



No evidence that legal marijuana increases traffic fatalities

Opponents of marijuana policy reform often claim that ending prohibition leads to increases in traffic fatalities or to more impaired driving-related fatalities. These assertions, however, are contradicted by reliable evidence. Recent studies and government data, including the materials described below, find no evidence to support the hypothesis that states with legal marijuana experience higher rates of traffic deaths than would otherwise be expected.

From 2016 to 2017, as the number of states with legalization laws doubled from four to eight, national rates of motor-vehicle deaths declined slightly, according to the National Safety Council.¹ Public safety experts continue to point to “distracted driving, speeding and people who still don't use their seat belts” — not marijuana — as the biggest contributors to these sorts of tragedies.²

Driving under the influence of any psychoactive substance is dangerous, and the Marijuana Policy Project supports public safety campaigns that discourage individuals from driving after consuming marijuana, along with enforcement of laws prohibiting impaired driving. But, as recent peer-reviewed scientific studies demonstrate, there is no substance to the argument that removing penalties for adults who responsibly consume marijuana makes our roads less safe.

A 2017 study in the *American Journal of Public Health* finds similar crash rates in legalization and non-legalization states.

Researchers compared crash fatality rates in Colorado and Washington (both of which approved laws legalizing marijuana for adult use in 2012) to those of eight other control states from 2009 through 2015. Pre-legalization fatality rates were similar among all states analyzed, as were post-legalization rates. The paper concludes, “Three years after recreational marijuana legalization, changes in motor vehicle crash fatality rates for Washington and Colorado were not statistically different from those in similar states without recreational marijuana legalization.”³

Data spanning 1985 to 2014 show fewer traffic fatalities in states with medical marijuana.

Another study published in the *American Journal of Public Health* in January 2017 analyzed state rates of motor vehicle fatalities over a nearly 30-year period and found that, “[medical marijuana laws] and dispensaries were associated with reductions in traffic fatalities, especially among those aged 25 to 44 years.”⁴

Another study published in 2018 fails to find evidence linking legalization with increases in fatal car accidents.

A paper published by the National Bureau of Economic Research analyzed the rates of drivers found with THC (marijuana's primary psychoactive ingredient) in their systems after fatal car crashes from 2013 to

¹ https://www.nsc.org/Portals/0/Documents/NewsDocuments/2018/December_2017.pdf

² <https://www.usatoday.com/story/money/cars/2018/02/15/national-safety-council-traffic-deaths/340012002/>

³ Jayson D. Aydelotte, MD, et al., “Crash Fatality Rates After Recreational Marijuana Legalization in Washington and Colorado,” *American Journal of Public Health*, July 12, 2017.

⁴ Julian Santaella-Tenorio, DVM, MSc, et al., “US Traffic Fatalities, 1985–2014, and Their Relationship to Medical Marijuana Laws,” *American Journal of Public Health*, January 11, 2017.

2016. The researchers then compared the patterns of THC-positive drivers in Colorado and Washington during that time period to those in other states. In a summary of their results, the authors write, “We find the synthetic control groups saw similar changes in marijuana-related, alcohol-related and overall traffic fatality rates despite not legalizing recreational marijuana.”⁵

Colorado data suggests no change in drugged driving.

Data from the Colorado Department of Transportation does not support the assertion that impaired driving-related serious injuries are increasing. The Colorado Department of Transportation’s Problem Identification Report, published in 2017, actually shows that the percent of cases where an officer suspected drugs or alcohol in a serious-injury crash decreased slightly or remained stable after legalization.⁶

Prohibitionists often manipulate reports and data to mislead lawmakers and the public.

Prohibitionists frequently point to a study published by AAA, which claims, “Fatal crashes involving drivers who recently used marijuana doubled in Washington after the state legalized the drug.” However, if the state laboratory identified THC in a driver’s blood, the authors categorized that as “recent use.” But THC can be present in one’s system long after cannabis’ effects have worn off. Scientists have found THC can be present for *up to seven days* or more after cannabis was last used, with THC-blood levels sometimes rising even after abstinence.⁷ Additionally, the statistics were for prevalence data only; neither causality nor culpability was calculated or inferred.

Moreover, Washington officials changed their procedures regarding drug testing drivers and fatal accident victims post-legalization. An article in the *Journal of Analytical Toxicology* explains, “Prior to 2013, the laboratory did not routinely ... screen for drugs in suspected impaired driving cases where the blood alcohol concentration was 0.10.”⁸ Predictably, once procedures changed to mandate drug screening in alcohol-impaired drivers, regulators discovered an increased number of drivers with both alcohol and THC in their systems. But, this increased prevalence is likely a result of the additional testing rather than an actual increase in THC-positive drivers on the road.

Anti-legalization advocates also misappropriate data from Colorado. Citing a July 2018 report from the Department of Public Safety,⁹ prohibitionist lobbying group Project SAM falsely claimed, “New study found that nearly 73% of some 4,000 drivers charged with a DUI in Colorado in 2016 tested positive for marijuana.” In fact, as the report itself says, there were 27,244 case filings with at least one DUI charge that year. Of these, 3,946 involved a screening for cannabinoids, and in 73% of those cases, a positive

⁵ Benjamin Hansen, et al., “Early Evidence on Recreational Marijuana Legalization and Traffic Fatalities,” National Bureau of Economic Research, March 2018.

⁶ Table 9, *available at* <https://www.codot.gov/safety/safety-data-sources-information/colorado-problem-identification-id-reports/2017-problem-id-report/view>. (In the three years before legalization, 2010-2012, officers suspected drivers were impaired by alcohol in 15.9% of serious-injury crashes — 1,045 total. In the three years after legalization, from 2013-2015, that figure decreased to 14.2%, or 926 total. Meanwhile, the percent of serious-injury crashes where officers suspected the driver was under the influence of drugs remained stable at 3.7%, with the total number decreasing by one — from 243 to 242.)

⁷ “Residual cannabis levels in blood, urine and oral fluid following heavy cannabis use.” Odell, et al. January 2015. <https://www.ncbi.nlm.nih.gov/pubmed/25698515>

⁸ This refers to grams per 100 millimeters. Quote from “The prevalence of marijuana in suspected impaired driving cases in Washington state.” Couper, et al. October 2014. <https://www.ncbi.nlm.nih.gov/pubmed/25217548>

⁹ http://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

result was found. In other words, cannabinoid metabolites were detected in only 11% of drivers charged with DUI.