Marijuana Laws and Traffic Fatalities

Abstract

Marijuana laws and related policies have changed dramatically over the last three decades. While several studies have examined the relationship between marijuana laws and traffic fatalities, some of the research is becoming outdated and existing evidence remains inconclusive. Our research uses data from the Fatality Analysis Reporting System (FARS) for the years 1990 to 2018 to re-examine the effects of sequential introduction of state-specific medical and recreational marijuana laws on overall and crash-specific (e.g., time of day, alcohol involved, young drivers) traffic fatalities. Employing a difference-in-differences approach, we find that medical marijuana laws significantly impact traffic fatalities, with a smaller and often non-significant effect for recreational marijuana laws. Specifically, the implementation of medical marijuana laws and the opening of medical marijuana dispensaries are associated with a 9% annual reduction in total traffic fatalities. An event study indicates that the effects diminish somewhat at five years post implementation.