

What coaches can do to prevent this potentially devastating injury

by Rosalind Stefanac

ANDREW LAHEY, A TWO-TIME GOLD MEDAL WINNER in short track speed skating, has represented Canada at four world junior championships. But today, at the age of 31, he can barely take a light jog around the block let alone a race on the ice.

Despite a promising future with Speed Skating Canada's national short track team, Lahey was forced to retire at the age 21 because of symptoms related to repeated concussions. In fact, he estimates he had 10 concussions caused by skating falls over the course of his short career. "I probably had my first one at 14," he recalls. "With the last concussion, my symptoms got so severe I lost all form of short-term memory and my vision was badly affected." The symptoms lasted two years, and while Lahey has regained all his mental functioning, he hasn't been able to maintain any consistent form of physical activity since. "Even now, when I go for a run my vision is scattered and my balance is off."

According to the latest statistics from the Centers for Disease Control and Prevention, up to 3.8 million concussions happen in the U.S. each year, based on emergency room visits (there are no definitive stats for Canada). Experts say this number is conservative given that some people go to their family physician or don't see a doctor at all for a diagnosis.

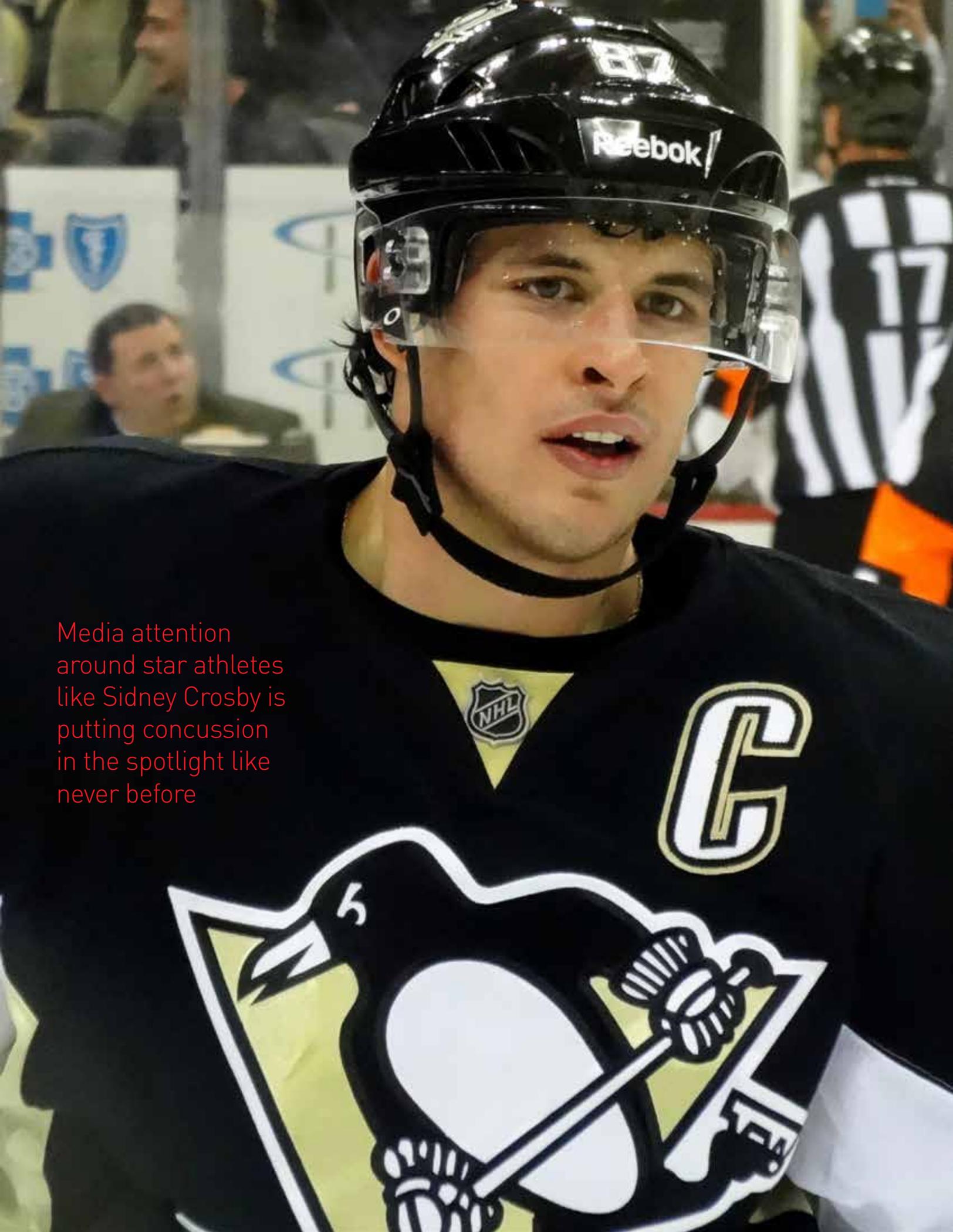
Tackling Concussion HEAD ON

Concussion in the spotlight

Media attention around star athletes like Sidney Crosby is putting concussion in the spotlight like never before, but the awareness is still nowhere near where it should be, says Dr. Charles Tator, professor of Neurosurgery at the University of Toronto and founder of ThinkFirst Canada, an organization dedicated to preventing brain and spinal cord injuries. "Concussions have been a neglected problem in the medical field and we haven't gone far enough in terms of education in the sports world around what a concussion is and how to recognize and manage it," he says, adding that there are plenty of people who still refer to concussions as a "ding" or "getting your bell rung," and who believe a person needs to lose consciousness to have had one.

He says another major misconception is that helmets will protect against concussion. "Every hockey player I see in my office who has been concussed has been wearing a helmet," he says. "These helmets may prevent more catastrophic brain injuries and save lives, but they have little or nothing to do with preventing concussion." Helmets protect the head, but can't fully protect the brain. >>

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Managing Children with Concussion

Concussions can affect people all ages, but when it comes to children, coaches should be particularly vigilant in taking immediate action if a concussion is suspected.

Gad Espinosa, technical director of Toronto High Park FC soccer club and a former professional athlete, says concussions are typically harder to detect with children because they may not be as vocal about symptoms. “With adults, we complain much more about the aches and pains so feedback is much more prevalent,” he says, adding that it’s important for coaches who see a rough fall among children to be extra cautious. Espinosa says coaches suspecting a possible concussion should bring the player out and ask a series of questions to determine their cognitive state.

Dr. Jamie Kissick, who specializes in sports medicine, agrees that extra caution is essential when dealing with young athletes. “Children are unique and not just small adults,” he says. “Because their brains are still developing, we’re always concerned about the impact a concussion could have.” His advice to coaches is to keep a close eye on young players who have experienced a hit or fall even if they are seemingly okay. “If you think you’ve seen a hit, your radar should be on about any further signs of symptoms,” says Kissick. “What we want to emphasize with coaches working with kids is not that they have to diagnose the concussion but recognize when it might have occurred and take the appropriate action.”

And for parents who may be reluctant to put their children in sports for fear of concussions, Dr. Kissick says it’s important to stress that the benefits still far outweigh the risks. “At the end of the day, with awareness and proper training, the benefits of sports are massive and risk of concussion relatively small.”

Dr. Tator says what he’s learned over the course of 50 years of dealing with concussed patients, is that everyone involved in the sport needs to be informed about the condition—players, parents, coaches, trainers, teachers, physicians and other healthcare personnel. “It takes a whole team of properly trained, informed and interested people to both diagnose and manage concussions.”

He says coaches play a particularly significant role on the team because they are ultimately in charge of the safety of their players. “The coach has the power to prevent injury or to cause injuries, and the way he or she coaches the game will determine what happens.”

Jonathon Caver, national team coach for Short Track Speed Skating Canada in Calgary, has worked with a variety of athletes, including Lahey, and says with increased awareness around concussions, he and his staff are taking every precaution to keep players safer. When a concussion is suspected, Caver says having the initial assessment done by a qualified person other than the coach can make it easier to

negotiate with athletes around decisions to take them out of play. “Playing the ‘heavy’ role is our responsibility,” he says. “For selfish reasons we want to see them perform, but I know I can sleep better at night if I’ve ensured their health and safety is my number one concern.”

Caver says it’s also essential for coaches to be the ones athletes ultimately trust, sometimes even over family and other supporters. “Because a concussion isn’t as tangible as a visible wound, it’s easier for an athlete’s entourage to push—they want their child to be safe but they also want them to succeed,” he says. “You have to cut through the forest at times and deal directly with the athlete and ensure they are hearing your voice clearly.”

While safety awareness may be heightened in professional sport circles, there is still a lack of knowledge about the severity of concussion at the community level, says Jesse Smith, a pseudonym for a rep soccer coach in Toronto who asked that we not use her real name. “I know a little more because I did some first aid training, but I think that many coaches don’t understand the difference between somebody tripping and falling and somebody who might have a brain injury,” she says. “It’s also tricky to make an assessment of an injury on-site because it may take a few days for the brain to swell and the symptoms to show.”

Need for return-to-play protocol

In addition to more training around concussion symptoms for coaches, Smith advocates for a more formalized return-to-play protocol for players who have been diagnosed. “We had one player who came back after a couple of weeks without a doctor’s note and her symptoms were triggered just by running some laps around the field,” she says. “We suggested she go back to her doctor and helped her parents see that things were off—she ended up missing the whole summer of soccer.”

Ottawa-based sports medicine physician Jamie Kissick says coaches are in the best position to note



IS IT A CONCUSSION?

Keep an eye on the three possible aspects of concussion symptoms: physical, cognitive and emotional, says Dr. Jamie Kissick. Determine if the player is showing signs of imbalance, disorientation or drowsiness. Check his or her concentration and memory by asking questions around the game score, or place of play. Note if a spirited child is suddenly withdrawn or if a normally quiet one is overly talkative or irritable. For a full list of possible symptoms go to www.thinkfirst.ca

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symptoms pre- and post-concussion because they get to know their athletes and can quickly see when behaviour is off-kilter. “Coaches have a significant amount of influence and if they don’t buy into the [severity] of concussion, the athletes are going to be reluctant to say they don’t feel right.”

When it comes determining when players can get back to play, Dr. Kissick says a step-wise approach monitored by a qualified physician is key. “Think of a dimmer where you can adjust the light as needed rather than simply turning it off and on,” he says, noting that 85 per cent of concussions require at least seven to 10 days of rest—and more severe ones require even more. “I’ve seen people get worse because they push through it. They should be at a level of rest where they’re not provoking symptoms.”

Statistics also point to the fact that people who have had a concussion are likely to have a second and third so they need to be cautious when returning to play, says Dr. Kissick, adding that the coach can play a part in making sure the athlete takes things slow.

With all the emerging research around the detrimental effects of concussion it’s time to start making things better for athletes, says Cyndie Flett, ChPC, vice-president of research and development at the Coaching Association of Canada. “There have been deaths and serious long-term brain injuries that have led to debilitating life issues for young athletes,” she says. “The coach is the first front-line contact with the players and while we have no intention of training coaches to take the place of doctors in diagnosing concussions, they can play a significant role in identifying signs and seeking follow up where necessary.”

The federal government contributed to the cause by providing \$1.5 million towards the development of resources to promote concussion awareness and management through a new charitable organization called Parachute. Part of the project entailed a series of six eLearning modules—developed in part by the Coaching Association of Canada—that provide training around concussion prevention, detection, and the proper return-to-play protocols for coaches dealing with young athletes ages five to 19. The first module is a multi-sport version and was launched on www.coach.ca in April 2013. Modules targeting soccer, football, snowboarding, freestyle skiing, and speed skating will be available in June 2013.

“We don’t want to see a decline in the number of parents signing up for mass participation sports for their children,” says Flett. “We want to be diligent about preventing concussions, and when they do happen, diligent about managing them in the best way.”

CONCUSSION RESOURCES:

The Coaching Association of Canada has a variety of concussion resources designed to help coaches gain the knowledge and skills required to ensure the safety of their athletes. Coaches can test their concussion IQ, find out what happens during a concussion, get concussion smart via the “Making Head Way” eLearning modules, or simply browse through real concussion stories. www.coach.ca

Parachute is a new, national non-profit organization culminating from the amalgamation of four leading injury prevention groups: ThinkFirst, Safe Kids Canada, Safe Communities Canada and SMARTRISK. It provides the latest news on safety initiatives and programs and houses a multitude of free resources on concussion for coaches, parents and athletes. www.parachutecanada.org

Centers for Disease Control and Prevention offers a Heads Up Tool Kit for Youth Sports, which provides information on preventing, recognizing and responding to a concussion for coaches, parents and athletes. For coaches there are downloadable fact sheets, clipboard information, posters and quizzes. www.cdc.gov/concussion/headsup/youth.html



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