

By: David G. Evans, Esq.

The Institute for the Study of Labor in Germany recently published a discussion paper entitled "Medical Marijuana Laws, Traffic Fatalities, and Alcohol Consumption" that has been touted as "proof" that "medical" marijuana laws reduce traffic fatalities because people use marijuana instead of alcohol. This discussion paper was not peer reviewed. This discussion paper is "junk" science and the authors should have subjected themselves to peer review before publishing it.

The glaring problem with this discussion paper is that it only has data from three "medical" marijuana states - Montana, Rhode Island and Vermont. Were these states cherry picked to get the outcome the authors of the discussion paper wanted? Vermont and Rhode Island are not typical "medical" marijuana states because their law is very restrictive and very few people have been permitted to use "medical" marijuana. In Vermont only had 349 registered users and Rhode Island only about 3,000. The number is too small to have any effect on the general population or driving data. In addition, in Vermont and Rhode Island at the time of the discussion paper research there were no "medical" marijuana dispensaries. In most medical marijuana states there are storefront marijuana dispensaries that sell "medical" marijuana candy and ice cream. They advertise in the local papers. The dispensaries are in school neighborhoods where teens see them each day. There is an active well-funded effort to promote the use of "medical" marijuana that the public sees daily. In 2011, the dispensaries in Montana were shut down by legislation. One of the reasons the legislature voted to end the dispensaries was due to an increase in marijuana related DUIs. In Montana from 2007-2009 drug-impaired driving increased significantly for driving under the influence of cannabis. In 2009, 44% of drug impaired drivers had cannabis in their system. [FN1]

The discussion paper should have looked at typical "medical" marijuana states. The numbers of users in the typical "medical" marijuana states are considerably larger and would have a significant effect. For example, California - the users are in excess of 300,000; Oregon - 38,269; Colorado - 95,477; Hawaii - excess of 8,000; Michigan - 20,548 (data as of 2010). [FN2]

In addition the authors make a number of assumptions about DUI data and fatalities. I was the Manager of the New Jersey Intoxicated Driving Program for six years and also served as a Research Scientist for the New Jersey Department of Health. There are many variables that effect DUI enforcement and fatalities. For example, if local cities have money to pay police for overtime they have more resources to have police enforcing DUI laws on the weekends and at night when most DUIs occur. The fatalities are also effected by local treatment resources, time of year, changes in the state laws and many other factors. In addition, many states do not have a mechanism for testing drivers for marijuana use. The authors did not do a good job of sorting out all these variables before they leaped to the assumptions that they made.

A serious question about the discussion paper is also raised because a number of the members and researchers in the Institute have ties to the Soros Foundation or billionaire George Soros. [FN3] Soros has funded a number of studies and organizations that have legalization of drugs as their goal. "Medical" marijuana is seen as a step in that direction. One of the arguments against "medical" marijuana is that it will increase marijuana use and thus DUIs. This discussion paper is

attempt to refute that concern.

Although many state "medical marijuana" laws state that a person should not be in physical control of a motor vehicle while under the influence of marijuana, it is naive to think that people who smoke "medical marijuana" will stop driving. They will still have to get to work and buy groceries. They will still have to drive their kids to school. In addition, how will you determine if someone is under the influence? How will you get them drug tested? Many states do not include drug testing as part of its DUI implied consent law.

Studies that show a link between marijuana and DUI and fatalities.

The US National Highway Traffic Safety Administration (NHTSA) found that marijuana significantly impairs the ability to safely operate a motor vehicle. The NHTSA report noted, "[e]pidemiology data from road traffic arrests and fatalities indicate that after alcohol, marijuana is the most frequently detected psychoactive substance among driving populations." The driving problems included: decreased handling performance, inability to maintain headway, impaired time and distance estimation, increased reaction times, sleepiness, impaired sustained vigilance and lack of motor coordination. [FN4]

A study of drivers arrested for reckless driving showed that, among those who were not impaired by alcohol, 45 per cent had positive tests for marijuana. [FN5]

There is a clear correlation between trauma and marijuana use. In one large shock trauma unit they found that 17 per cent (one in six) of crash victims tested positive for marijuana with a slightly higher for crash rate for victims under the age of eighteen, 19 per cent of whom tested positive for marijuana. [FN6]

Recent marijuana use has been reported in over 30% of the samples tested from drivers involved in serious accidents.[FN7]

The 1998 US National Household Survey on Drug Abuse showed that in a 12-month period nearly 9 million Americans drove within two hours of using marijuana or cocaine. Both drugs were frequently used in combination with alcohol. Marijuana was the illicit drug used most often by drivers who drove after drug use. [FN8]

Available epidemiological research examining drugs other than alcohol indicates that marijuana is by far the most prevalent drug detected in impaired drivers, fatally injured drivers, and motor vehicle crash victims. [FN9]

A study found that, of 1,023 patients admitted to the Baltimore Maryland Shock-Trauma Unit, 34.7% had used marijuana very recently (i.e., greater than 2ng/ml THC in serum), and 33% had BACs greater than 100mg/dL. [FN10]

## Drugged driving among young people

Under state laws 18 year olds are able to get "medical" marijuana. Many are still in high school and will be seniors. A study of high school students in 2000 and 2001 showed that about 28,000 seniors each year admitted that they were in at least one accident after using marijuana. [FN11] About 15 per cent of adolescents report driving under the influence of marijuana. This percentage is almost equal to the percentage of adolescents who report driving under the influence of alcohol (16 per cent).[FN12]

The US National Institute on Drug Abuse surveyed 6,000 adolescent drivers and found that those who drove more than six times a month after using marijuana were about two and-a-half times more likely to be involved in an accident than those who did not smoke before driving. [FN13]

The most recent study published in October 2011, was an analysis of many studies by researchers at Columbia University in New York that showed "Epidemiological studies published in the past 2 decades demonstrate that marijuana use by drivers is associated with a significantly increased crash risk." [FN14]

## About the Author

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## References

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[FN2] Who is Really Smoking Marijuana? Drug Free America Foundation. [www.dfaf.org](http://www.dfaf.org)

[FN3] For example, Klara Peter, John S. Earle, Devah Pager, and Anzelika Zaiceva

[FN4] The DEA Position On Marijuana, [DEA.gov](http://DEA.gov) footnote 46; National Highway Traffic Safety Administration, Use of Controlled Substances and Highway Safety; A Report to Congress (U.S. Dept. of Transportation, Washington, D.C., 1988).

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