

Greg McCallum can't imagine a winter without hockey.

A lifelong hockey player in Calgary, McCallum now passes on his respect for the sport by coaching youth hockey. But when McCallum began his five-year tenure as president of Calgary's Midnapore Hockey Association in 2011, he found himself in the middle of a controversy. Should young players be stopped from body checking? This would change a fundamental part of the sport he, and many other Canadians, loved.

In June 2013, Hockey Canada did indeed adopt a policy banning body checking in peewee teams across the country to prevent injuries, specifically concussions.

How did this come about? In part, through the hard work of a private foundation.







At First There Was an Idea...

In 2005, Ralph Strother, a program officer with Calgary-based Max Bell Foundation, who is also a physician with a specialty in sports medicine, heard something coming up more and more in conversations with hockey parents and sports doctors: the high rate of concussions among young players.

Strother approached the foundation's president David Elton about funding a research project to understand the interplay between youth hockey and injuries.

Founded in 1972, The Max Bell Foundation has awarded more than \$82 million over the years to Canadian charitable organizations working on aspects of public policy. When Strother presented his idea, Elton initially resisted.

"It was about kids playing hockey, parents and coaches. How can that be considered public policy?" But after considering the information, his view changed.

At the time, hockey injuries were believed to account for 10% of all injuries incurred during youth sports. Body checking was cited as causing anywhere from 45% to 86% of injuries for youth hockey players, while reports showed that 15% of all injuries for nine- to sixteen-year-old hockey players were concussions.

"The health and welfare of Canadians are often functions of the policies and programs of many different kinds of non-governmental organizations. Hockey Canada included," said Elton.

Body checking was causing anywhere from 45% to 86% of injuries for youth hockey players.

Laying the Groundwork: Collecting the Data

In 2005, the foundation awarded a grant to University of Calgary's Faculty of Kinesiology for a research project to better understand the differences in injury and concussion rates between peewee hockey leagues that permit body checking and those that bar it.

Dr. Carolyn Emery, now Associate Dean (Research) at the University of Calgary's Faculty of Kinesiology, conducted the research in coordination with researchers from McGill University and Laval University. The Canadian Institutes of Health Research also funded the project.

From 2007 to 2009, the project collected data on injuries among 2154 players in 74 peewee teams from Alberta and 76 Quebec teams. The research study concluded that there are three-times the risk of game-related injuries and concussions for peewee hockey players participating in leagues allowing body checking compared to leagues where body checking is not permitted.

A change in body checking policies, argued the researchers, could potentially prevent 1,500 concussions and 5,000 injuries in eleven- to twelve-year-olds every year. Moreover, the research also indicated that there was no protective effect for players learning body checking at younger ages. A comparison of injury rates in bantam (thirteen to fourteen years old) hockey, where body checking was permitted, complemented the peewee study and demonstrated that injury rates were similar in Quebec and Alberta teams.

The Role of Organized Philanthropy: More than Just Funding the Research

Informed by past experiences of funding public policy efforts, the Max Bell Foundation knew that academic reports and validated data only go so far. Successful, lasting policy change requires opportunities for dialogue among stakeholders. As a result, the foundation encouraged the researchers to include a post-study communications plan in their proposal.

"There is too little emphasis on knowledge transfer," explained Elton. "We said to the researchers, we want you to talk with Hockey Canada... get out there and talk with the people who make the decisions."

The foundation therefore built in funding for the researchers to develop relationships with key influencers, including hockey administrators, coaches, and sport medicine doctors, along with media and parents, during and after the research phase.



The funding for relationship development helped Dr. Emery build credibility and trust among those individuals whose buy-in would be necessary for any policy changes.

"This is an important step in that process that is often missed. Knowledge transfer takes time, you have to persist with it," said Elton.

Long-Lasting Impact

The research project's spotlight on bodychecking and youth hockey continues to be visible years later. Non-elite bantam hockey leagues in Ontario and B.C. have banned body checking. In April 2016, Edmonton's minor hockey association passed a regulation that forbids body checking at the bantam and midget levels.

Followup also shows that the peewee checking ban has paid off. By 2017, Dr. Emery reported findings that it was preventing 4,800 concussions each year across Canada—"a pretty huge public health impact."

The experience funding the research project also changed the Max Bell Foundation.

"It reinforced the need to think through the results and what we want people to do with them. To reinforce the project's goal, communication and knowledge transfer are now built into the budgets and programs we fund," explained Elton.

The foundation is also more fully committed to the idea that policies fostering public well-being are not strictly the domain of the government.

"This project expanded our appreciation that public policy is not just done by government ... there are school boards, national associations, sports and recreation associations impacting every part of our lives," said Elton.

"Now we look for these kinds of grants."

"If you were to ask me prior to the science of what Dr. Emery brought in, I would have been against removing body checking at the peewee level," explains Greg McCallum of the Midnapore Hockey Association. In fact, he says he would have argued to move body checking to an earlier age group versus pushing it back. But now his opinion has changed.

"It's one of those of things that was done very, very well. Really well thought out. We used science, we used experiential information. We got feedback from players, from past players, from the medical community...I honestly would not change a thing. It was the right thing to do at the right time," adds McCallum.

READ MORE:



KEEPING KIDS OFF THE STREET

Up to 40,000 young Canadians experience homelessness each year. But it doesn't have to be this way.



PUTTING THE *RISK* BACK IN OUTDOOR PLAY

Have we lost sight of the benefits of outdoor play, in trying to protect our children from every risk?