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AAA Foundation for Traffic Safety

FACT SHEET

Cannabis Use among Drivers Suspected of Driving Under the Influence or Involved in Collisions: Analysis of Washington State Patrol Data

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Background

- In November 2012 Washington voters passed Initiative-502 (I-502), legalizing retail cannabis sales and recreational cannabis use for adults 21 years and older. As with alcohol, the law provides two options for prosecuting suspected impaired drivers:
  - demonstrating impairment through detailed observation notes, field test results, witness observations, or Drug Recognition Expert assessments; and
  - determining the suspect's blood level for the drug is above the legal "*per se*" limit
- I-502 established a *per se* level of 5ng/mL of active delta-9-tetrahydrocannabinol (hereafter THC) in blood for cannabis-impaired driving
  - THC is a psychoactive compound in cannabis

Objective

- The objectives of this study were to examine drivers involved in collisions and/or arrested for suspected driving under the influence (DUI), who were investigated by the Washington State Patrol (WSP) and for which blood evidence was collected in order to:
  - describe the trends in THC involvement over time and in relation to the passage of I-502;
  - to describe the prevalence of THC alone and in combination with alcohol and other potentially intoxicating drugs; and
  - to describe the estimated time to blood draw under real world conditions, and examine the relationship between estimated time to blood draw and the level of THC detected

Methods

- A variety of methods, including: semi-structured interviews with law enforcement, prosecutors, and toxicology laboratory staff; document review to determine DUI arrests, law enforcement staffing and training overtime; data linking from WSP's toxicology laboratory, dispatch, and officer activity log; as well as longitudinal analyses conducted to examine trends from 2005-2014 for the presence and level of THC

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Key Findings

Law enforcement staffing and training

- The overall number of WSP troopers assigned to traffic enforcement was relatively unchanged from 2009-2014, but there was an increase in the number of patrol officers with specialized training in Advanced Roadside Impaired Driving Enforcement

Trends in THC-involved driving

- Between 2005 and 2014, the proportion of WSP DUI and collision cases tested by toxicology that were positive for THC, excluding those positive for alcohol, increased significantly, from 20 percent to 30 percent. Among these cases, the prevalence of THC continued to grow after passage of I-502 in 2012, but at a significantly slower pace
- The median blood level of THC increased significantly from 4.0ng/mL in 2005 to 5.6ng/mL in 2014

Prevalence of THC in collisions and suspected DUIs

- Among drivers for whom blood evidence was submitted following a collision, 11 percent were positive for THC in conjunction with another potentially impairing substance (alcohol or other drugs). An additional 4 percent were positive for THC only. The majority (53%) of collision involved drivers were under the influence of alcohol at a level of 0.08 g/dL or higher, and 7 percent met or exceeded the *per se* level of THC, 5ng/mL
- Among drivers arrested for suspected DUI in the absence of a collision, 11 percent were positive for THC in conjunction with another potentially impairing substance. An additional 26 percent tested positive for THC only. Non-collision-involved drivers arrested for DUI were most commonly under the influence of alcohol at 0.08 g/dL or above (30%). Among these drivers, 20 percent had a THC level of 5ng/mL or above

Estimated time to blood draw

- The median estimated time to blood draw for THC-positive drivers (among collisions and non-collisions) was 139 minutes
- The proportion of those with an estimated time to blood draw of less than 2 hours who had a THC blood level greater than or equal to 5ng/mL was 26 percent compared to 10 percent for those with an estimated time to blood draw of 2 hours or more

Conclusions

- These findings indicate that THC-involved driving is relatively common, appears to be increasing and is likely underestimated given the generally protracted time until a blood specimen is obtained. Evaluating the impact of protracted time until blood testing is complicated by the lack of available standardized law enforcement data on the time of testing

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For more information on this study and the AAA Foundation's other traffic safety research and materials, please visit AAAFoundation.org.

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