

Study shows medical marijuana laws reduce traffic deaths

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A groundbreaking new study shows that laws legalizing medical marijuana have resulted in a nearly nine percent drop in traffic deaths and a five percent reduction in beer sales.

"Our research suggests that the legalization of medical marijuana reduces [traffic fatalities](#) through reducing [alcohol consumption](#) by [young adults](#)," said Daniel Rees, professor of economics at the University of Colorado Denver who co-authored the study with D. Mark Anderson, assistant professor of economics at Montana State University.

The researchers collected data from a variety of sources including the National Survey on Drug Use and Health, the [Behavioral Risk Factor Surveillance System](#), and the [Fatality Analysis Reporting System](#).

The study is the first to examine the relationship between the legalization of medical marijuana and [traffic deaths](#).

"We were astounded by how little is known about the effects of legalizing medical marijuana," Rees said. "We looked into traffic fatalities because there is good data, and the data allow us to test whether [alcohol](#) was a factor."

Anderson noted that traffic deaths are significant from a policy standpoint.

"Traffic fatalities are an important outcome from a policy perspective because they represent the leading cause of death among Americans ages five to 34," he said.

The economists analyzed traffic fatalities nationwide, including the 13 states that legalized medical marijuana between 1990 and 2009. In those states, they found evidence that alcohol consumption by 20- through 29-year-olds went down, resulting in fewer deaths on the road.

The economists noted that simulator studies conducted by previous researchers suggest that drivers under the influence of alcohol tend to underestimate how badly their skills are impaired. They drive faster and take more risks. In contrast, these studies show that drivers under the influence of marijuana tend to avoid risks. However, Rees and Anderson cautioned that legalization of medical marijuana may result in fewer traffic deaths because it's typically used in private, while alcohol is often consumed at bars and restaurants.

"I think this is a very timely study given all the medical marijuana laws being passed or under consideration," Anderson said. "These policies have not been research-based thus far and our research shows some of the social effects of these laws. Our results suggest a direct link between marijuana and alcohol consumption."

The study also examined marijuana use in three states that legalized medical marijuana in the mid-2000s, Montana, Rhode Island, and Vermont. Marijuana use by adults increased after legalization in Montana and Rhode Island, but not in Vermont. There was no evidence that marijuana use by minors increased.

Opponents of medical marijuana believe that legalization leads to increased use of marijuana by minors.

According to Rees and Anderson, the majority of registered medical marijuana patients in Arizona and Colorado are male. In Arizona, 75 percent of registered patients are male; in Colorado, 68 percent are male. Many are under the age of 40. For instance, 48 percent of registered patients in Montana are under 40.

"Although we make no policy recommendations, it certainly appears as though [medical marijuana](#) laws are making our highways safer," Rees said.

More information: The study is entitled, "Medical Marijuana Laws, Traffic Fatalities, and Alcohol Consumption." It can be found at:
[www.iza.org/en/webcontent/pers ...
/index.html?key=4915](http://www.iza.org/en/webcontent/pers.../index.html?key=4915)

Provided by University of Colorado Denver

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