

Alcohol, Marijuana, and Motor Vehicle Accidents

A lethal combination for youth

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Alcohol and marijuana are among the drugs most commonly used by adolescents and young adults. Use is associated with substantial morbidity and mortality for young people, especially motor vehicle crash fatality, which is a leading cause of death among those 18 to 25 in the U.S.

Half of young drivers in fatal crashes in nine U.S. states used either alcohol or marijuana. Researchers from Columbia University analyzed 7,191 fatal accidents involving drivers between the ages of 16 and 25 from the states of California, Connecticut, Hawaii, Illinois, New Hampshire, New Jersey, Rhode Island, Washington, and West Virginia. These nine states all routinely perform toxicological tests on the blood or urine specimens of drivers who die in car crashes.

Overall, 50.3 percent of the deceased tested positive for alcohol, marijuana, or both. Of these, 36.8 percent were under the influence of alcohol, 5.9 percent used only marijuana, and 7.6 percent used both substances. The researchers did note that marijuana use decreased among those aged 21 years and older who used this drug alone. After reaching age 21, use of alcohol in combination of marijuana increased slightly.

Although the weight of available evidence indicates that increasing access to marijuana may reduce alcohol use at the population level, the current study results suggest that any negative trend in marijuana use is likely small. However, it should be noted that marijuana use is also a risk factor for involvement in fatal and nonfatal motor vehicle crashes; thus, the effects of increased marijuana use at the population level, while potentially reducing alcohol use, may be null or even detrimental for fatality rates overall.

Dr. Guohua Li, co-author of the study and Director of the Center for Injury Epidemiology and Prevention at Columbia University said:

“Taken together, we found no significant substitution effect between alcohol and marijuana. Rather, increased availability seems to increase the prevalence of concurrent use of alcohol and marijuana.”

Given the rapid changes currently underway in marijuana availability in the U.S., understanding the potential effects of increased use on other substances, as well as substance-related outcomes such as motor vehicle crash fatality, has never been more important to the health of society. Helping young people to address substance abuse early by providing education could help prevent future addiction and the associated health risks.

Young people are smarter than many adults give them credit for, and teaching drug prevention at an early age is a wise precaution today. The average age of first marijuana use is 14, and alcohol use can start before age 12. The use of marijuana and alcohol in high school has become

common, and sadly not an issue to many teens; this is unfortunate because of the dangerous risks to the developing brain and potential for fatal or life-altering accidents.