According to Statistics Canada, injury from sport and recreational involvement is second only to motor vehicle accidents in terms of frequency. To gain a better understanding regarding the nature, source and severity of sport and recreational injuries in the province, the Alberta Centre for Well-Being (ACFWB), in collaboration with the Sport Medicine Council of Alberta (SMCA), recently completed the Alberta Sport and Recreation Injury Survey. The first of its type in Alberta, the survey gathered participation and injury information from a representative sample of 1,478 households and 3,790 individuals.

Methods

The study was a replication of recent studies completed in Quebec (Impact R écherche, 1993) and Ontario (McLaren, 1996). Participation patterns of Alberta residents aged six years and older and the pattern of sport and recreational injuries requiring medical treatment were studied using a random sample of Albertans. Data was gathered by means of a telephone interview with an obliging household member 18 years of age or older. Only information regarding injuries for which medical attention was sought was gathered. If the respondent, or any subsequent household member, had not participated in any sport or recreational activities in the 12-month period preceding the survey, then only demographic information was gathered (i.e., age, sex, income and educational levels). For all respondents and family members who indicated participation in sport and/or recreational activities, information about the type and frequency of participation was collected. For individuals who had been injured, additional information regarding the nature, severity and consequences of the injury was collected.

Survey information was provided by 1478 of the 2940 eligible households contacted (50.2% response rate). The questions related to sport and recreational activities that were participated in at least ONCE in the 12-month period prior to the survey. It did NOT include activities such as housework, gardening, mowing the lawn, picnics, or walking to do errands. Guided responses for participation included: bike riding, swimming, home exercises, team sports, etc. Of principal interest were injuries resulting from sport or recreational activities which led to a visit to a health care professional. Where required, participants were prompted that these professionals included: physicians, physiotherapists, chiropractors or sports clinic personnel.

The questionnaire collected information with respect to frequency and type of sport and recreational activity involvement; numbers, types and location of injuries requiring medical attention; the nature of the most serious injury; the location and type of medical attention received; and an estimate of the amount of time lost to work, school and regular activities as a result of the injury in question.

Estimated number of injuries for the 10 highest source activities are presented in Table 1. Although injuries were recorded in 60 activities, they were not evenly distributed among activities. In fact, more than half of the injuries were reported in seven activities (ice hockey, baseball, basketball, soccer, jogging, cycling, and volleyball). Ice hockey (28,400) and baseball (24,600) produced approximately one fifth of all sport or recreation injuries. According to injury rates, boxing (100%), rodeo (63%) and rugby (47%) were the most injurious activities in Alberta (Table 2). However, due to low participation rates, these activities accounted for relatively few of the estimated injuries. Activities that produced the most injuries in Alberta (i.e., ice hockey, baseball, basketball, etc.) tended to have lower injury rates but higher participation rates. For example, recreational cycling had a very low injury rate (2%) yet resulted in more than 10,000 injuries in Alberta due to the sheer volume of people who participated in this activity (approximately 34% participation rate).
The benefits of a physically active lifestyle are well documented, however the negative side of activity are injuries related to participation. Undoubtedly the benefits of participation outweigh the risks, however knowledge regarding nature, source and severity of sport and recreational injuries is the first step in making these activities safer, more enjoyable and ultimately more beneficial for all involved.

The full report of the Alberta Sport and Recreation Injury Survey can be obtained from the SMCA or ACFWB.

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