



National Institute
on Alcohol Abuse
and Alcoholism

WHAT HAVE WE LEARNED SO FAR? WHAT SHOULD WE DO NEXT?

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Division of Epidemiology and Prevention Research
National Institute on Alcohol Abuse and Alcoholism
National Institutes of Health

**Cannabis Legalization and Youth: Developing Clear Messages in an
Evolving Policy Climate**

November 16, 2018

Overview

I. Recent findings

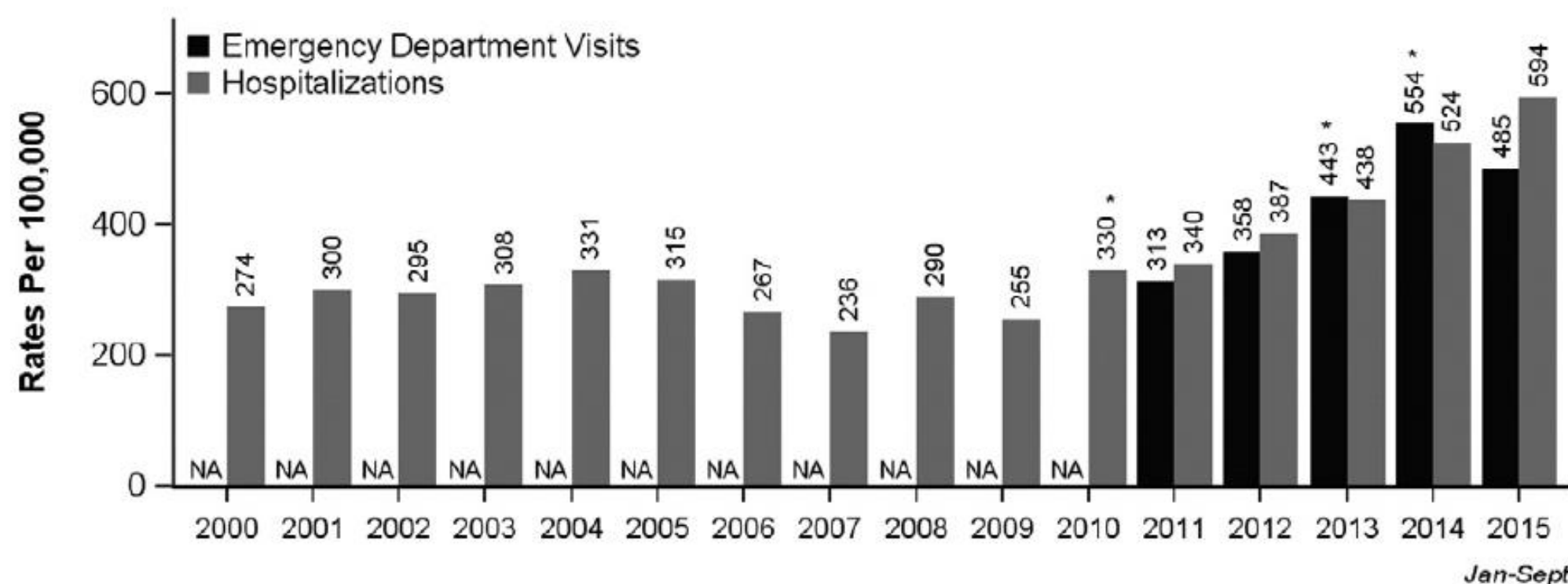
II. Research tools

III. Research opportunities

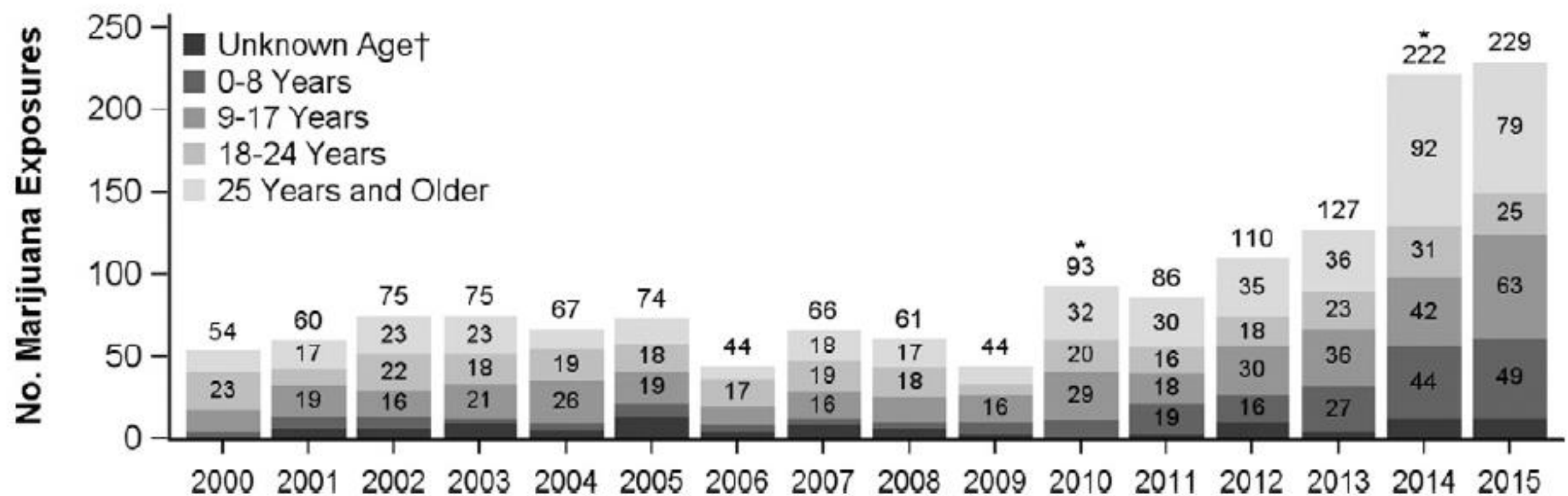


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I. Recent findings



- * Rates significantly increased from the previous year at a p value of <0.003 for hospitalizations and >0.0125 for ED visits. †ICD-9-CM codes 305.20–305.23, 304.30–304.33, 969.6, and E854.1 were used to determine HD and ED visits with marijuana-related billing codes within the first three diagnosis codes. ‡Data source: Colorado Hospital Association Discharge Data



*Counts significantly increased from previous year with a p value <0.003. †Unknown age includes calls with ages recorded as teens, 20s, unknown adult (≥20 yrs), unknown child (≤19 yrs), and unknown age. ‡Human marijuana exposure calls to RPC were determined by the presence of the generic code Marijuana - 0083000 from the National Poison Data System or marijuana exposure mentioned in RPC case notes.



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TOXICOLOGY/RESIDENTS' PERSPECTIVE

Colorado Cannabis Legalization and Its Effect on Emergency Care

Howard S. Kim, MD*; Andrew A. Monte, MD

**Corresponding Author. E-mail: howard.kim@northwestern.edu.*

0196-0644/\$-see front matter

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<http://dx.doi.org/10.1016/j.annemergmed.2016.01.004>

A **podcast** for this article is available at www.annemergmed.com.

[Ann Emerg Med. 2016;68:71-75.]

Drug Use and Health responses from 2011 to 2013, the prevalence of Coloradan adults endorsing marijuana use within the last month was 19% compared with a national

Trends and age, period and cohort effects for marijuana use prevalence in the 1984–2015 US National Alcohol Surveys

William C. Kerr , **Camillia Lui & Yu Ye**

Alcohol Research Group, Public Health Institute, Emeryville, CA, USA

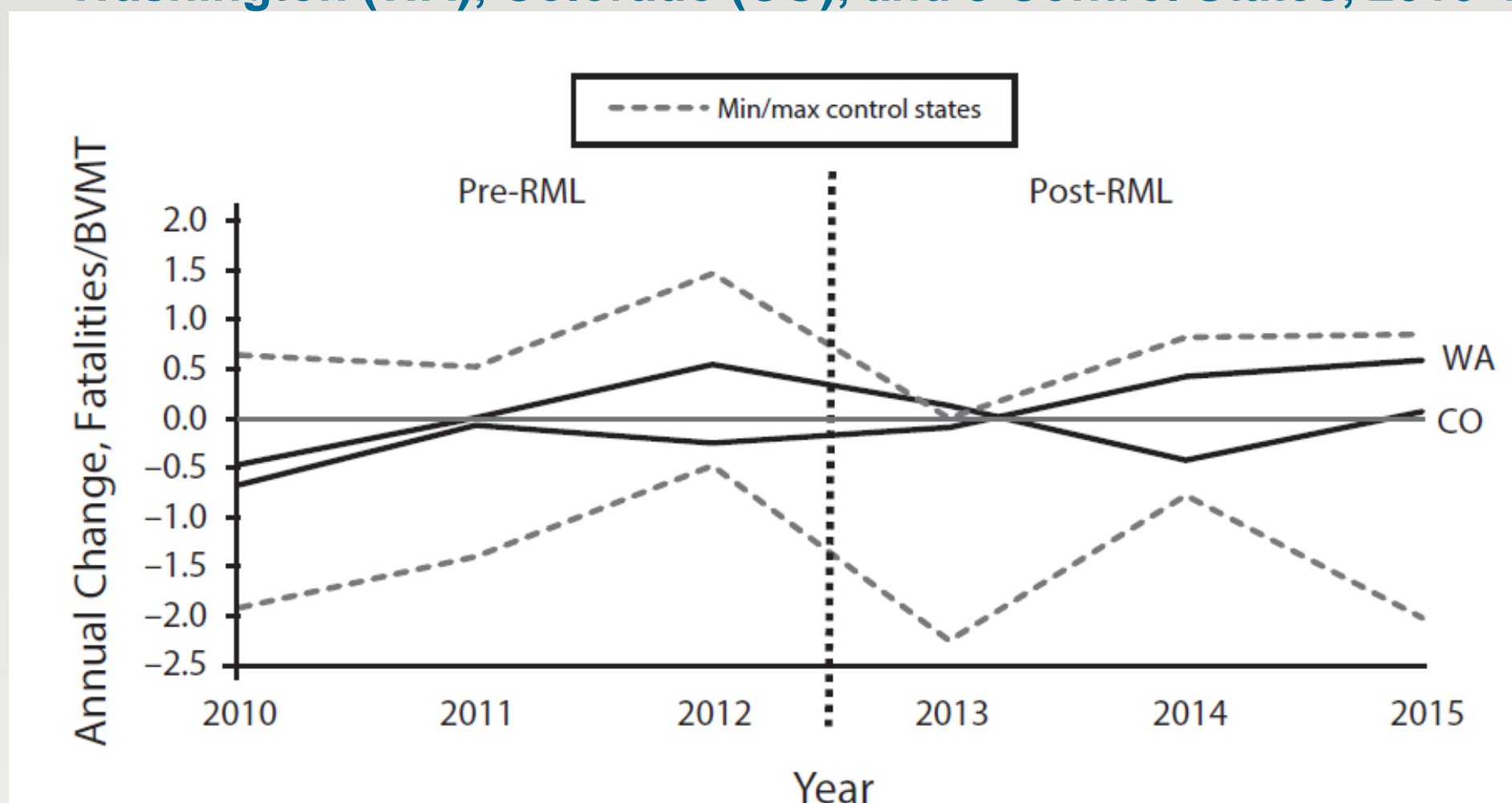
“Models including indicators of medical and recreational marijuana policies did not find any significant positive impacts”

**Any marijuana use in past 30 days:
Change between 2010-2011 (before) and 2013-2015 (after)**

	8th graders	10th graders	12th graders
Washington	2.0%	4.1%	NS
Colorado	NS	NS	NS

Source: Cerda et al., Association of State Recreational Marijuana Laws With Adolescent Marijuana Use. JAMA Pediatrics 171(2): 142-149

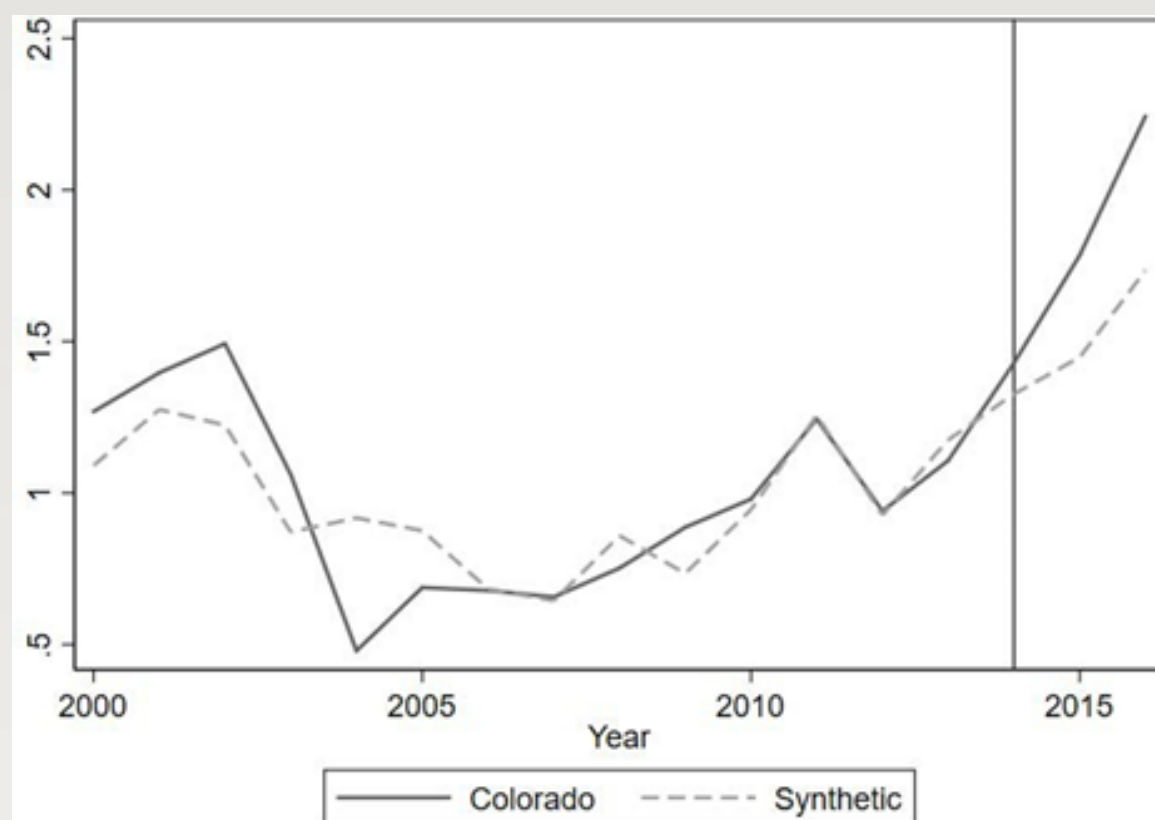
Annual Year-Over-Year Changes in Motor Vehicle Crash Fatality Rates per Billion Vehicle Miles Traveled (BVMT) Before and After Recreational Marijuana Legalization (RML): Washington (WA), Colorado (CO), and 8 Control States, 2010–2015



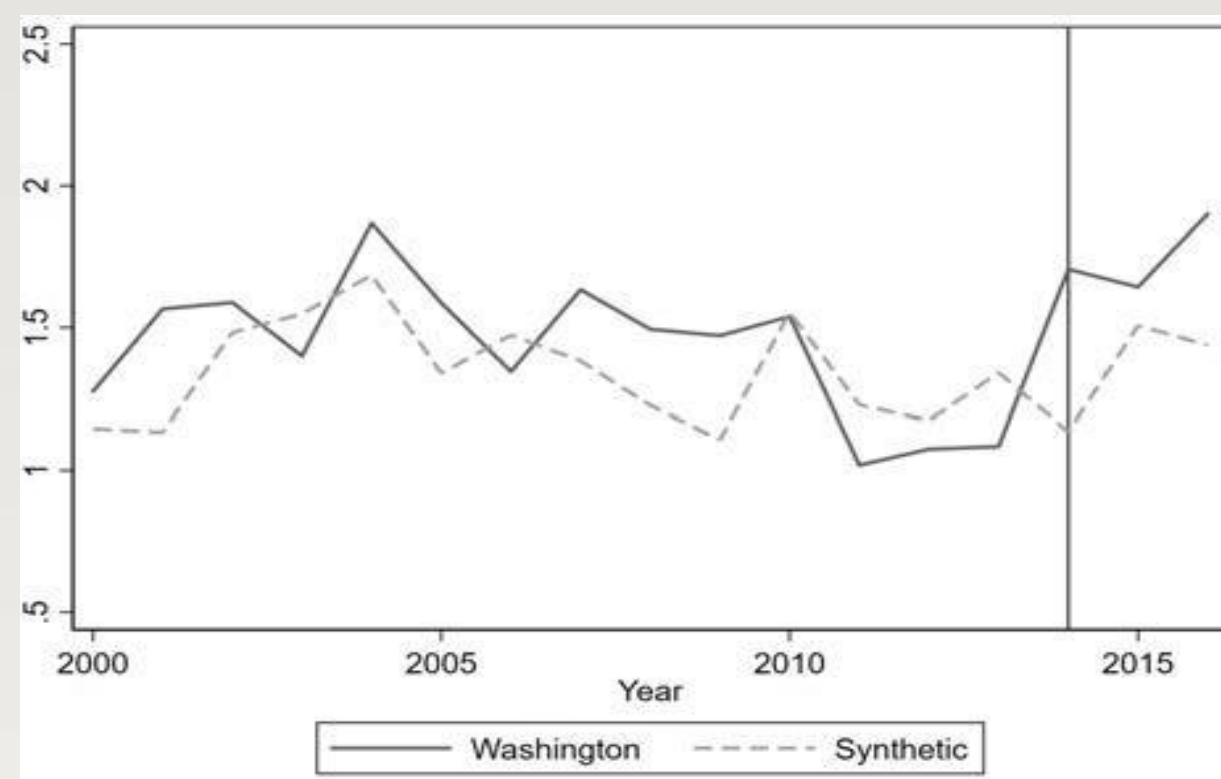
“Three years after recreational marijuana legalization, changes in motor vehicle crash fatality rates for Washington and Colorado were not statistically different from those in similar states without recreational marijuana legalization.”

Marijuana-Related Traffic Fatalities per billion VMT

Colorado



Washington



Findings so Far

- Sparse
 - Mixed
 - Early Stage
-

Obstacles Encountered

- Policy formulation and policy research timelines do not match
 - There is no standard measure of quantity
-



“Explore the possibility of constructing a standardized dose similar to that for alcohol {the standard drink}, tobacco (a cigarette), or opioids...”

RESEARCH ARTICLE

Measuring cannabis consumption: Psychometric properties of the Daily Sessions, Frequency, Age of Onset, and Quantity of Cannabis Use Inventory (DFAQ-CU)

Carrie Cuttler*, Alexander Spradlin

Department of Psychology, Washington State University, Pullman, WA, United States of America

Obstacles Encountered

- Policy formulation and policy research timelines do not match
 - There is no standard measure of quantity
 - There is no defensible standard for per se driving impairment
-

Clinical Chemistry 61:10
1223-1225 (2015)

Editorials

Cannabis-Impaired Driving: A Public Health and Safety Concern

Marilyn A. Huestis^{1*}

“[D]etermining an appropriate THC concentration for a legal per se limit or zero tolerance concentration, based on a laboratory’s methodological limit of quantification, is an urgent international priority.”

“Unfortunately, there is no one THC blood concentration that will achieve this goal...”

Recap

- What have we learned so far?
 - Not much
 - There are significant obstacles
 - Research tools
 - Research opportunities
-

II. Research Tools

WELCOME TO THE

Alcohol Policy Information System

The Alcohol Policy Information System (APIS) provides detailed information on a wide variety of [Alcohol-Related Policies](#) in the United States at both State and Federal levels, as well as policy information regarding the [Recreational Use of Cannabis](#). The information and resources available on this site are geared towards alcohol policy researchers and others interested in alcohol policy issues.

Underage Drinking

APIS provides convenient access to policy topics that pertain to underage drinking, in order to encourage research, evaluation, and outreach efforts in this important area.

- > [Highlight on Underage Drinking](#)
- > [State Profiles of Underage Drinking Laws](#)

What's New

March 30, 2018 - The website was redesigned, policy information appearing on the site was updated to include legislative and regulatory changes that took effect on or before 1/1/2017, and supplemental resources were added or revised.

For a full list of changes since the launch of the site on June 23, 2003, see the website [Change Log](#).

Alcohol Policy Topics

Detailed state-by-state information is available for the following alcohol policy topics, or you may [browse all topics](#).

Alcohol Beverages Pricing

- > [Drink Specials](#)
- > [Wholesale Pricing Practices and Restrictions](#)

Alcohol Beverages Taxes

- > [Beer](#)
- > [Distilled Spirits](#)
- > [Wine](#)

Alcohol Control Systems

- > [Retail Distribution Systems for Beer](#)
- > [Retail Distribution Systems for Spirits](#)
- > [Retail Distribution Systems for Wine](#)
- > [Wholesale Distribution Systems for Beer](#)
- > [Wholesale Distribution Systems for Spirits](#)
- > [Wholesale Distribution Systems for Wine](#)

Blood Alcohol Concentration (BAC) Limits

- > [Adult Operators of Noncommercial Motor Vehicles](#)
- > [Operators of Recreational Watercraft](#)
- > [Youth \(Underage Operators of Noncommercial Motor Vehicles\)](#)

Health Care Services and Financing

- > [Health Insurance Parity for Alcohol-Related Treatment](#)
- > [Health Insurance: Losses due to Intoxication \("UPPL"\)](#)

Pregnancy and Alcohol

- > [Civil Commitment](#)
- > [Legal Significance for Child Abuse/Child Neglect](#)
- > [Limitations on Criminal Prosecution](#)
- > [Priority Treatment](#)
- > [Reporting Requirements](#)
- > [Warning Signs: Drinking During Pregnancy](#)

Retail Sales

- > [Bans on Off-Premises Sunday Sales](#)
- > [Beverage Service Training and Related Practices](#)
- > [Keg Registration](#)

Transportation

- > [Open Containers of Alcohol in Motor Vehicles](#)
- > [Vehicular Insurance: Losses due to Intoxication](#)

Underage Drinking

- > [False Identification for Obtaining Alcohol](#)
- > [Furnishing Alcohol to Minors](#)
- > [Minimum Ages for Off-Premises Sellers](#)
- > [Minimum Ages for On-Premises Servers and Bartenders](#)
- > [Possession/Consumption/Internal Possession of Alcohol](#)
- > [Prohibitions Against Hosting Underage Drinking Parties](#)
- > [Underage Purchase of Alcohol](#)
- > [Use/Lose: Driving Privileges](#)

Cannabis Policy Topics

Detailed policy information is available on the [Recreational Use of Cannabis](#).

In addition, APIS has developed the [Cannabis Policy Taxonomy](#) (CPT), an inventory and taxonomy of cannabis policies.

Recently Adopted

Information is available on states that have [recently adopted laws](#) legalizing the recreational use of cannabis since the most recent update of this website.

Features covered by APIS

- Regulatory agency
 - Products permitted
 - Maximum amount cultivated
 - Retail sales conditions
 - Pricing controls
 - Taxation
 - Underage prohibitions
 - Impaired driving
 - Local authority
-



PDAPS

Prescription Drug Abuse Policy System



A source of rigorous legal data for researchers and detailed policy information for the public.

PDAPS is funded by the National Institute on Drug Abuse to track key state laws related to prescription drug abuse. Click on any topic area to reach an interactive page where you can investigate the history and features of the law, or download data and other documentation for research.

News

Legal Science, LLC
@LegalScienceLLC
Check out the latest developments with Good Samaritan drug overdose laws with our 2018 Update
Recap blog post: legalscience.com/blog/3/. Bonus: there's a soothing time-lapse map gif. #update
Aug 24, 2018

PDAPS
@PDAPSysLLS
Update alert: As of July 1, 2018, 46 states have a Good Samaritan drug overdose law - up from 37 states in Dec. 2016. Check out the new 2018 Good Samaritan Drug Overdose Law #update at pdaps.org/
Aug 13, 2018



PDAPS
@PDAPSysLLS
Update alert: Head on over to pdaps.org and check out the 2018 Pain Management Clinic Laws update!
Aug 9, 2018



Topics



Expanded Access to Naloxone

State laws authorizing third-party prescribing and lay administration of the standard antidote to opioid overdose.

Naloxone Overdose Prevention Laws



Medical Marijuana

State laws and regulations governing the production, transport, sale, quality and consumption of marijuana for therapeutic purposes.

Medical Marijuana Caregiver Rules

Medical Marijuana Dispensaries

Medical Marijuana Laws for Patients

Medical Marijuana Product Safety



Prescription Drug Monitoring Program

State laws and regulations governing the operation and use of programs tracking prescription and dispensing of controlled substances.

PDMP Access and Registration

PDMP Administration

PDMP Implementation Dates

PDMP Reporting and Authorized Use



Good Samaritan 911 Immunity

State laws providing protection from criminal sanctions to overdose victims or witnesses who seek emergency services.

Good Samaritan Overdose Prevention Laws



Opioid Related Controls

State laws and regulations on various legal mechanisms used to control access to opioids.

Direct Dispensing of Controlled Substances Laws

Opioid Prescribing Guidelines for Acute and Emergency Care

Pain Management Clinic Laws



Related Topics

Databases on related drug law topics that provide an overview of the state laws and regulations governing these domains

Drugged Driving Laws

Medication-Assisted Treatment with Methadone (MAT) Laws

Recreational Marijuana Laws

Features covered by PDAPS

- Regulatory agency
 - Minimum age
 - Product testing
 - Out of state residents
 - Amount purchased or possessed
 - Number of plants possessed
 - Impaired driving
 - License to cultivate
 - Retail licenses
 - Taxation
-

Main Takeaway



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III. Research Opportunities

Department of Health and Human Services

Part 1. Overview Information

Participating Organization(s)	National Institutes of Health (NIH)
Components of Participating Organizations	National Institute on Alcohol Abuse and Alcoholism (NIAAA) National Institute on Drug Abuse (NIDA) National Cancer Institute (NCI)
Funding Opportunity Title	Public Policy Effects on Alcohol-, Marijuana-, and Other Substance-Related Behaviors and Outcomes (R01)
Activity Code	R01 Research Project Grant
Announcement Type	Reissue of PA-11-087
Related Notices	<ul style="list-style-type: none"> • NOT-OD-18-009 - Reminder: FORMS-E Grant Application Forms and Instructions Must be Used for Due Dates On or After January 25, 2018. • September 20, 2017 - Updates to Active Funding Opportunity Announcements to Prepare for Policy Changes Impacting Due Dates On or After January 25, 2018. See NOT-OD-17-114. • July 18, 2017 - Notice of NCI's Participation on PA-17-135. See Notice NOT-CA-17-069. • May 10, 2017 - New NIH "FORMS-E" Grant Application Forms and Instructions Coming for Due Dates On or After January 25, 2018. See NOT-OD-17-062. • March 20, 2017 - Notice of Participation in PA-17-135. See Notice NOT-DA-17-010.
Funding Opportunity Announcement (FOA) Number	PA-17-135



Part 1. Overview Information

Participating Organization(s)

National Institutes of Health ([NIH](#))

Components of Participating Organizations

National Institute on Alcohol Abuse and Alcoholism ([NIAAA](#))
National Institute on Drug Abuse ([NIDA](#))

Funding Opportunity Title

Alcohol and Other Drug Interactions: Unintentional
Injuries and Overdoses: Epidemiology and Prevention
(R01 - Clinical Trial Optional)

Activity Code

[R01](#) Research Project Grant

Announcement Type

New

Related Notices

None

Funding Opportunity Announcement (FOA) Number

PA-18-863

Thank you!

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