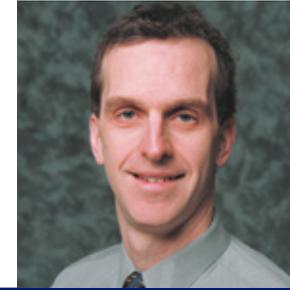


Contributing to policy changes for the prevention of concussions

Donald Redelmeier



Alison Macpherson



Inspired by his work caring for patients diagnosed with acute concussion in the Sunnybrook emergency department, ICES senior scientist **Donald Redelmeier** set out to investigate media anecdotes on the link between concussions and suicide. This curiosity-driven investigation revealed that a patient's history of concussion could triple the subsequent risk of suicide. Redelmeier's 2016 **paper** received coverage from major news outlets in Canada, the United States and Europe and contributed to evolving discussions about the prevention and treatment of head injuries in professional athletes, including those in the NFL, CFL and NHL. The work has also led to increased attention to preventing concussions among adults engaged in everyday activities.

Also concerned about rising concussion rates in children and youth, ICES senior adjunct scientist **Alison Macpherson**, a professor at York University, and ICES chief science officer **Astrid Guttmann**, a physician at the Hospital for Sick Children, examined the treatment of pediatric concussion cases in emergency departments and primary care centres across Ontario. Their **study** determined that rates of pediatric concussion had risen sharply in 10 years, nearly doubling for boys and more than doubling for girls. Hockey and ice skating were the leading causes. These findings have informed Ontario legislation

to address child and youth concussion. The Rowan's Law Advisory Committee, named in honour of a young woman who died following a rugby injury, was established by an act of the Ontario legislature in 2016 with a mandate to create new guidelines around concussion in children and youth in sport. The Manitoba government subsequently announced plans for similar legislation. Former NHL player Eric Lindros cited ICES in his championing of Rowan's Law, adding that the Ontario legislation "should be the gold standard across Canada that we all support."



International news coverage of Donald Redelmeier's work on concussion and suicide has informed ongoing discussions of **risk in professional sports**, including the NFL, CFL and NHL.



Work by Macpherson and Guttmann on **child and youth concussions** has informed legislation that will lead to province-wide practice guidelines for youth sport.