



## Adolescent Marijuana- and Alcohol-Impaired Driving Behaviours

## Amy J. Porath-Waller\* and Peter A. Fried Carleton University, Ottawa, ON, Canada

Marijuana- and alcohol-impaired driving behaviours were investigated among 307 Grade 9 to 12 students from predominantly rural areas of Eastern Ontario, Canada. Students were administered a questionnaire that asked about their past year marijuana and alcohol use, driving history, past year frequency of driving within an hour of using marijuana, drinking two or more drinks of alcohol, and using both substances, and how often in the previous 12 months they rode as a passenger with someone who drove under these same conditions. Similar rates of driving at least once within an hour of using marijuana (21%) and alcohol (20%) were observed among the 162 youth with a driver's license. Six percent of licensed drivers reported driving at least once within an hour of using both substances. Among licensed drivers, non- and infrequent users of marijuana and alcohol, respectively, drove less often within an hour of using each respective substance as compared to frequent users who smoke or drank more than once per month (ps < .01). Non-users of marijuana also drove less often within an hour of using both substances than did frequent users (p < .01). Forty-six percent of the sample reported riding at least once as a passenger with someone who drove within an hour of drinking alcohol, whereas 40% reported doing so with a driver who drove within an hour of using marijuana. Nearly a guarter (24%) of the adolescents indicated that they had ridden at least once with someone who drove within an hour of consuming both drugs. A unique aspect of this work was the investigation of differences in rates of riding as a passenger with an impaired driver according to youth's frequency of marijuana and alcohol use. Results revealed that non- and infrequent users of marijuana reported riding less often with someone who drove within an hour of using marijuana as compared to frequent users (ps < .0001). Non-users of marijuana also indicated that they rode less often with someone under the influence of both marijuana and alcohol than did frequent users (p < .01). Infrequent drinkers were found to ride less often with drivers who drove within an hour of drinking alcohol (p < .01), using marijuana (p < .0001), and both drugs (p < .0001) than were frequent drinkers. Overall, the findings from this study suggest that frequent users of marijuana and alcohol are not only more likely to drive while under the influence of these substances, but they are also more apt to ride as a passenger with someone who is under the influence. This work also extends previous inquiry on youth impaired driving by providing data on driving behaviours following the combined use of marijuana and alcohol. Implications for public policy and program development are discussed.

Keywords: Marijuana, Alcohol, Driving