The Incidence of Behaviours Associated with Body Checking Among Young Ice Hockey Players

C Goulet*, L Nadeau, C A Emery, D Hamel, S Malenfant. Correspondence: Department of Physical Education, Laval University, Pavillon de l’éducation physique et des sports, 2300, rue de la Terrasse, local 2176, Quebec, G1V 0A6, Canada

10.1136/ip.2010.029215.773

Context Ice hockey has one of the highest sport participation and injury rates in youth in Canada. Body checking (BC) is the predominant mechanism of injury in leagues where it is permitted.

Objective To determine if the incidence of physical contacts differs for Pee Wee (PW) players (11–12 years) in leagues where
BC is permitted (Alberta) versus players in leagues where BC is not permitted (Quebec).

**Design** Cohort study.

**Setting** Arenas in Alberta and Quebec, 2007–2008 season.

**Participants** PW teams in the top 10% of divisions of play in Quebec (n=10) and Calgary (n=10).

**Observation technique** 20 games were analysed. Games were video-recorded and analysed by two trained observers.

**Main outcome measures** The intensity of the physical contacts was observed with a validated observation system. Five levels of intensity were coded. Level 1 represents the lowest intensity of physical contacts. Rate ratios (RR) adjusted for team clusters based on multivariate Poisson regression was used to compare games played in Calgary and Quebec.

**Results** 2418 physical contacts were observed. No difference was observed in the rate of physical contacts in games played in both provinces. High intensity physical contacts (levels 4 and 5 combined) were more frequent in Calgary (RR=6.57; 95% IC 3.09 to 13.93).

**Conclusions** The results suggest that the greater rate of injury observed in PW leagues where BC is permitted would not be caused by the frequency of the physical contacts but by their intensity.