100,000; and the economic burden of sports-related injuries cost the Canadian health care system \$188 million in 2009; and

**Whereas**, concussions represent approximately 25% of all injuries reported, with comparable rates across hockey, soccer and football regardless of gender or of level of competition; and that collision sports such as hockey and football increase the risk of neurotrauma injury 10-fold; and

**Whereas**, recent medical and scientific evidence indicates sports-related injuries tend to be under-reported; and that four out of five athletes are not aware or fail to report concussion or concussion-like symptoms and may return too quickly putting them at risk for a subsequent concussion and the development of Second Impact Syndrome;

**Therefore be it resolved** that OPHA collaborates with the Ontario Hockey Federation, the federal and provincial governments, national and provincial sports governing bodies, the Coaching Association of Canada, to address the issue of sports-related injuries by developing/enhancing injury prevention and skill development education programs, implementing concussion identification and management protocols, mandatory awareness campaigns, and the establishment of a national injury surveillance system.

**Be it further resolved** that OPHA collaborates with the Ontario Medical Association, the Ontario Hockey Federation, Ontario Registered Nurses Association, the Ontario Neurotrauma Foundation, Think First Foundation, SmartRisk, public health units, injury prevention agencies, researchers and interested sports and recreation associations, coaches and parents to advocate for safe sports practices thereby changing the culture and attitudes within sport that contribute to injuries.

### **Background for Sport Injuries:**

In 2008, the morbidity rate of sport injuries in Ontario was 25.4 per 100,000. During that same period, ED visit rate was 1,071.1 per 100,000 in Ontario, with Northern Ontario has the highest rate of 1,626.4/100,000 followed by South West with a rate of 1,330.4/100,000 (Sports & Recreation Injuries: Evidence-Based Practice Synthesis Document, Ontario Injury Prevention Resource Centre, Nov. 2008). Nationally in 2009, sports-related injuries seen in emergency departments resulted in 1,223 hospitalizations, 66,037 non-hospitalizations, 607 partial disabilities and 48 permanent disabilities. These visitations resulted in \$97 million direct and \$91 million indirect costs on the healthcare system. Provincially, Ontario recorded 259 hospitalizations, 25,054 non-hospitalizations, 193 partial and 15 permanent disabilities. The financial burden for Ontario amounted to \$29 million direct and \$31 million indirect costs (SmartRisk, 2009).

Concussions also represent a critical issue. Recent studies on sport concussions have revealed a silent epidemic of traumatic brain and spinal cord injuries (Congeni, 2009; Langlois et al. 2004; Vaishnavi, 2009). These studies indicate that concussions can have cumulative and long-lasting effects on memory, judgment, social conduct, reflexes, speech, balance and coordination. A recent Canadian study on concussion rates involving junior hockey players in Ontario found that approximately 88% had at least one concussion in the past and 25% of those players suffered a second concussion in the same year (Echlin et. al, 2010).

Concussions are extremely problematic as they may lead to Post-Concussion Syndrome (PCS), which is a set of symptoms that a person may experience for weeks, months, or occasionally up to a year or more after a concussion. PCS may even cause life-long disability (Rao & Lyketsos, 2000). Recently research has suggested a strong causal relationship between multiple concussions in sports and Chronic Traumatic Encephalopathy (CTE) (Cantu, 2007). PCS, along with Second Impact Syndrome, which occurs when an athlete sustains a second concussion before the first one is resolved (Cantu, 1998), may be etiologically related to Alzheimer's disease (Graham & Gennareli, 2000).

Since sports-related injuries, especially neurotrauma, are preventable and may be unresolved once they occur, the focus should be on primary prevention. Thus, the culture of sports, especially hockey, football and soccer, must be changed by eliminating dangerous play such as contact above the shoulders. Additionally, a coach education program that focuses on safety while teaching sports skills is needed. Furthermore, a concussion management program should be developed and implemented in all amateur sports, including school and non-school based. This program should include: a) concussion education that focuses on symptom recognition, the recovery process, and return to play guidelines; b) mandatory completion of training by athletes, parents, coaches, officials and administrators; c) baseline, acute and post-concussion neurocognitive and physiological testing for all athletes; d) mandatory incident reporting protocols for coaching and training staff; and e) enforcement of existing rules and development of new rules to prevent injurious behavior.