



The Problem of Youth Drugged Driving and Approaches to Prevention

The Issue

Sizeable proportions of youth who use cannabis report driving a vehicle within one to two hours of consuming the drug.^{1,2,3} Additionally, analysis of fatality data revealed that among drivers who tested positive for drugs following their death in a car crash, almost 70% of those under the age of 19 and more than half of those aged 19–24 tested positive for cannabis.⁴ These high figures for drug use among young drivers might occur because youth do not perceive driving under the influence of cannabis to be as risky as driving under the influence of alcohol.⁵ Some youth think that cannabis might actually improve their driving abilities by increasing focus and concentration⁶ or that they can compensate for the effects of cannabis by driving slower.⁵ This report examines the effectiveness of drugged driving prevention programs in deterring youth from driving under the influence of drugs to inform future prevention initiatives in this area.⁷

Key Findings

Education and Prevention Programs

A systematic review was conducted of studies that evaluated programs aimed at preventing drugged driving and were targeted at youth audiences, and that were published in English and publicly available. Results from this review revealed that only four programs focusing on preventing drugged driving had been evaluated for effectiveness among youth.

The **Alcohol and Substance Abuse Prevention Program** exposes youth to the consequences of substance use through in-person visits to an emergency department and trauma centre as well as a detention centre. Youth are engaged in discussions about life skills and coping that promote critical thinking and reinforce positive values. Following the discussions, youth are asked to be peer educators to promote safety in the school and community. When compared to youth who only receive education about substance use in the classroom, the group exposed to the real-life implications perceived impaired driving to be riskier. However, no differences in knowledge or behaviours were uncovered between the two groups.⁸

Similarly, the **Prevent Alcohol and Risk-Related Trauma in Youth Program (P.A.R.T.Y.)** raises awareness of the potential for injury and trauma when taking unsafe risks. Youth aged 16 and older attend a hospital to follow the course of an injury from the initial event through rehabilitation and reintegration into the community. Students sign a contract to minimize risks and share their learnings with peers and family members through public service announcements (PSAs), letter writing and role-playing. Compared to matched controls, traumatic injuries occurred less often



among those who were involved in the P.A.R.T.Y. program and this effect was larger for females than males.⁹ Evaluation of juvenile offenders in the program revealed modified attitudes towards risk-taking behaviours following the program and subsequently fewer offences related to traffic, violence and alcohol- or drugs, as well as fewer injuries leading to hospitalization compared with those who did not participate in the program.¹⁰

Life Skills Training is based on the idea that youth engage in negative behaviours to achieve a goal, such as fitting in. Group discussions, demonstrations, modeling exercises, feedback, reinforcements and homework exercises administered throughout grades 6 and 7 are geared to increase self-esteem and the ability to resist peer pressure with the ultimate aim to increase drug use resistance. Evaluation of this program revealed that youth involved were less likely to have violations and points on their driving record than those in a control group.¹¹

The **Alcohol, Drugs, Driving and You Program** provides facts about impaired driving to increase accurate knowledge among grade 10 students, and then has them communicate this knowledge to their peers through PSAs and school assemblies. The initiative also encourages dialogue between youth and their parents. Following the program, youth better understood the effects of alcohol and other drugs, decision making in drug situations and the causes of collisions and legal implications, and also reported less aggressive driving behaviours. Youth in one cohort greatly understood the effects of impaired driving and were less likely to ride with an impaired driver than those who did not go through the program. Females reported greater attitude changes about impaired driving than did males.¹²

Overall, education and prevention programs can be effective in altering youth's attitudes and knowledge about drug impaired driving. However, there is not yet enough evidence to suggest that these programs can change youth behaviours.

Media and Awareness Campaigns

Although there have been a great number of drugged driving campaigns in recent years, the systematic review revealed that only three have been evaluated.

The **Drugged Driving Kills: Why Drive High** campaign empower youth by having them create age and culturally appropriate messages for 13–25 year olds. The aim was to increase awareness of the effects of cannabis on health and the risks of driving after using cannabis or riding with a cannabis-impaired driver.¹³ The campaign was implemented at the beginning and end of the school year and had success in students recalling and relating to the information presented. Collaborations with the community also allowed for extended and widespread dissemination of the information.¹⁴

The **Drug Driving... You'd Be Off Your Head** campaign launched four PSAs, as well as an advertisement in bars and clubs, to educate 17–25 year olds about collisions, drugged driving and the related penalties. One region observed a decrease in drug-related road deaths during the time the campaign was run and awareness of drugged driving increased in the two years following the campaign.¹⁵

The **Drug Driving** campaign aimed to educate 17–24 year olds on the likelihood of being caught driving while impaired by drugs using a humorous advertisement. Though a large proportion of youth recalled seeing the ad, the impact of the messaging was reduced because they did not relate to the age of the characters in the ad, believed the characters portrayed the influence of alcohol instead of drugs and did not believe that enforcement was actually occurring on roadways.¹⁶



The media and awareness campaigns reviewed were effective in increasing awareness about drug impaired driving concerns and reaching their targeted audience. However, there was no evidence to suggest that this translated into a greater understanding of the issue.

The Implications

Although the evaluations were not able to demonstrate changes in behaviour, the programs have displayed some successes in increasing knowledge and changing perceptions of drugged driving among youth. Some components of these programs that need to be taken into consideration:

- Including parents, peers, schools and the broader community in initiatives can extend the reach of messages and increase dialogue among multiple sources.
- Dialogue with youth can promote critical thinking about their attitudes and life choices.
- Seeing examples of the impact of injury and trauma at hospital and detention centres might increase youths' perception of the risks and implications of drugged driving.
- Youth-centric, youth-created, culturally sensitive, factual messaging will ensure information is believable and easily understood by youth.
- Empowering youth to plan and create their own prevention initiatives can increase their confidence to engage in outreach with their peers and community.
- Initiatives should be timed to correspond with periods of critical age (e.g., before obtaining a driver's license) or critical events (e.g., graduation) to increase impact.
- Enforcing detection and penalties in conjunction with prevention programs could make the consequences of driving after using drugs relevant.

The research findings suggest that education and prevention programs might be effective in changing youth perceptions of the risks of drug-impaired driving, while media and awareness campaigns might be effective in increasing awareness. The existing evaluations have not yet been able to demonstrate any changes in youth behaviours following these efforts. Encouraging youth to think about their attitudes and choices, providing them with life and coping skills, and involving parents and the community are approaches that might increase the success of these programs. However, further studies are needed to confirm the components of a prevention program that will ensure its efficacy to resonate with youth. Evaluating future prevention initiatives will ensure they are having their intended effect to deter drug-impaired driving among youth.

Additional Resources

- What Canadian Youth Think About Cannabis
- Cross-Canada Report on Student Alcohol and Drug Use
- The Characteristics of Youth Passengers of Impaired Drivers



- ¹Health Canada. (2012). Canadian Alcohol and Drug Use Monitoring Survey (CADUMS): Summary of Results for 2011. Ottawa: Author.
- ²Marcoux, K., Vanlaar, W., & Robertson, R. (2011). *The Road Safety Monitor 2010: Youth Drinking and Driving*. Ottawa: Traffic Injury Research Foundation.
- ³Young, M., Saewyc, E., Boak, A., Jahrig, J., Anderson, B., Doiron, Y., ... Clark, H. (2011). *Cross-Canada Report on Student Alcohol and Drug Use*. Ottawa: Canadian Centre on Substance Abuse.
- ⁴Beasley, E., Beirness, D., & Porath-Waller, A. (2011). *A Comparison of Drug and Alcohol-involved Motor Vehicle Driver Fatalities*. Ottawa: Canadian Centre on Substance Abuse.
- ⁵Patton, D., & Brown, D. (2002). Driving drunk, driving high: A comparison of student attitudes toward driving while drunk compared to driving while high on cannabis. *Proceedings of the 16th International Conference on Alcohol, Drugs and Traffic Safety*, Volume 3, pp. 1049–1053. Quebec, QC.: Société de l'assurance automobile du Québec.
- ⁶Porath-Waller, A., Brown, J., Frigon, A., & Clark, H. (2013). *What Canadian Youth Think About Cannabis*. Ottawa: Canadian Centre on Substance Abuse.
- ⁷This report in short is based on the technical report, *Youth Drugged Driving: The Problem and Approaches to Prevention*, available on the CCSA website.
- ⁸Bernstein, E., & Woodall, W. (1987). Changing perceptions of riskiness in drinking, drugs, and driving: An emergency department-based alcohol and substance abuse prevention program. *Annals of Emergency Medicine*, 16(12), 1350–1354.
- ⁹Banfield, J., Gomez, M., & Kiss, A. (2011). Effectiveness of the P.A.R.T.Y. Program in preventing traumatic injuries: A 10-year analysis. *Journal of Trauma, Injury, Infection, and Critical Care*, 70(3), 732–735.
- ¹⁰Ho, K., Litton, E., Geelhoed, E., Gope, M., Burrell, M., Coribel, J., ... Rao, S. (2012). Effect of an injury awareness education program on risk-taking behaviors and injuries in juvenile justice offenders: A retrospective cohort study. *PLoS ONE*, 7(2): e31776. doi:10.1371/journal.pone.0031776.
- ¹¹Griffin, K., Botvin, G., & Nichols, T. (2004). Long-term follow-up effects of a school-based drug abuse prevention program on adolescent risky driving. *Prevention Science*, 5(3), 207–212.
- ¹²Young, C. (1991). Alcohol, drugs, driving and you: A comprehensive program to prevent adolescent drinking, drug use, and driving. *Journal of Alcohol and Drug Education*, 36, 20–25.
- ¹³Marko, T., & Watt, T. (2007). *Drugged driving kills project. Why drive high? campaign*. Ottawa: Ottawa Public Health and Carlington Community and Health Services.
- ¹⁴Marko, T., & Watt, T. (2011). Employing a youth-led adult-guided framework: "Why drive high?" social marketing campaign. *Family & Community Health*, 34(4), 319–330.
- ¹⁵Raes, E., Pil, K., Van den Neste, T., & Verstraete, A. (2007). *DRUID deliverable 7.1.1. Review of guidelines, booklets, and other resources: State of the art*. Ghent: Ghent University.
- ¹⁶Ormston, R. (2003). *Evaluation of the drug driving TV advert*. Edinburgh: Scottish Executive Social Research.

