WEB BASED SPORTS INJURY REGISTRATION AND INFORMATION SYSTEM

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Background
The number of sports injuries in the Netherlands is about 1.5 million every year. The yearly costs are high and sports injuries are an important cause for people to stop participating in sports. For the Ministry of Health, Welfare and Sports these are important reasons to invest in adequate registration and prevention of sports injuries.

TNO developed a web based registration and information system called BIS (Injury Information System) to gain insight in the frequency, the characteristics and the consequences of sports injuries and the effects of preventive measures. During the season 2005-2006 the system was used for korfball, hockey, soccer and running. In the future the BIS will be available for all sports.

Methods
The study was designed as a prospective cohort study of sports injuries by means of web-based information gathering. A cohort of sports participants was followed during one sports season (40-45 weeks). During the season, data on background, sports injuries and recovery were collected using injury-forms and recovery-forms. An injury contact person filled in the necessary forms.

An important function of the BIS is providing feedback for each individual participating club for registered data in comparison with all participating clubs. The feedback is always up-to-date and also available for clubs that don’t participate in the cohort. Additional information on sports injuries prevention and treatment is available in the BIS.

Results
The population consisted of 920 hockey, 566 korfball, 142 korfball league, 345 soccer players and 814 runners. They sustained respectively 96, 79, 39, 80 and 68 injuries that were registered in the BIS. The overall incidences (injuries per 1,000 hours of sports) were: hockey 0.8, korfball 1.4, korfball league 2.3, soccer 1.3 and running 0.6. The incidence during matches was much higher than during training. In hockey, korfball and soccer senior players run a three times higher risk to sustain an injury than junior players do. For all sports most injuries were located at the lower extremities. Twenty-two percent of all injuries were located at the ankle and 15% at the knee, caused by contact with a player, a stick or ball, or sprain. Running injuries often didn’t have an apparent cause (overuse injuries) or were a re-injury.

Conclusions
In general the web based registration works well and provides more detailed information on sports injuries than other registration systems. A 100% registration of injuries is crucial for delivering valid incidences. Continuous attention is given to improve the system and to make it attractive for sportsmen and women to actually fill in the injury-forms. At the moment the system is also operational for professional soccer, tennis, ice skating and fitness and in the future for a growing number of sports. BIS may play an important role in the prevention and treatment of sports injuries in the Netherlands.

Keywords: Prevention, Internet, Sports Injuries