

## Marijuana and Vehicular Accidents

THC disrupts functioning of the cerebellum and basal ganglia, brain areas that regulate balance, posture, coordination, and reaction time. This is the reason people who have used marijuana may not be able to drive safely.

*Marijuana*, National Institute on Drug Abuse (NIDA), February 12, 2018, 10.

The frequency of collision claims per insured vehicle year rose a combined 6% following the start of retail sales of recreational marijuana in Colorado, Nevada, Oregon and Washington, compared with the control states of Idaho, Montana, Utah and Wyoming. The combined-state analysis is based on collision loss data from January 2012 through October 2017.

*Highway Loss Data Institute Bulletin*, Vol.35, No.8: April 2018

Colorado, Oregon and Washington combined saw a 5.2% increase in the rate of crashes per million vehicle registrations, compared with neighboring states that didn't legalize marijuana sales. The study examined police-reported crashes before and after retail sales began in Colorado, Oregon and Washington from 2012 to 2016.

Insurance Institute for Highway Safety, *Status Report Newsletter*, Vol. 53, No.6, October 18, 2018

The share of fatal accidents in which at least one driver tested positive for marijuana increased in Colorado and Washington after marijuana was legalized in both states in 2014. In Colorado the fraction of positive tests increased by 92% from 2013 to 2016; in Washington the increase was 28% during that period.

Benjamin Hansen, Keaton S. Miller, Caroline Weber, "Early Evidence on Recreational Marijuana Legalization and Traffic Fatalities," *National Bureau of Economic Research Working Paper No. 24417*, March 2018

Marijuana-related traffic deaths in Colorado when a driver was positive for marijuana more than doubled from 55 deaths in 2013 to 125 deaths in 2016.

"The Legalization of Marijuana in Colorado: The Impact," *Rocky Mountain High Intensity Drug Trafficking Area*, Vol. 51, October 2017

Drivers who test positive for marijuana or who report using marijuana are more than twice as likely as other drivers to be involved in motor vehicle crashes.

Li M, Brady, JE, Dimaggio CJ, Lusardi AR, Tzong KY, Li G. "Marijuana Use and Motor Vehicle Crashes." *Epidemiol Rev* 2012; 34(1):65-72, Columbia University Medical Center

Acute cannabis consumption nearly doubles the risk of a collision resulting in serious injury or death.

"Acute Cannabis Consumption and Motor Vehicle Collision Risk: Systematic Review of Observational Studies and Meta-Analysis," *British Medical Journal* 2012; 344:e536

Marilyn Huestis, a professor at The Lambert Center for the Study of Medicinal Cannabis and Hemp at Thomas Jefferson University, has said that many people don't realize cannabis can impair driving ability. "The truth is, if everything goes as it's supposed to go, you can make it home. But you can't respond appropriately and quickly when an unexpected event occurs. You see this over and over again in crash cases."

Linda Carroll, "Many Drivers Who Test Positive for Marijuana Have a Child in the Car, Survey Finds," NBC News, April 25, 2019.