## Risk of Injury Associated With Body Checking Among Youth Ice Hockey Players

CE HOCKEY IS A POPULAR NORTH American winter sport, with more than 550 000 registered youth players in Hockey Canada and more than 340 000 registered players in the USA Hockey Association in 2008-2009.<sup>1,2</sup> Despite the advantages of sport participation, there is increasing concern regarding the frequency of ice hockey injuries in youth. Canadian data suggest that hockey injuries account for 10% of all youth sport injuries.<sup>3,4</sup> Body checking has been associated with 45% to 86% of injuries among youth ice hockey players.5-8 Recently, attention has been focused on the increased frequency of concussive head injuries in youth hockey.9 Concussion has been found to be the most common type of specific injury, accounting for more than 15% of all injuries in 9- to 16year-old players.7,10

Internationally, there are different regulations regarding the age at which body checking is introduced in ice hockey. In the United States, body checking is introduced in all leagues in the Pee Wee age group (ages 11-12 years), but leagues not permitting body checking exist through all ages up to Midget (ages 15-16 years).<sup>11</sup> In Canada, the youngest age group in which body checking is permitted is Pee Wee (ages 11-12 years).<sup>12</sup> In the province of Quebec, however, Bantam (ages 13-14 years) is the youngest age group in which body checking is permitted. Otherwise, in Canada, rules of play are mandated by Hockey Canada and are consistent across all provinces.<sup>12</sup> Effect of bodychecking on rate of injuries among minor hockey players

B ODYCHECKING IS THE MOST COMMON CAUSE OF ALL ice hockey injuries. The practice has raised particular concern because it can lead to severe injuries such as fractures and traumatic brain injury.<sup>1-5</sup>

Unfortunately, bodychecks from behind, which send players headfirst into the boards, are still a frequent cause of injury, despite rules prohibiting this practice.<sup>3</sup> The debate about the value of bodychecking for Can-

adian minor hockey players has increased since the 1998/1999 hockey season, when Hockey Canada introduced a 5-year voluntary pilot program that lowered the legal age for body contact from 12 and 13 years (PeeWee division<sup>6</sup>) to 10 and 11 years (Atom division<sup>7</sup>) (see Table 1 for Hockey Canada's age divisions over the period of this study). Proponents of the rule change have argued that lowering the age limit for body contact enables minor hockey players to learn how to properly receive and give a bodycheck at an earlier age and that this early learning and repeated reinforcement of proper technique would reduce injuries at older ages. In 2005, Hockey Canada approved continuation of the pilot program beyond the initially planned 5-year period. By that time, the age categories had also been changed, and the youngest players in the Atom division were 9 years old (see Table 1).

Table 1: Age divisions in Canadian minor hockey*		
Division	Period; player's age, yr†	
	Before 2002/2003 season	2002/2003 and 2003/2004 seasons
Novice	8–9	7–8
Atom	10–11	9–10
PeeWee	12–13	11–12
Bantam	14–15	13–14
Midget	16–17	15–17
* Source: Hocke †As of Dec. 31 c	y Canada. <sup>®</sup> of current season.	