

## Vital Signs | College • Collège

## A head-injured society?

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The idea that you persevere goes back to time immemorial. It's a badge of honour .... It's also the mindset that will shorten their lives and destroy their bodies. Men are the way men are.

Scott Masterton, son of the late Bill Masterton

espite the advances in medicine leading to an augmented ability to prevent, diagnose, and treat concussions, head injuries in sports continue to affect many participants, as well as those who surround them in the arenas, on the fields, and in their lives.

In 1968 Bill Masterton of the Minnesota North Stars died hours after what seemed to be an innocuous hit during an NHL game. Retrospective reviews of his medical history and postmortem examination revealed that Masterton probably suffered from a blow to the head that occurred during an earlier game, but he continued to play despite persistent headaches. It is suspected that he died from a second hit, which, although less intense, added to the still-unhealed initial brain injury.

In January 2011 millions of viewers watched Sidney Crosby, one of the biggest stars in hockey today, absorb a significant hit to his head. Although clearly stunned, he returned and played the third period. In the next game a few days later, he experienced another hard hit when he was crunched into the boards. This time he left the game and was later diagnosed with a concussion and missed the rest of the season. His career might now be in jeopardy should he get hit again, in part because, similar to Masterton 43 years ago, 1) he was a victim of hits that many consider to be "part of the game," 2) a possible initial concussion was not diagnosed and managed, and 3) he most likely suffered a second insult to his original head injury. It has taken decades for NHL decision makers (ironically called the brain trust) to begin to make rule changes that could protect players from devastating head injuries. Let's hope that Crosby's case has highlighted the need for preventive action.

Traumatic brain injury related to head injuries in sports is a chronic disease that starts with an initial blow to the head resulting in a concussion, which might be compounded by repeated hits before the initial injury has had a chance to heal and might persist with symptoms throughout the life of the injured person. While there might be inherited differences that render some individuals more susceptible to concussions, all are vulnerable. The good news is that today it is possible to prevent many of these injuries. The not-so-good news is that it

is not clear whether we, as a society, really want to prevent them. Many recommended preventive approaches are often rejected or, if implemented, simply seem to raise the challenge threshold for those striving to go where no human has gone before. People today are spurred on by death-defying virtual games or "reality" shows, and they celebrate truly violent "sports" like the Ultimate Fighting Championship. For some people, life has become an ongoing contest to see if they can overcome any risk, defeat any foe, and defy the laws of nature.

Is this inability to do what we can and should do to prevent concussions in sports a sign that we are all part of a chronically dazed and confused society? Are those resistant to change themselves victims of unrecognized head injuries? Why else are rules that could be changed to make some sports safer left alone or just tweaked? Why are face masks or mouth guards not accepted? Why do the rock-hard elbow and shoulder pads, which are intended to protect players from personal injuries, remain the standard equipment when they convert players into high-powered missiles sure to render opponents unconscious if struck in the head? Why are players who are willing to take greater risks or deliver harder hits rewarded? Will the efforts to bring about dramatic and meaningful change in the violent and potentially lifethreatening elements of many sports ever be able to overpower the human trait that needs, desires, seeks, promotes, sells, and cheers man challenging both fellow man and nature by risking life, limbs, and mental capacity? Will this world always have gladiators and Romans to cheer them on?

Although some will argue that people have the right to make their own decisions about participation in sports, we cannot ignore what we know about head injuries and abandon our responsibility to try to prevent having players continue to propel one another from the land of the alert to the unconscious universe.

Family physicians can play an important role in helping to interrupt the wave of concussions sweeping our society. In keeping with the principles of family medicine, family doctors should not only be fulfilling their roles as expert clinicians by diagnosing and treating patients who have suffered sports-related injuries, but should also be acting as resources for the individuals and populations they serve—educating them about how to prevent and recognize concussions and advocating for the changes needed in sports that could help bring an end to the current epidemic of head injuries. #

Reference

1. Cribb R, Starkman R. NHLer's death tied to hockey code. Toronto Star 2011 May 28