



Sport and Youth Substance Use: Findings from a Systematic Review of Longitudinal Studies

Key Messages

- Sport participation appears to be protective against most illicit drug use; however, the impact of sport participation on cannabis use is less clear.
- Participation in sport is associated with increased alcohol use among youth.
- There is some evidence that the relationship between sport participation and alcohol use varies by gender and socio-economic status.

Many Canadians view sport as a promising way to foster positive youth development and prevent substance use. However, evidence is mixed on the link between sport participation and substance use among youth.

The Issue

Many Canadian youth participate regularly in organized sport activities. In 2010, 54% of Canadians aged 15 to 19 and 34% aged 20 to 24 reported participating regularly in sport.¹ Participation in sport typically peaks between 8 and 17 years old, a time-period when youth also show a significant increase in their consumption of alcohol and cannabis.² When compared with other age groups, young people are disproportionately more likely to use substances, engage in risky patterns of use and experience harm from that use.³

Sport participation and substance use appear to peak around the same age ranges. It is important to understand if there is a relationship between sport participation and substance use and, if so, what the nature of that relationship is so that benefits can be maximized and risks minimized.

The Approach

The Canadian Centre on Substance Abuse (CCSA) commissioned a systematic review to examine the relationship between sport participation and substance use among youth ages 10 to 24. A systematic review is used to summarize an entire body of research on a particular question, providing a thorough summary of what is known across the literature. While other reviews had been conducted in the past, this review encompassed a broader age range of youth, included both elite and non-elite sport levels, and focused on longitudinal and intervention (experimental) studies only. Of the 17 studies used in the review, only nine were included in previous reviews, hence this review has captured new research not included in previous reviews. Nearly all of the studies selected were from the United States, with the exception of one from Norway. No Canadian studies were identified.



Key Findings

Sport participation appears to be associated with increased alcohol use and heavy drinking throughout adolescence and early adulthood. There is also some evidence that the relationship between sport and alcohol varies across gender and socio-economic status, but the evidence is not always consistent. Two studies reported female athletes engaged in more alcohol use than females who were not athletes and males in general. In contrast, another study found male athletes used more alcohol than males who were not athletes and females in general. Another study reported sport participation was associated with increased overall alcohol use during high school among youth living in higher socio-economic neighbourhoods when compared with youth living in lower socio-economic neighbourhoods.

Of the 17 studies included in the review, only one looked at the effect of sport type (individual versus team) on substance use. It found that people who participate in team sports have a greater increase in alcohol use than those who participate in individual sports.

While sport participation appears to be associated with a reduced frequency of illicit drug use, the impact of sport on cannabis use is less clear. Of the eight studies that looked at sport and marijuana use independently, four found no effect on sport and marijuana use and four reported a protective effect (i.e., less marijuana use). The reduction of illicit drug use was particularly present during high school, suggesting this may be an important period to focus prevention efforts through sport.

The review highlighted several limiting factors, including a lack of Canadian studies, randomized control studies and other research on what makes a sport program effective in preventing substance use.

Recommendations

The review put forward several recommendations about the need to fill gaps in knowledge, particularly from a Canadian context, and to increase the awareness of the relationship between sport participation and youth substance use. These recommendations include:

- Increasing understanding and awareness among key stakeholders involved in youth sport (e.g., parents, coaches, national and provincial sporting organizations) of the relationship between sport participation and alcohol use.
- Using existing Canadian data (e.g., National Longitudinal Survey of Children and Youth) to study the effect of sport participation on alcohol and drug use.
- Undertaking research to better understand factors associated with alcohol use and the effect of sport on illicit drug use (e.g., sport type, gender, social factors, psychological factors).

Call to Action

Increasing awareness and understanding about the relationship between sport participation and substance use is important to ensuring a positive sport experience for youth that is free of alcohol and drug related harms. Take a moment to share this summary through your networks:

- Post a link to this summary on your website;
- Tweet key findings and use #CanSportNetwork to follow the conversation.

Join the Canadian Sport and Youth Substance Abuse Prevention group on LinkedIn for opportunities to connect, network and share content. Email youth-jeunes@ccsa.ca to join the Canadian Sport and Youth Substance Abuse Prevention Network and stay connected:



- Learn about opportunities to inform and participate in new Canadian research projects;
- Contribute to the development of this growing network;
- Sign up to receive regular email updates; and
- Share information about your research, projects, programs and policies.

The complete version of the article summarized above is available for free via open access.⁴

¹ Canadian Heritage. (2013). *Sport Participation 2010, Research Paper*. Ottawa, ON: Author.

² Young, M. M., Saewyc, E., Boak, A., Jahrig, J., Anderson, B., Doiron-Brun, Y., ... Clark, H. (2011). *Cross Canada Report on Student Alcohol and Drug Use: Report in Short*. Ottawa, ON: Canadian Centre on Substance Abuse.

³ Health Canada. (2011). *Canadian Alcohol and Drug Use Monitoring Survey: Summary of results for 2011*. Ottawa, ON: Author.

⁴ Kwan, M., Bobko, S., Faulkner, G., Donnelly, P., & Cairney, J. (2014). [Sport participation and alcohol and illicit drug use in adolescents and young adults: A systematic review of longitudinal studies](#). *Addictive Behaviors*, 39(3), 497–506.

ISBN 978-1-77178-185-5

© Canadian Centre on Substance Abuse 2014



**Canadian Centre
on Substance Abuse**
Centre canadien de lutte
contre les toxicomanies

The Canadian Centre on Substance Abuse changes lives by bringing people and knowledge together to reduce the harm of alcohol and other drugs on society. We partner with public, private and non-governmental organizations to improve the health and safety of Canadians.

CCSA activities and products are made possible through a financial contribution from Health Canada. The views of CCSA do not necessarily represent the views of the Government of Canada.