

Technical Report: Licensed Cannabis Retail Access and Traffic Fatalities

This report is part of a larger mandate to evaluate the long-term consequences of non-medical cannabis (NMC) legalization in Washington over a 20-year period (ending in 2032). In this report, we specifically focus on outcomes related to fatal traffic crashes.

Background

Impaired driving is a primary concern related to cannabis legalization because impairments in driving performance could present a major threat to roadway safety. In 2019, about 23% of blood-tested drivers involved in a fatal traffic crash tested positive for THC. Studies have generally found a modest relationship between cannabis intoxication and driving ability. In this study, we examined how access to licensed cannabis retailers is related to traffic fatalities through the year 2019.

Quarterly Number of Drivers Involved in Fatal Traffic Collision, 2008-2019



Note:

Data come from the Coded Fatal Crash Data (CFC) data files, 2008-2019.

Findings

- Greater proximity to an NMC retailer is related to a modest increase in the total number of drivers involved in a fatal traffic collision.
- Greater proximity to a retailer relates to a modest increase in the number of drivers involved in a fatal traffic collision who test positive for detectable levels of (Delta-9) THC. This suggests more proximate retail access may be associated with a higher prevalence of driving after relatively recent cannabis use.

Limitations

- Results describe the relationship between retail cannabis access and fatal traffic outcomes. They do not necessarily generalize to traffic collisions and safety more broadly.
- A THC-positive blood test does not necessarily detect current impairment. Furthermore, the onset, intensity, and duration of cannabis impairment can vary depending on the type of product consumed, the frequency and method of use, and user characteristics.
- To better isolate the true impact of licensed NMC retail, we need more information about the neighborhood characteristics and local policies where retail is operational.

Assignment Details

Assigned by Initiative 502 in 2012
[Full report available on WSIPP's website](#)

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