

# Youth

## Marijuana Webinar Series Part 2: The Impact of Legalization on Youth



January 23, 2018



# Youth



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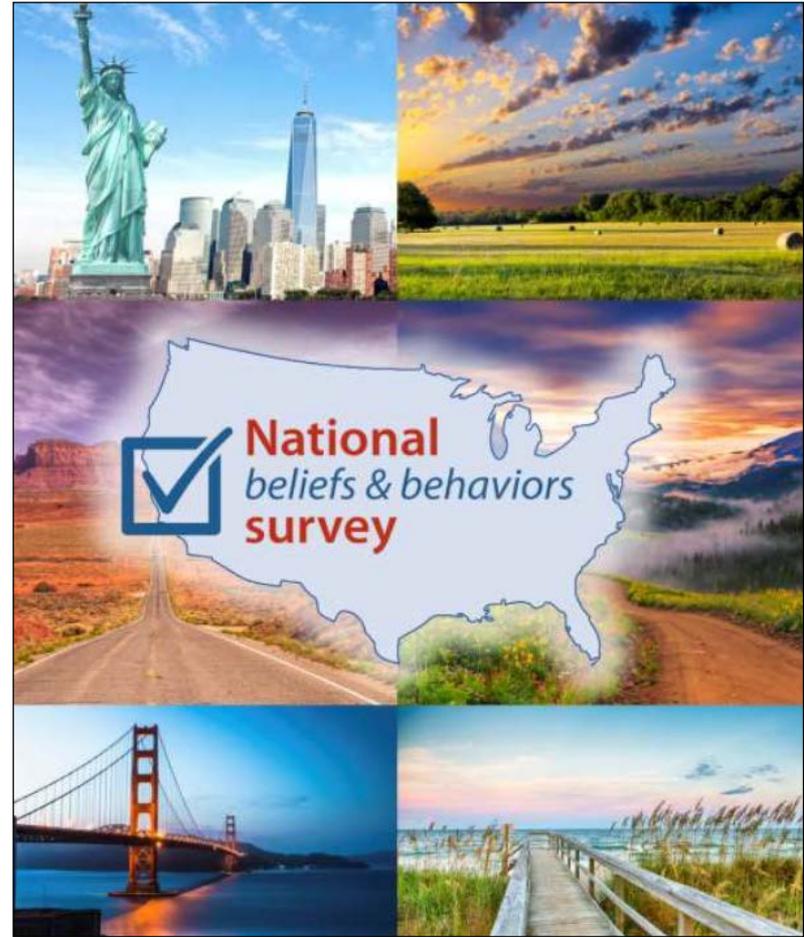
# RTI National Marijuana Survey

## Methods

- 7,000 adults
- Conducted in 2016–2017
- Recruitment: address-based sample & social media
- Data collection: mail & online

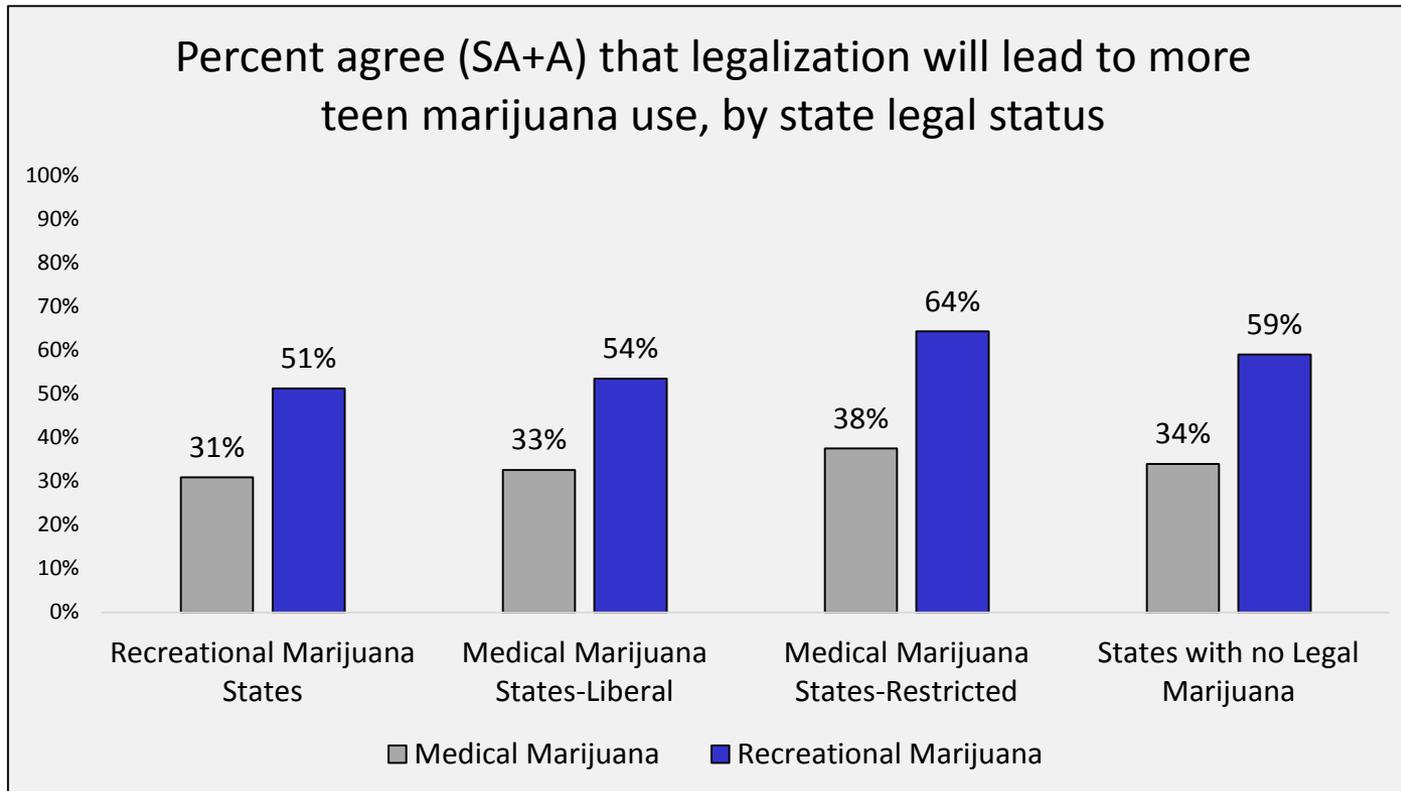
## Measures

- Beliefs, risk perceptions, support for legalization
- Marijuana sources
- Intention to use, or resume use
- Co-use with other substances
- Permit analysis of differences across the legal spectrum



# Perceived Impact of Legalizing Medical and Recreational Marijuana on Youth Use

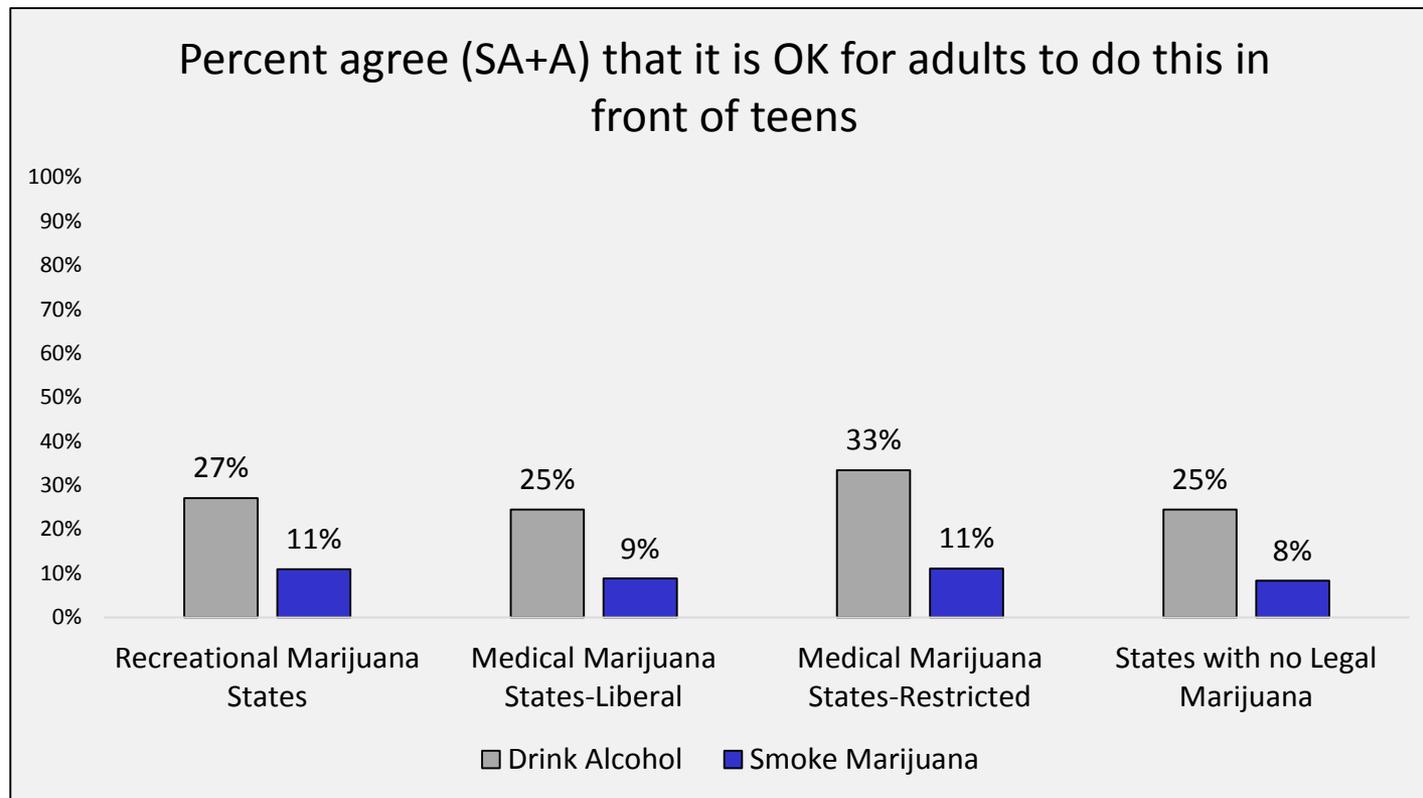
- Regardless of the legal status of marijuana in one's state, most adults believe legalizing recreational marijuana will lead to an increase in teen use.
- Fewer believe medical marijuana will lead to an increase in teen use.



RTI National Marijuana Survey, n=6790

# Perceived Impact of Legalizing Recreational Marijuana on Youth Use

- Nationwide, and regardless of state marijuana laws, it is more socially acceptable for adults to drink alcohol in front of teens than to smoke marijuana in front of them.



RTI National Marijuana Survey, n=6794

# Youth

## Poll Question #1

# Julia Dilley, PhD

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Department



Youth

# Oregon Legalization and Youth: Marijuana Use, Knowledge, Attitudes, and Harms

A public health perspective

Julia Dilley

Oregon Public Health Division

January 23, 2018

Oregon  
Health  
Authority

# Youth

## Objectives

Increase knowledge about cannabis regulation in Oregon and associated changes in youth:

1. Cannabis use, knowledge, and attitudes
2. Advertising and messaging exposure
3. Adverse health events
4. Criminal justice



# For more Oregon data

## Oregon Marijuana & Health Report, December 2016

<https://apps.state.or.us/Forms/Served/1e8509b.pdf>

- Multiple reports with similar covers—Google “Oregon marijuana health report” and pick the one from December 2016
- *New report being released in early 2018*



# Youth

**What happened in Oregon  
as part of marijuana  
(cannabis) legalization?**



# Youth

## Legalization Details

Oregon was one of four first states to “legalize”

- Washington State and Colorado were first (2012)
- Oregon and Alaska followed (2014)
- Other states have legalized since

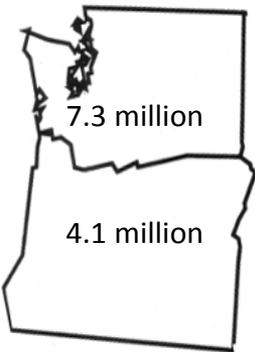
“Legalize” means decriminalization + opening a regulated market for sales

- In Oregon, possession/sales are legal for people ages 21+
- Youth possession/use and impaired driving remain illegal

# Oregon's Cannabis Policy Journey

Youth

## WASHINGTON



Medical Marijuana Legalized (I-692)

1998

Medical Marijuana Legalized (Measure 67)

## OREGON

11/6/12  
Voters pass recreational cannabis decriminalization, legalization (I-502)

12/6/12  
Decriminalization implemented

2012

2013

7/1/14  
Retail cannabis market opens (limited product availability)

2014

3/19/14  
Medical dispensary oversight implemented

11/4/14  
Voters pass recreational cannabis decriminalization, legalization (M91)

2015

7/1/15  
Recreational cannabis decriminalization implemented

10/1/15  
Limited retail sales begin in existing medical dispensaries (usable/flower only)

1/6/16  
Increased cap on retail sales licenses to 556

6/30/16  
Unlicensed dispensaries completely closed

2016

6/2/16  
Limited retail sales of edibles, concentrates begins

11/1/16  
Retail market opens

12/31/16  
Medical dispensaries no longer allowed to sell retail cannabis

# Youth

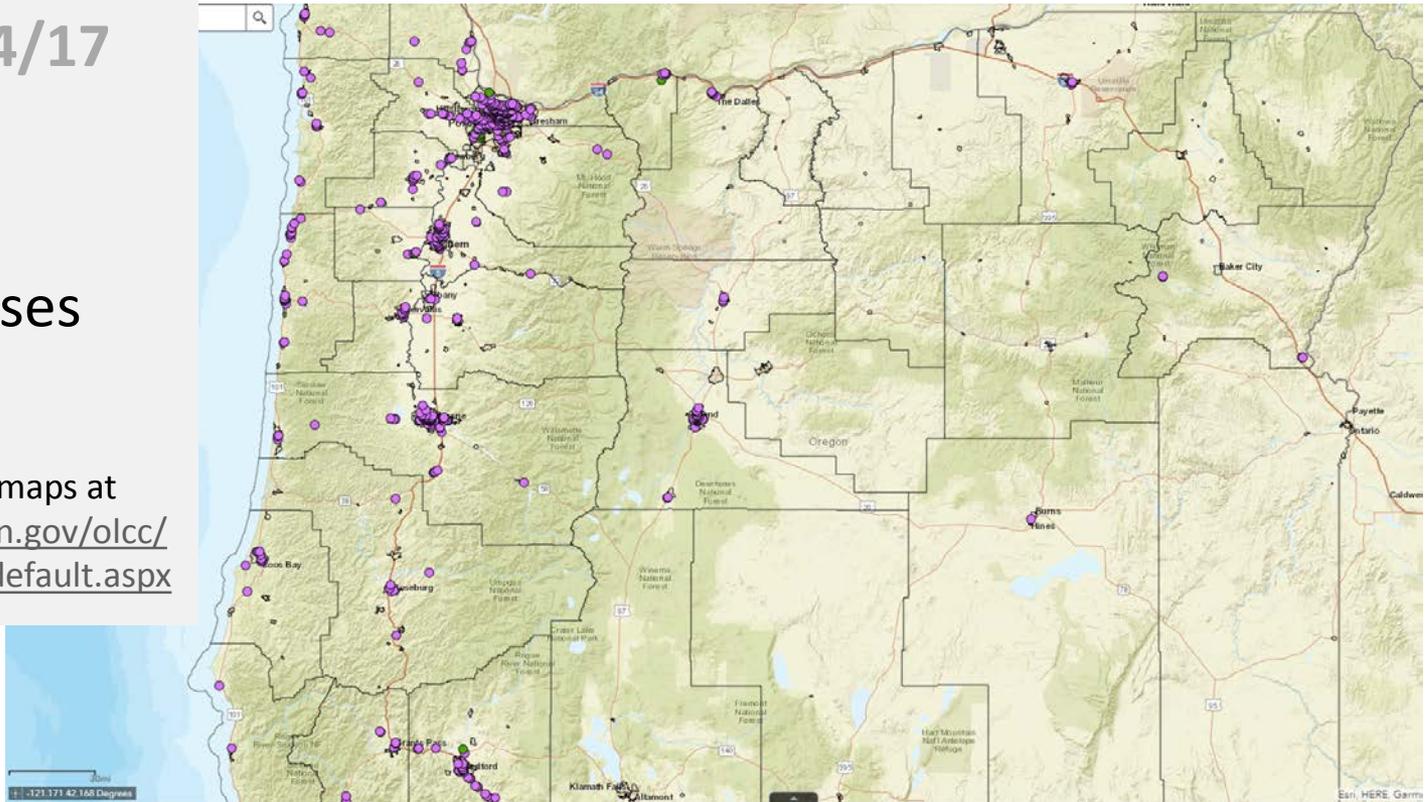
## Current Licensed Retailers

As of 11/14/17

**505**

Retail licenses  
in Oregon

Access interactive maps at  
<http://www.oregon.gov/olcc/marijuana/Pages/default.aspx>



# Youth

How has youth marijuana use changed since legalization in Oregon?



# Oregon's School-Based Youth Surveys

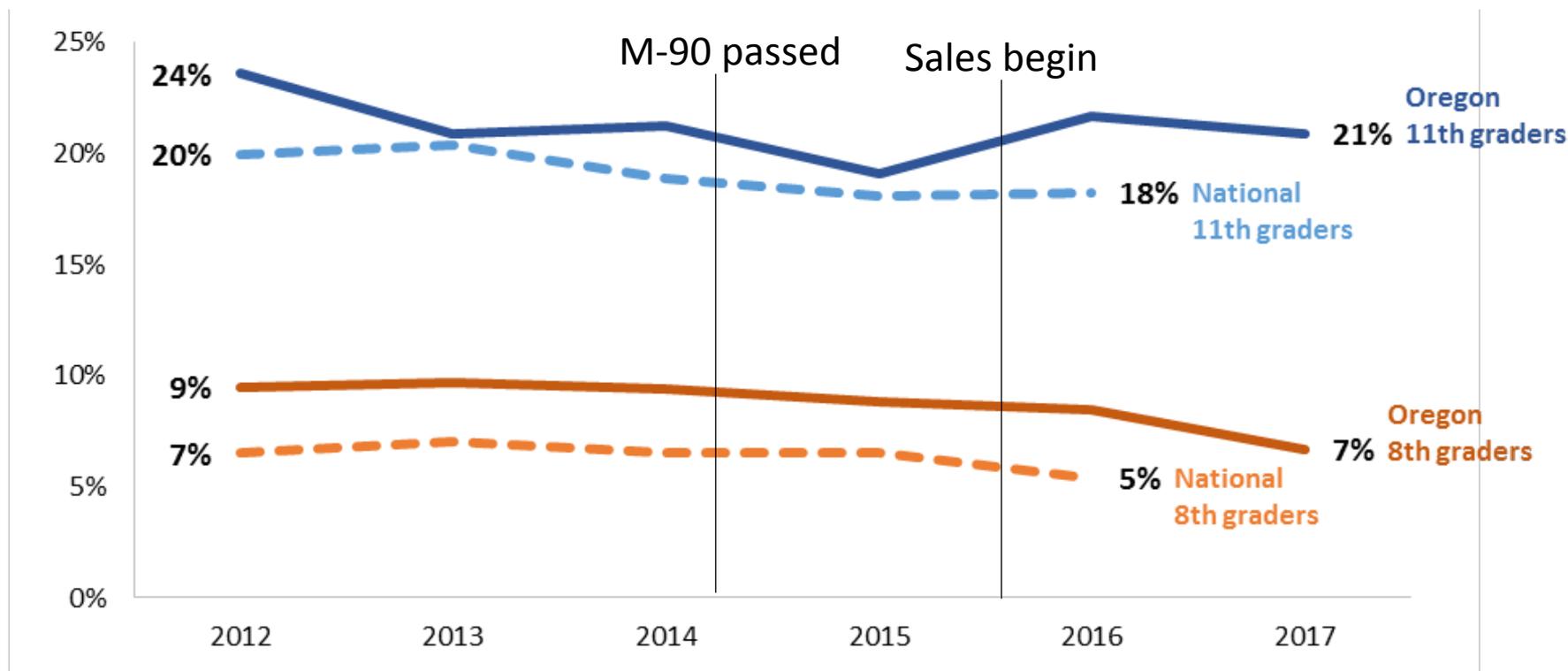
- Classroom-based surveys of Oregon's 8th and 11th graders
- Both led by state agencies
- Some questions are identical (e.g., 30-day marijuana use), but some are on only one survey (e.g., perceived parent disapproval)
  - **Oregon Healthy Teens (2017 vs. 2015)**
    - Content similar to Youth Risk Behavior Survey (YRBS)
    - Spring of even-numbered years
  - **Student Wellness Survey (2016 vs. 2014)**
    - Content similar to "Communities that Care," more emphasis on risk and protective factors
    - Spring of odd-numbered years



# Youth

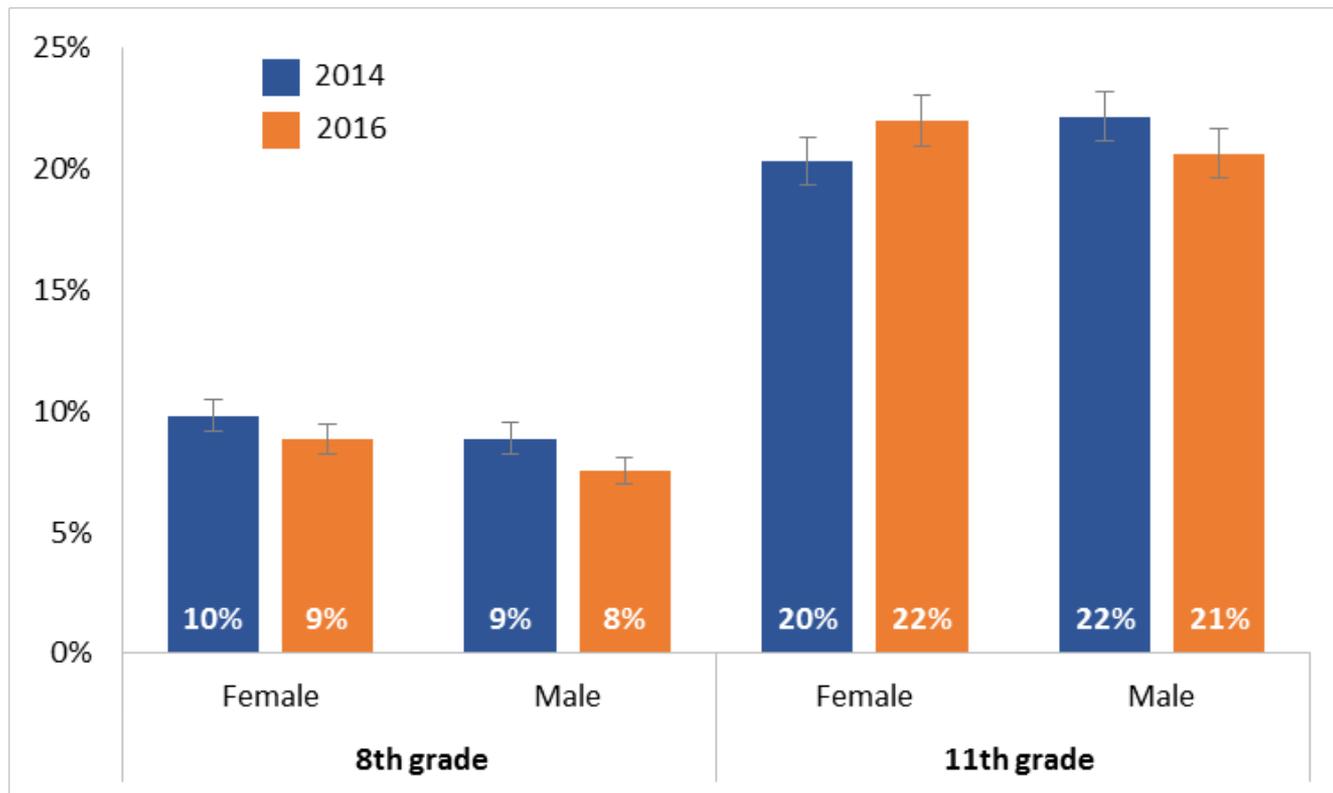
## Current marijuana use among youth over time, 2012–2017

Marijuana use has remained fairly stable over time in Oregon and nationally



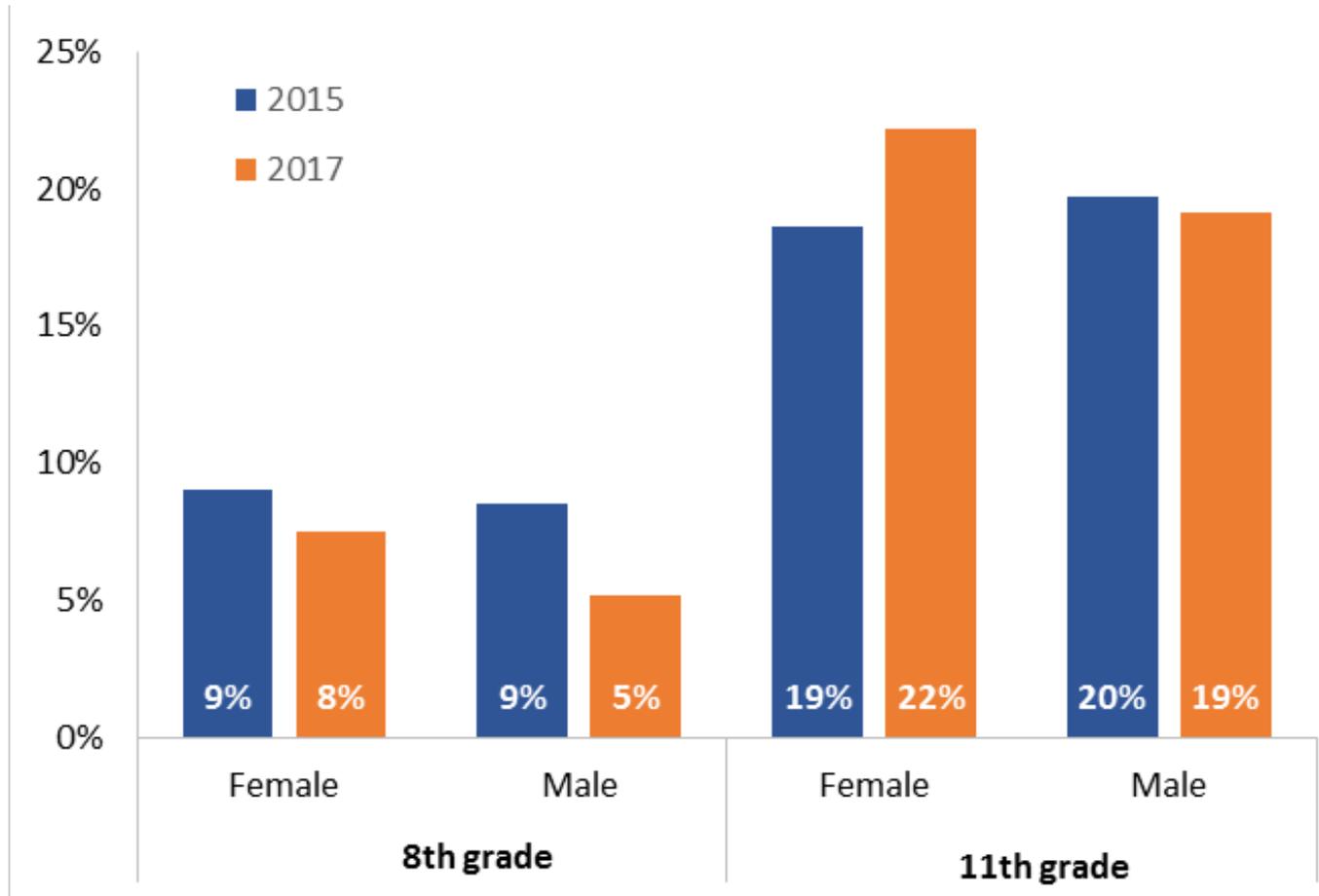
# Youth

## Current marijuana use among youth by grade and gender, 2014 & 2016 (SWS)



# Youth

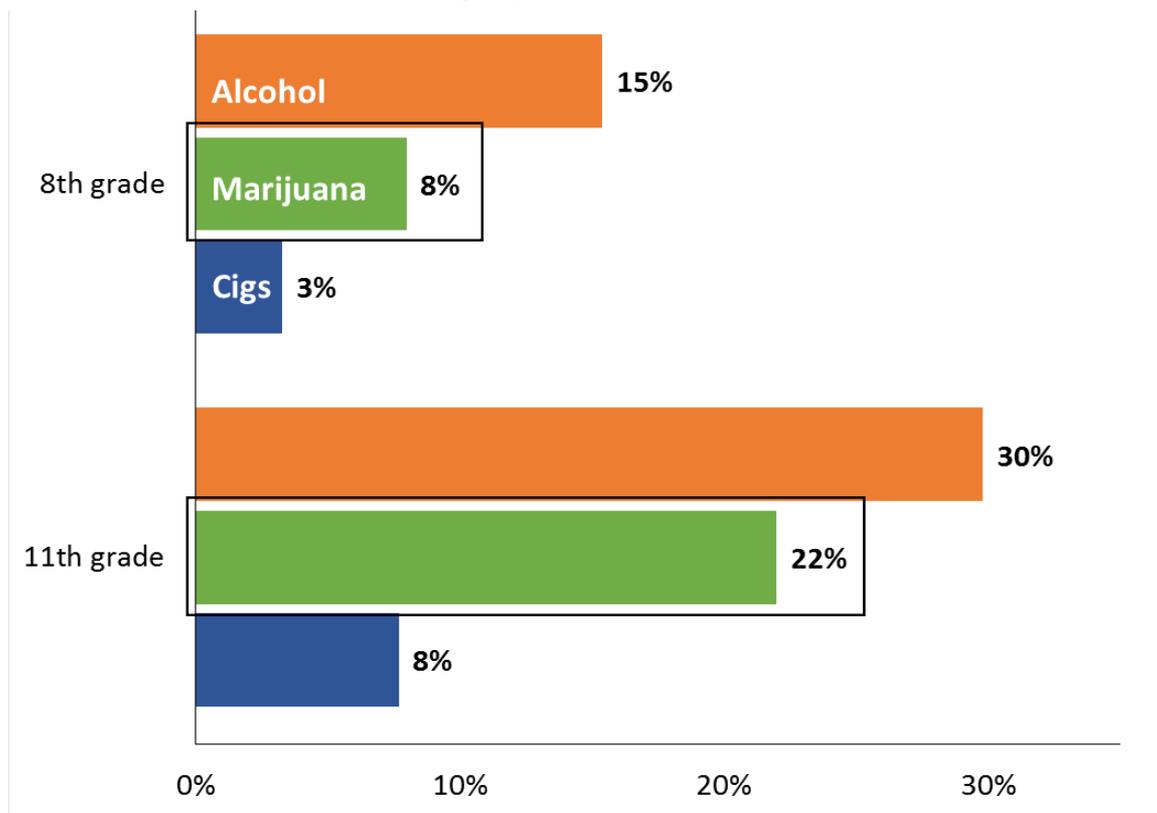
## Current marijuana use among youth by grade and gender, 2015 & 2017 (OHT)





# Youth

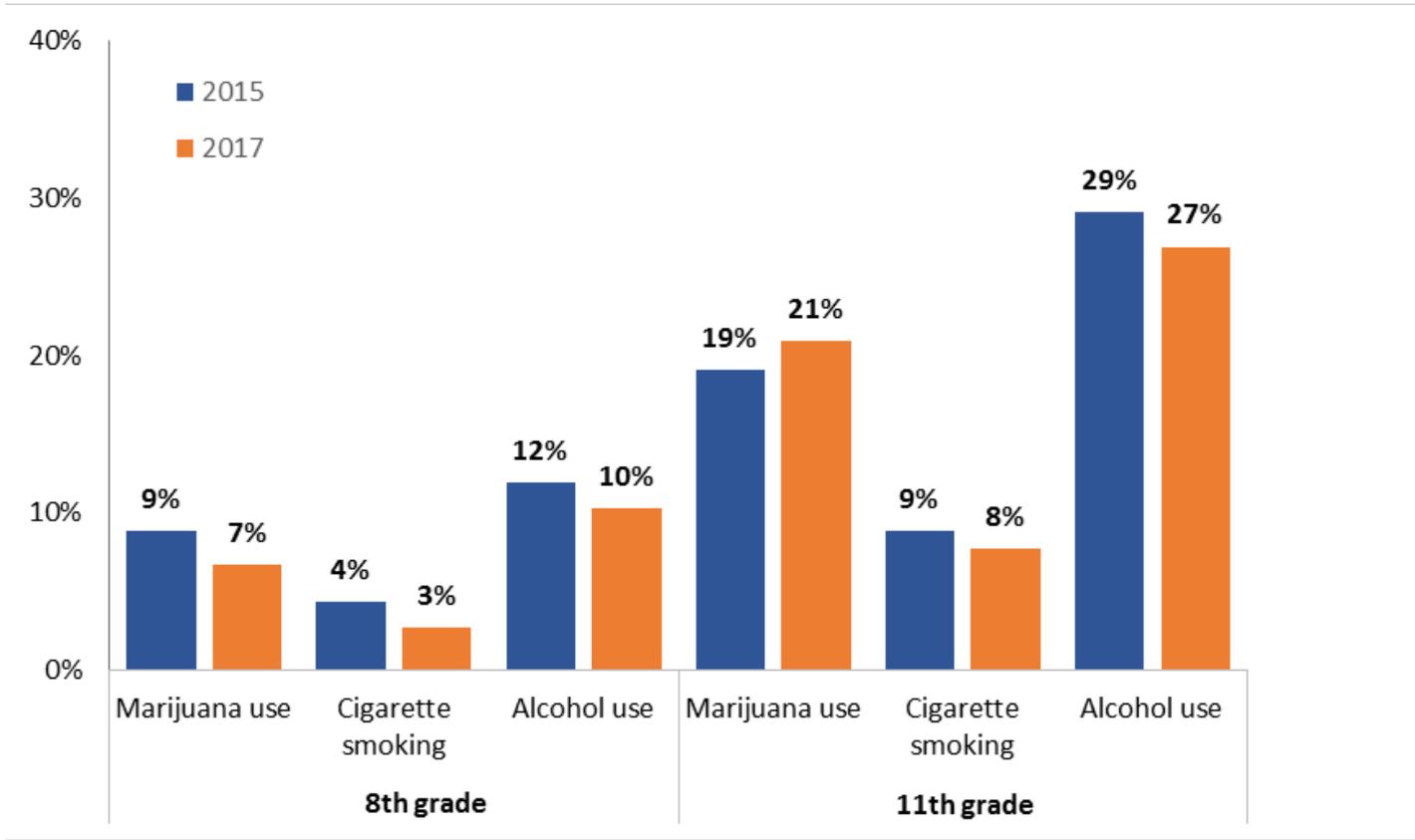
## Current use of marijuana, cigarettes, and alcohol among youth, 2016





# Youth

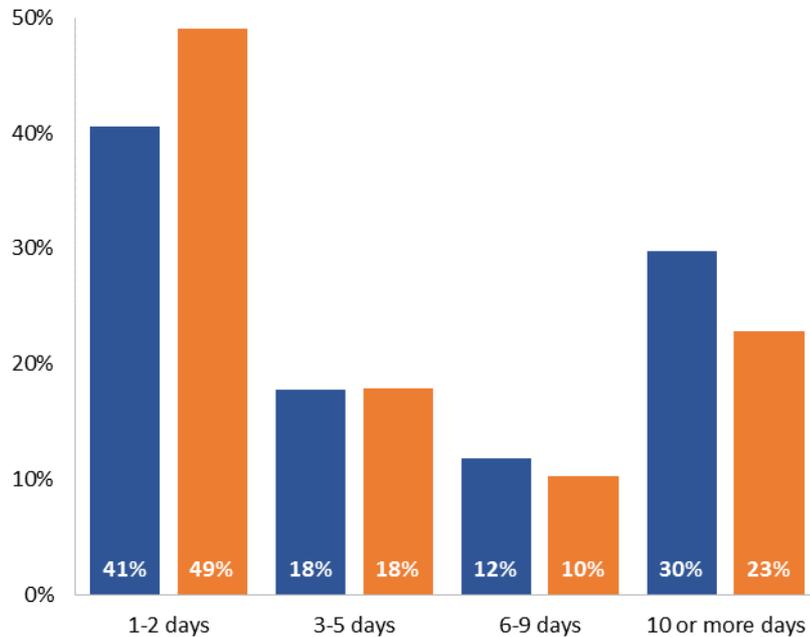
## Current use of marijuana, cigarettes, and alcohol among youth, 2015 & 2017



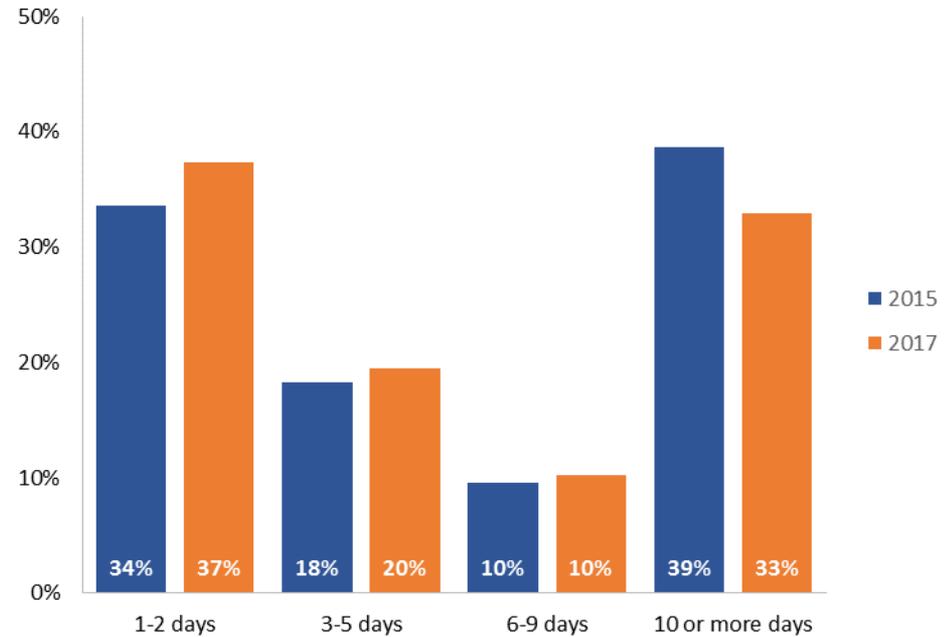
# Youth

## Frequency of use in past month, among youth users, 2015 & 2017

### 8<sup>th</sup> grade



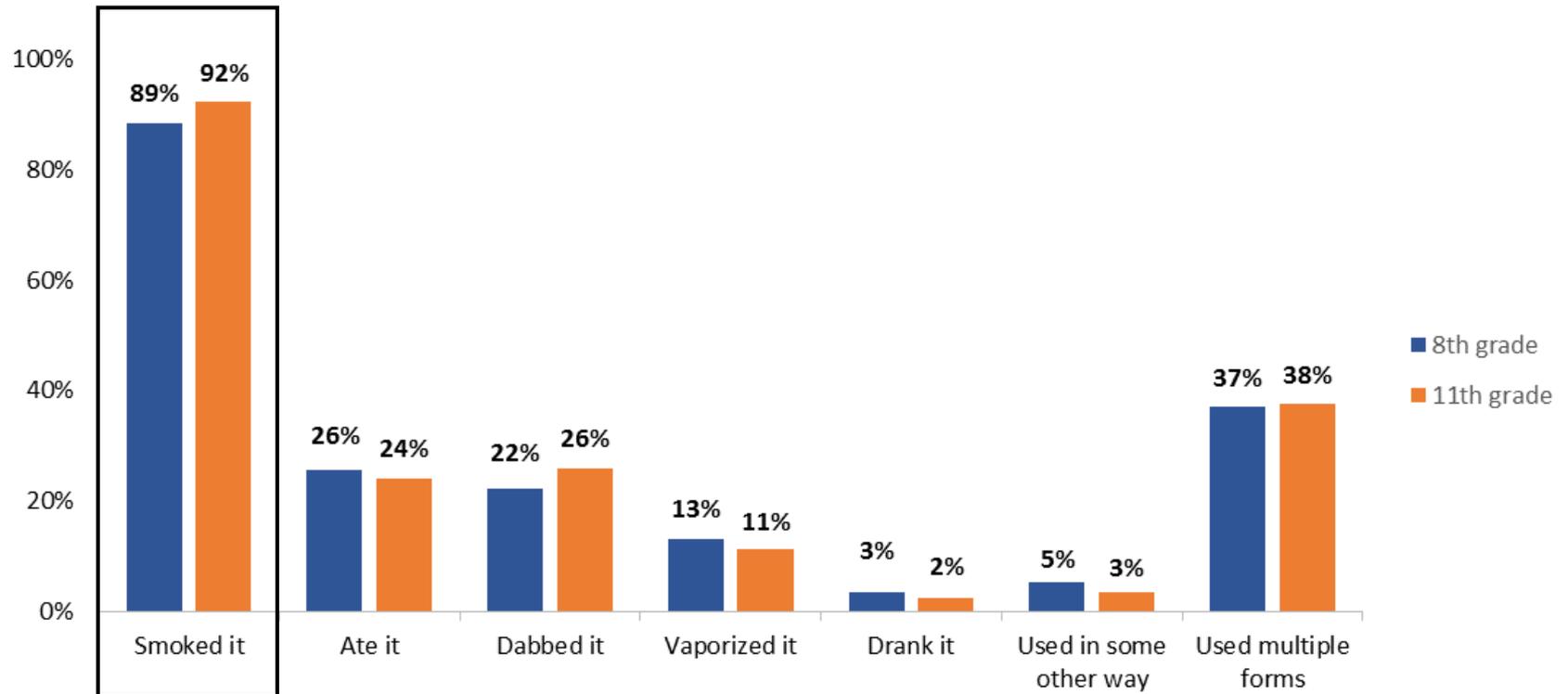
### 11<sup>th</sup> grade





# Youth

## Method of marijuana use among youth current users, by grade, 2017



# Youth

**Are risk factors for youth  
cannabis use changing since  
legalization?**



# Youth

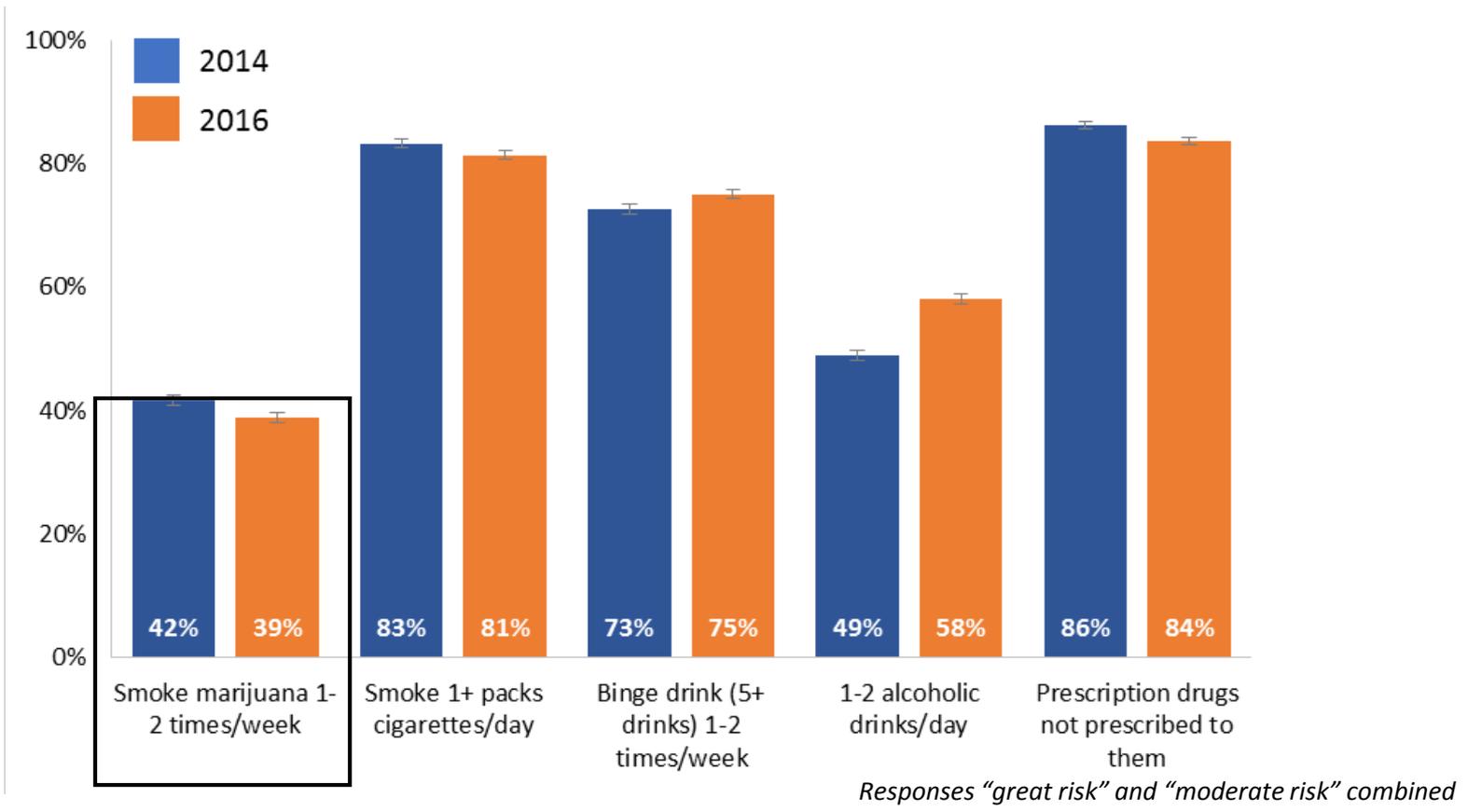
## Risk Factors

- Perceived harm
- Perceived access
- Peer norms
- Parent disapproval
- Media messaging



# Youth

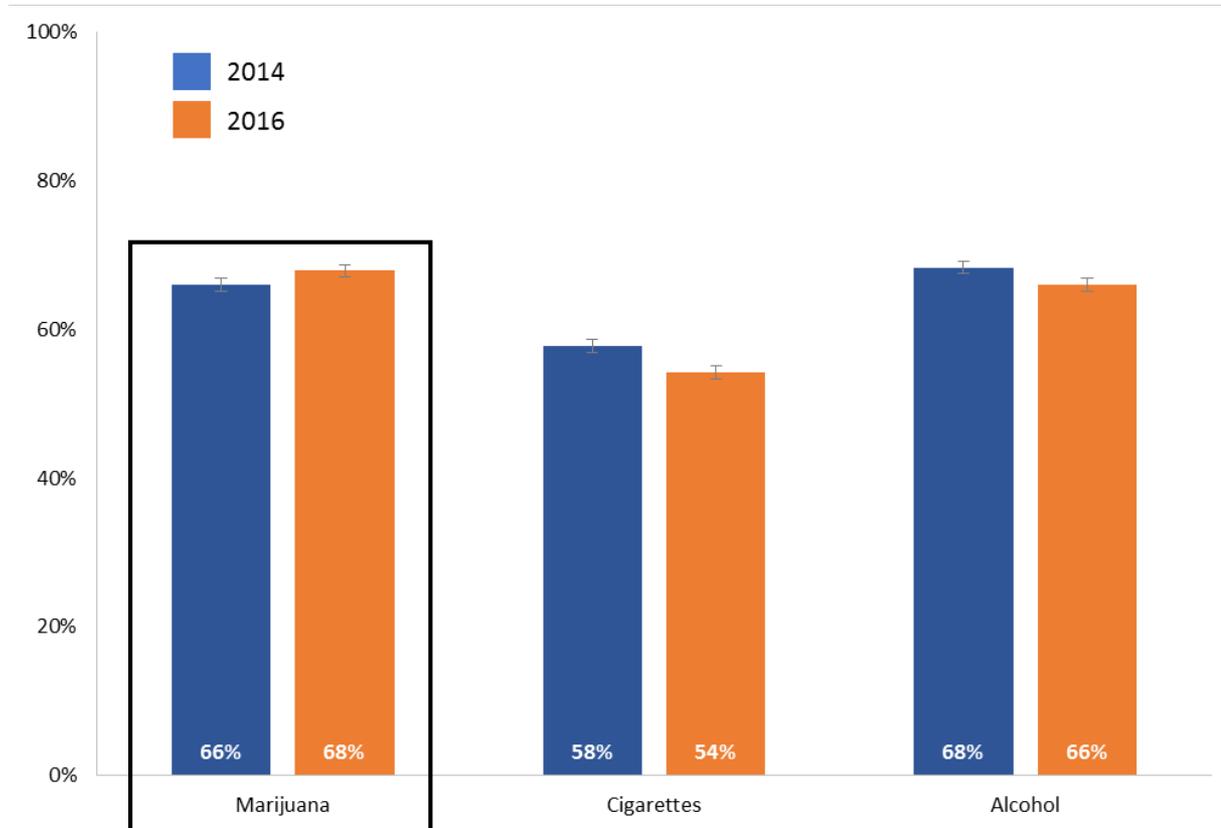
## Oregon 11th graders who think using select substances is harmful, 2014 & 2016





# Youth

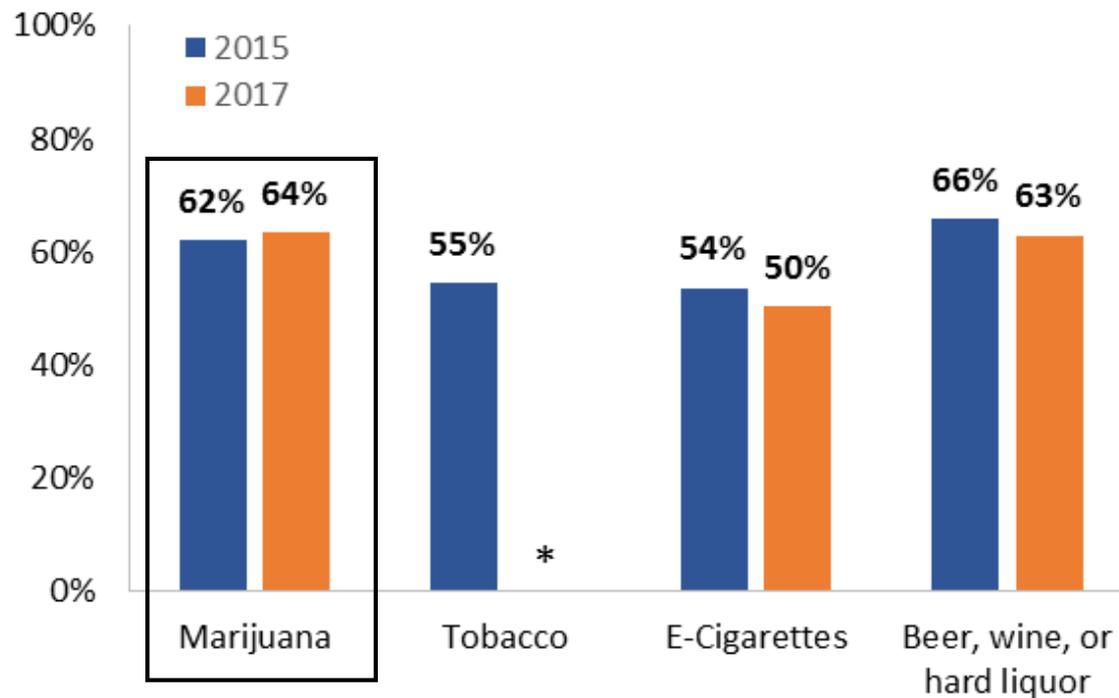
## Oregon 11th graders who think selected substances are easy to get, 2014 & 2016





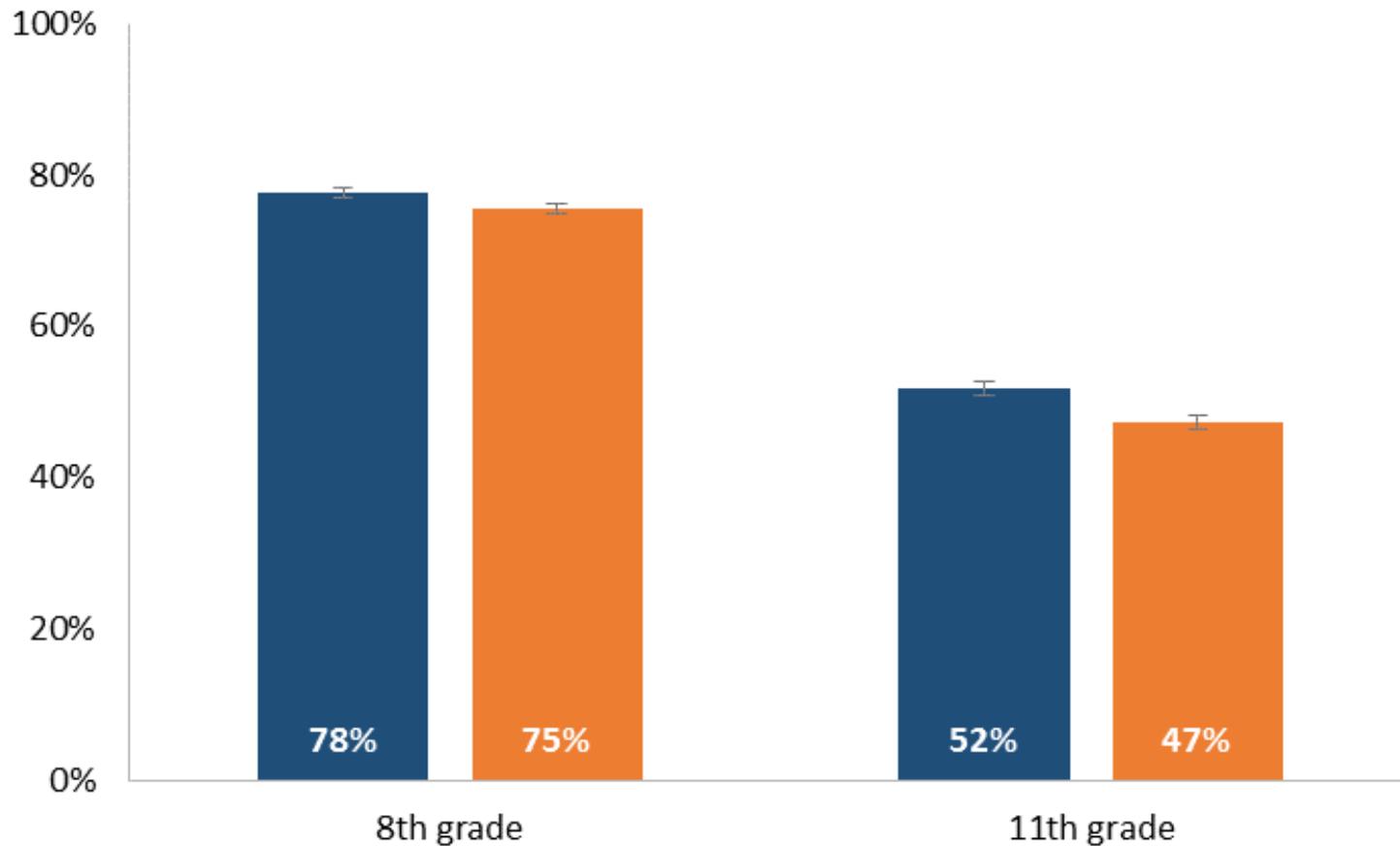
# Youth

## Oregon 11th graders who think selected substances are easy to get, 2015 & 2017

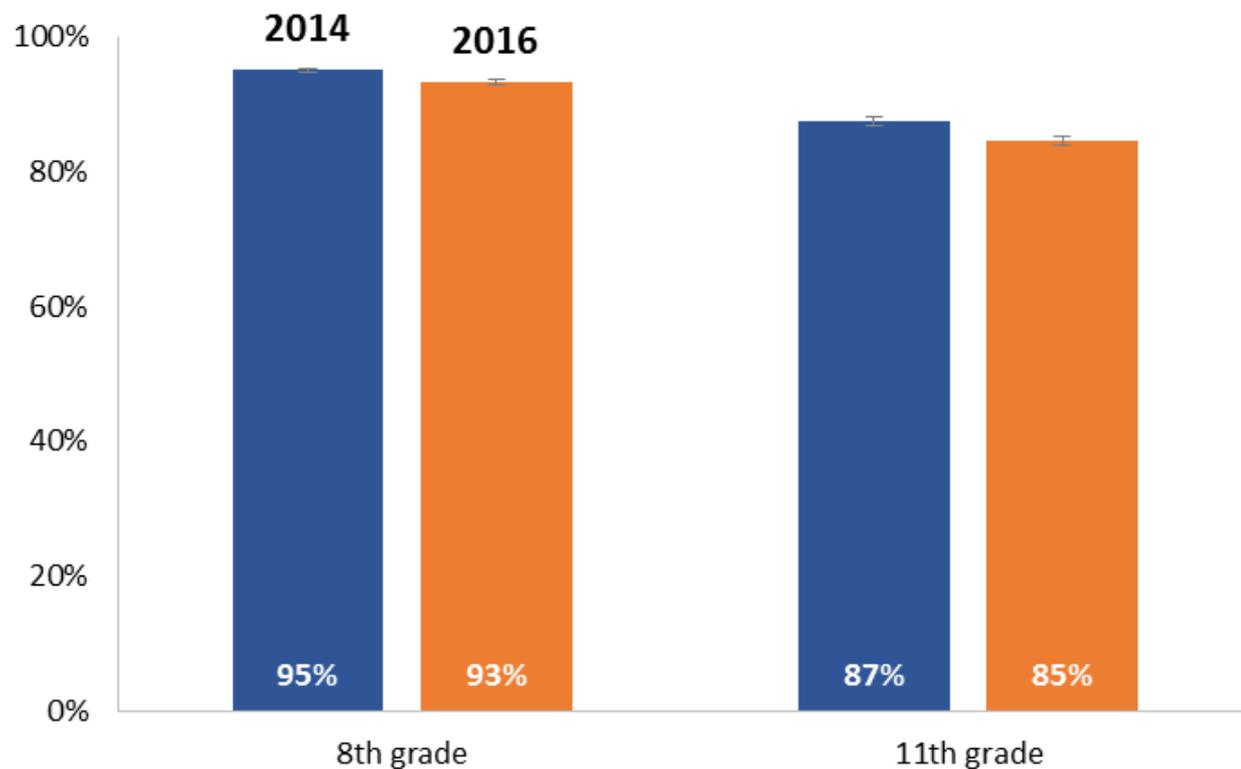


\* Question not asked in 2017

# Youth who think their friends would disapprove if they used marijuana, 2014 & 2016

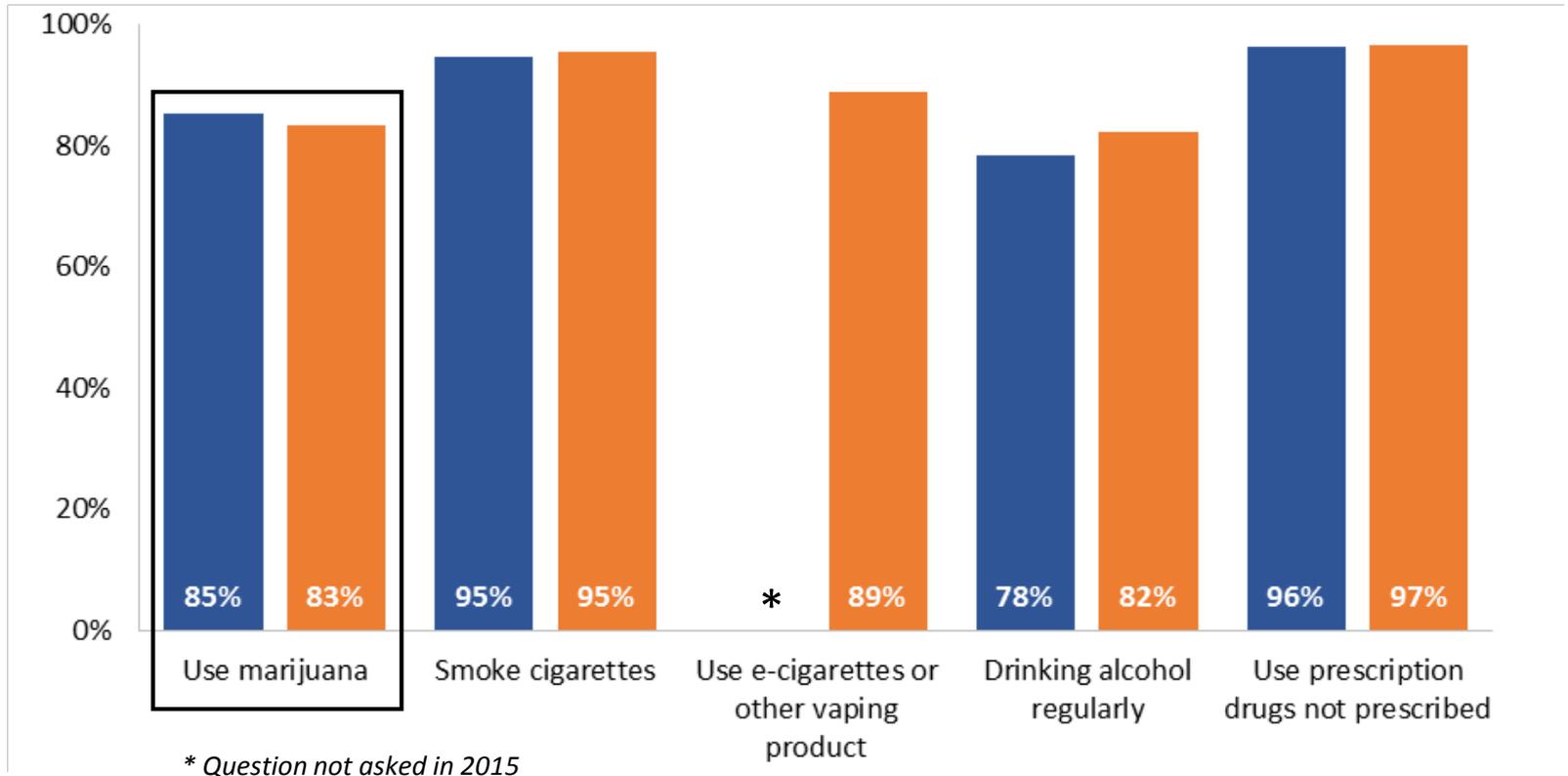


# Youth who think their parents would disapprove if they used marijuana, 2014 & 2016



# Youth

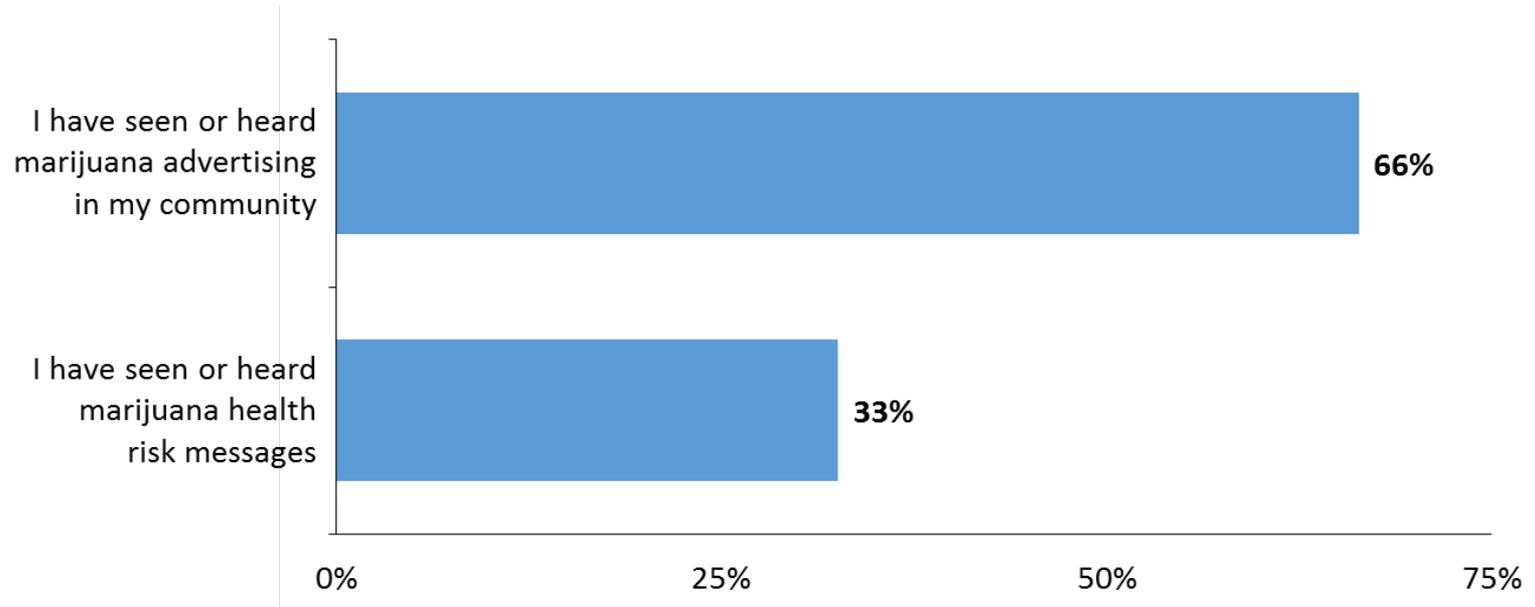
## Oregon 11th grade youth who think their parents would disapprove if they used a substance, 2015 & 2017





# Youth

## Adult exposure to marijuana stores and advertising in their communities, 2017





# Youth

## Examples of cannabis advertising





# Youth

Portland, Oregon

February 2017





# Youth

Portland, Oregon

Spring 2017





# Youth

Corvallis, Oregon

Fall 2017



# Youth

## Oregon youth marijuana prevention campaign



Sample campaign ad placed online, outdoors, in malls, and in print.

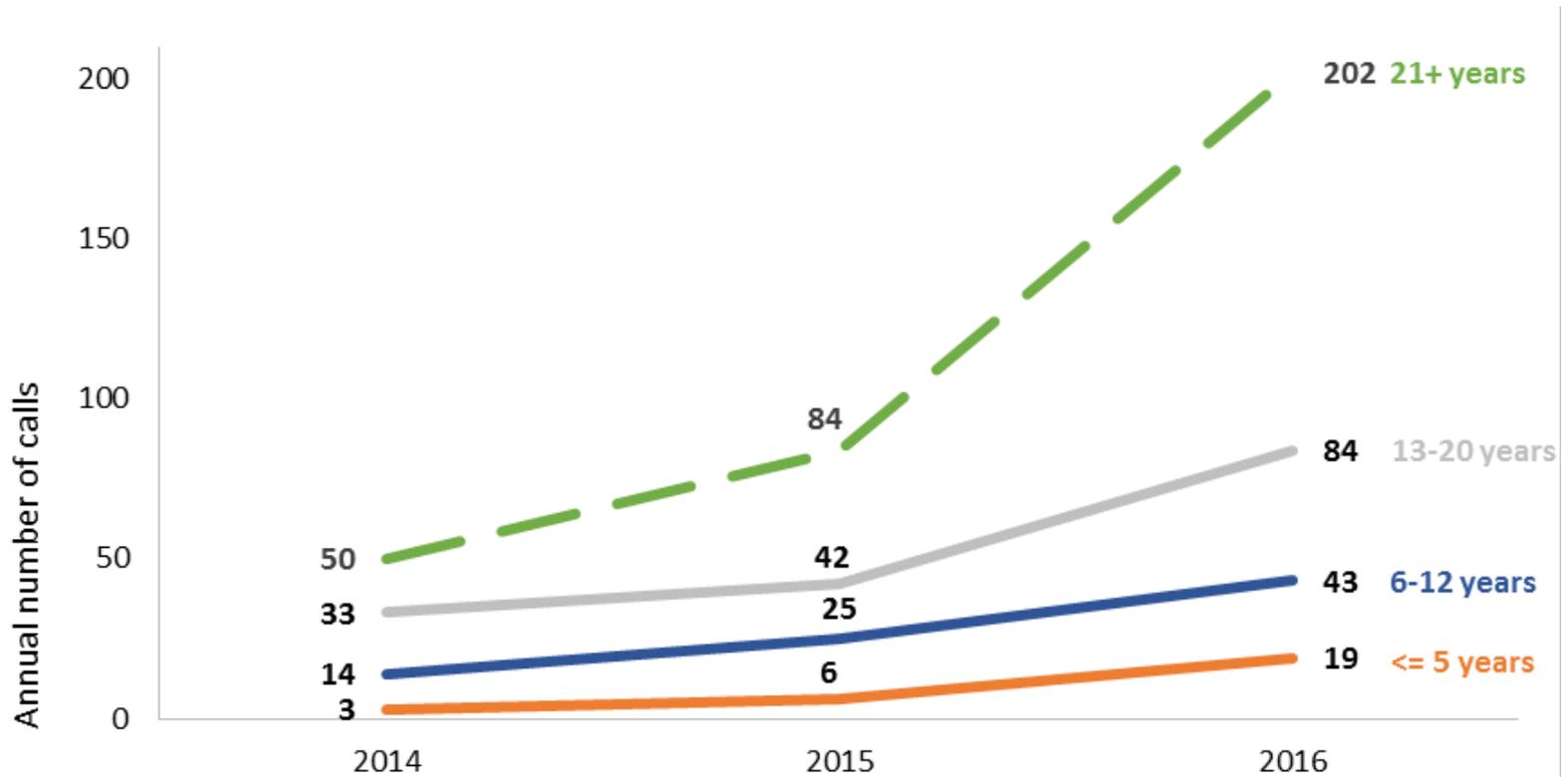
# Youth

Have there been  
adverse health  
effects among  
youth?



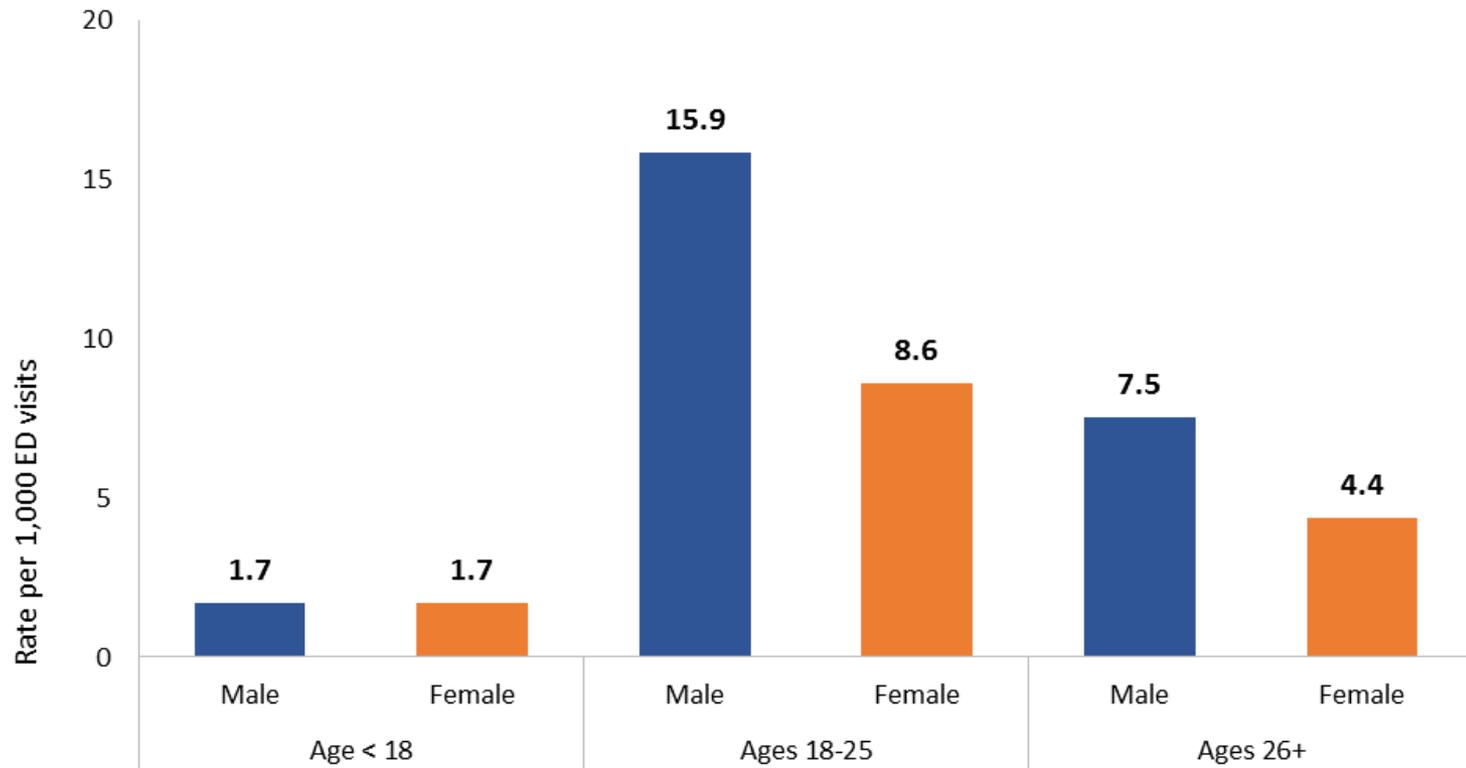
# Youth

## Annual marijuana-related Oregon Poison Center Calls, by age, 2014–2016



# Youth

## Marijuana-involved Emergency Department Visits, by age, October 2015–November 2017



<18 - 611 male and 581 female; 18-25 - 3,104 male and 2,534 female; 26+ 10,468 male and 7,535 female

# Youth

Have youth  
criminal justice  
encounters for  
marijuana  
offenses  
changed?



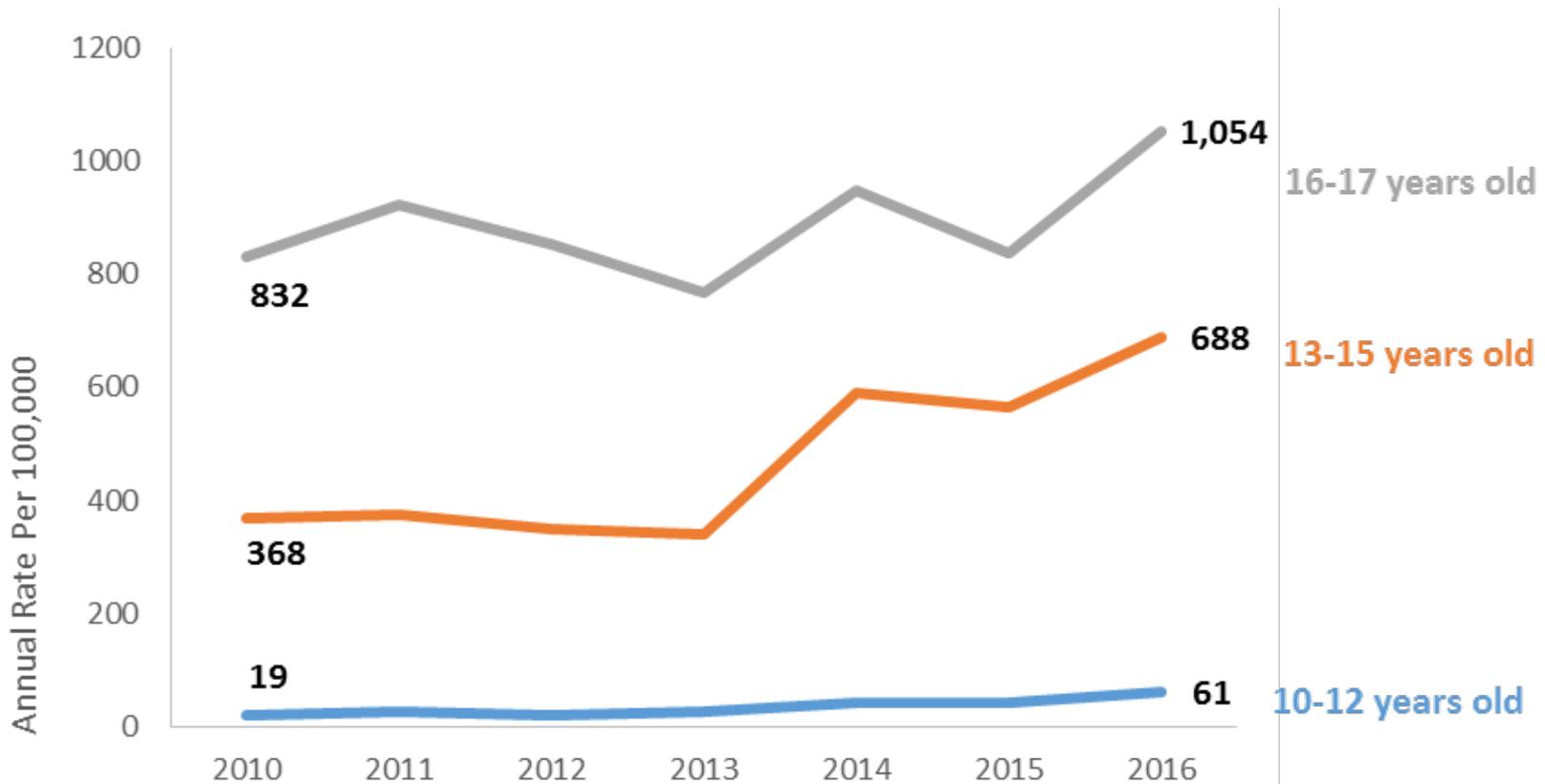
# YOUTH

## Marijuana-related youth criminal offenses

- Marijuana use and possession remain illegal for youth (<21)
- Terminology: “youth referrals” rather than arrests
- Minor in possession (<1 ounce) is not a criminal offense
- Following data are for Oregon minors <18 (ages 18-20 are referred to adult criminal justice system)

# Youth

## Annual cannabis-related referrals, by age group



# Youth

## Thank you

Feedback and thoughts always appreciated!

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Program Design & Evaluation Services  
Oregon Public Health Division & Multnomah County  
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# Youth

## Poll Question #2

**Daniel Vigil, MD, MPH**

**Marijuana Health Monitoring and  
Research Program**

**Colorado Department of Public  
Health and Environment**

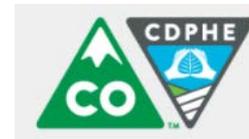


# Youth

## The Impact of Legalization on Youth: Colorado

### Topics:

- Introduction
- Accidental marijuana exposure
- Youth marijuana use
- Healthcare encounters
- Disciplinary data
- Summary





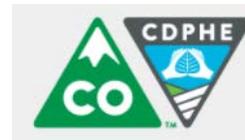
# *Introduction*

# Marijuana Health Monitoring & Research Program

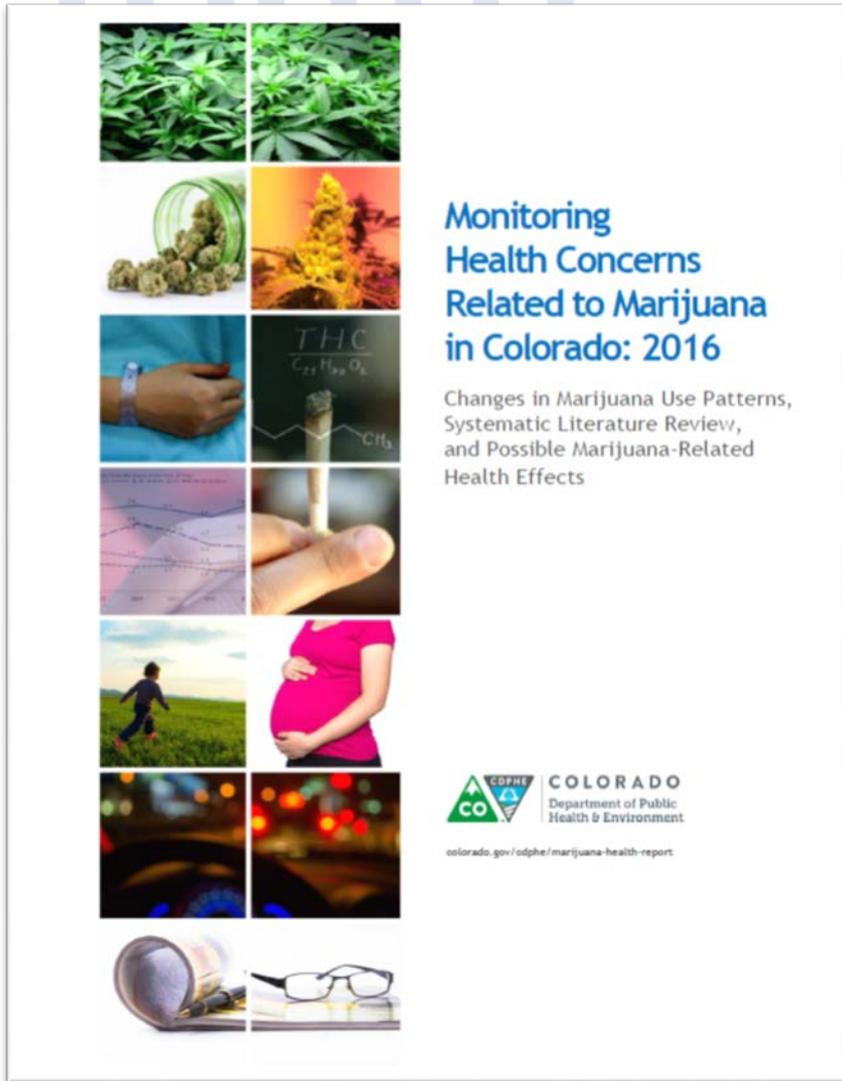
## Colorado Department of Public Health and Environment

Primary responsibilities:

1. Review existing and emerging research literature on health effects of marijuana
2. Data monitoring
  - a) Monitor health impacts
  - b) Monitor patterns of use
3. Marijuana research grants
  - a) Medical efficacy
  - b) Public health concerns

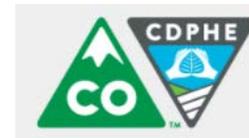


# Marijuana and Health



[www.colorado.gov/cdphe/marijuana-health-report](http://www.colorado.gov/cdphe/marijuana-health-report)

OR search  
"monitoring marijuana CO"  
and select the first link



*Accidental marijuana  
ingestion among  
young children*

According to the 2016 Child Health Survey:

- 8.3% of homes with children 1–14 years old had marijuana in or around the home
- The marijuana was not stored safely in 22% of those homes (1.8% of all homes with children)

According to National Poison Data System data:

- Marijuana exposure calls for 0–8 year olds increased from 8 in 2009 to 40 in 2016 in Colorado

According to Colorado Hospital Association data:

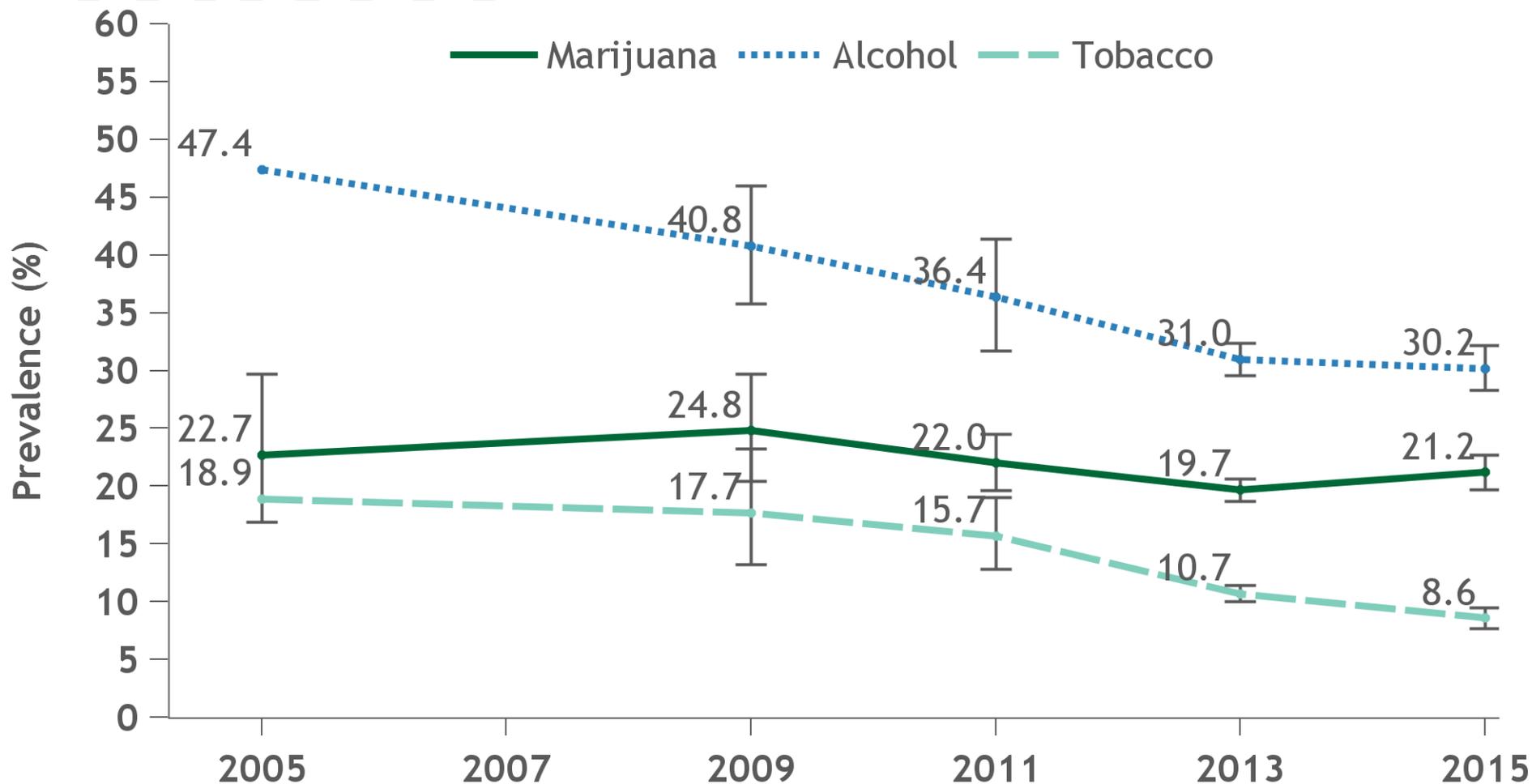
- Among hospitalizations for 0–8 year olds, the percentage that had a marijuana code increased from 0.002% in 2001–09 to 0.019% in 2014–15



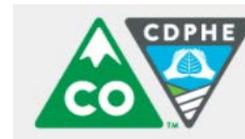


*Adolescent marijuana  
use in Colorado*

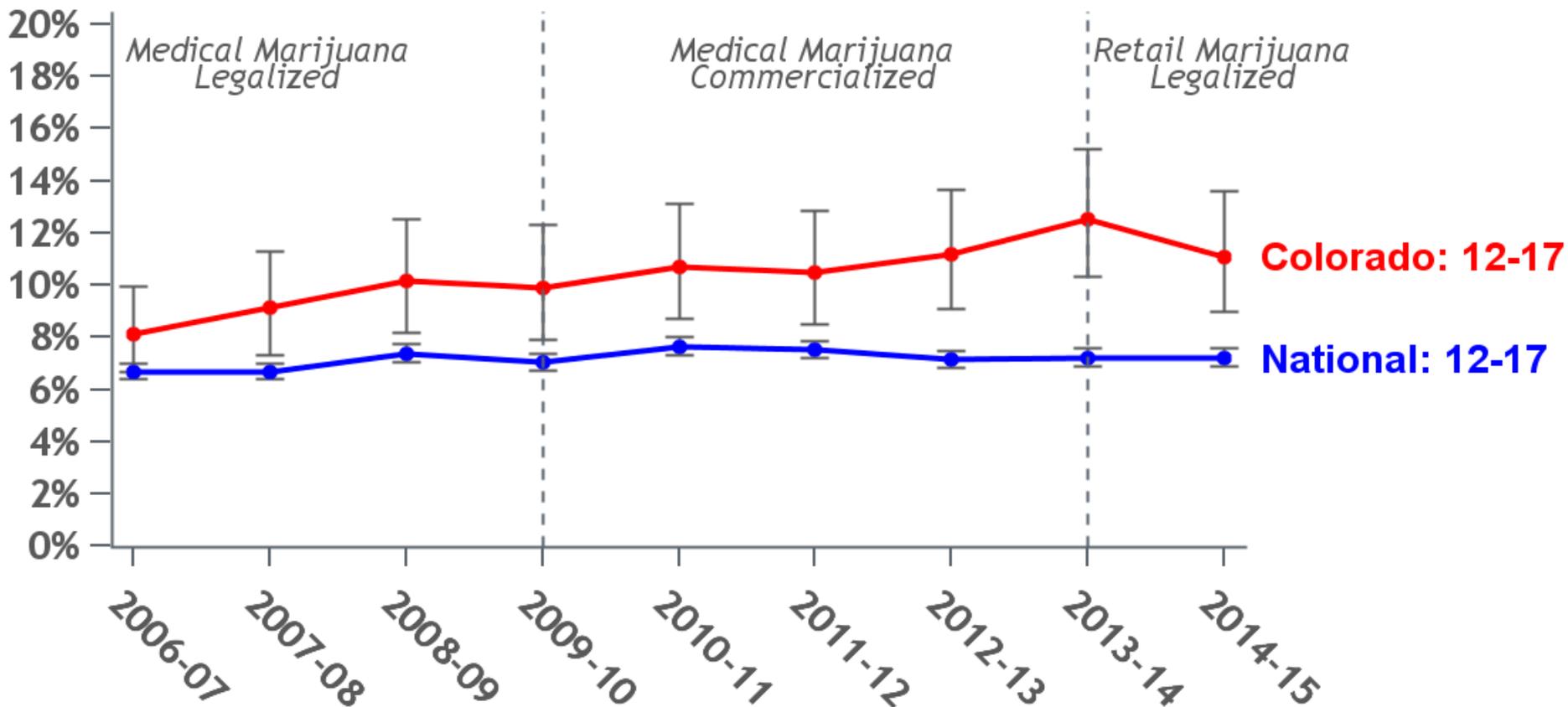
# Alcohol, marijuana, and tobacco use (past-30-day) among high school students in Colorado, 2005–2015



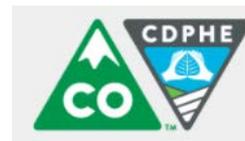
Source: Healthy Kids Colorado Survey, 2005-2015



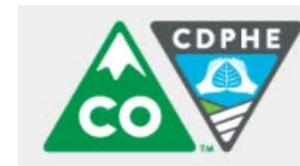
# Current marijuana use among youth age 12–17 in Colorado and U.S. (NSDUH)



Source: National Survey on Drug Use and Health, 2006-2015



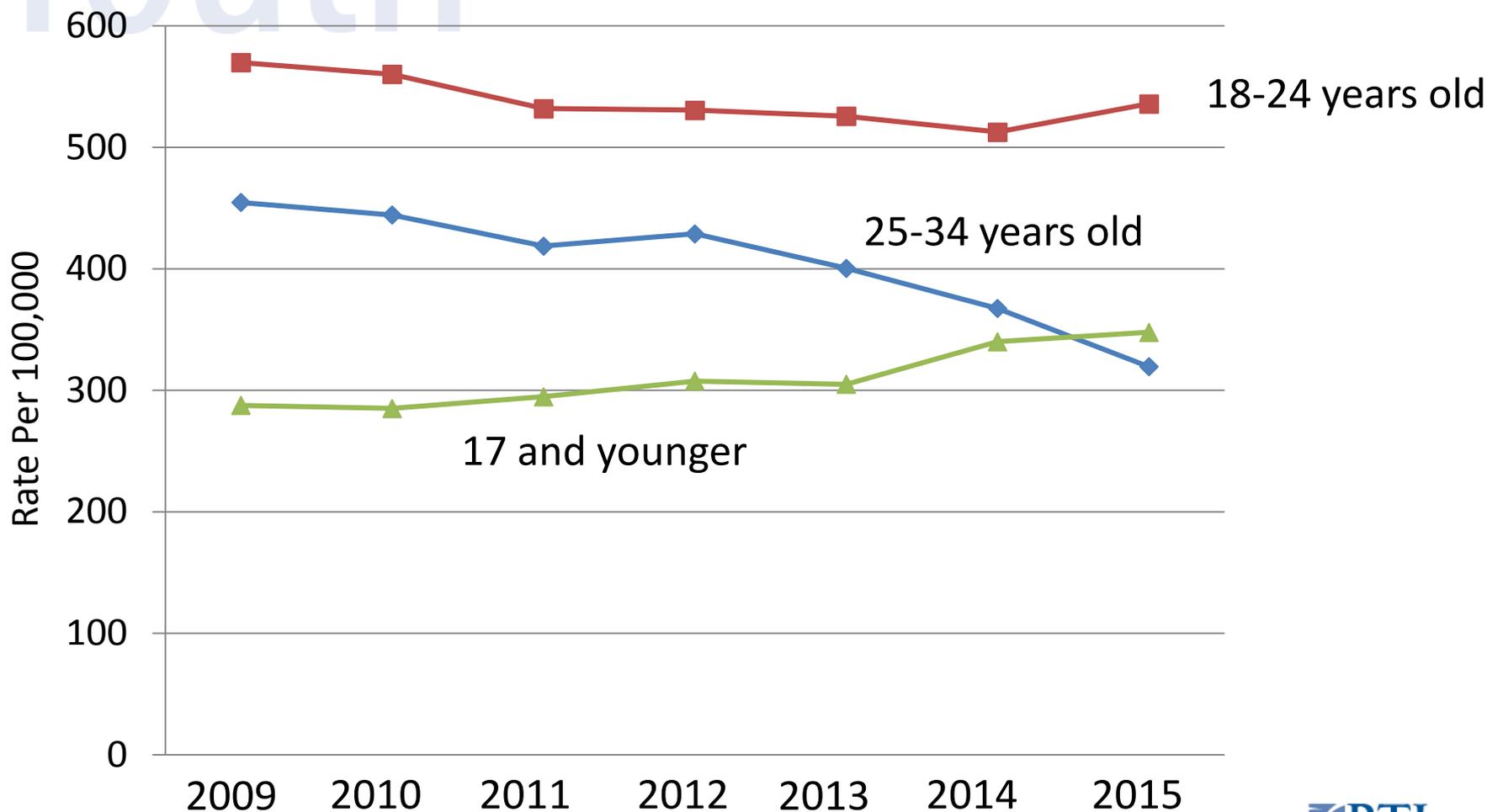
# Other aspects of high school marijuana use in Colorado



- Frequency of use has not changed over time (those using 1-2, 3-9, 10-19, 20-39 or 40+ times/month)
- Use increases with grade level, from 2.2% in 6th grade to 27.8% in 12th grade
- Use prevalence among males and females is nearly identical
- Asian students are less likely to use than blacks, whites, or Hispanics; there is no statistical difference in use prevalence among those three groups

Youth

# Marijuana treatment admissions per 100,000 population



Source: Colorado Department of Human Services, Office of Behavioral Health



*Healthcare encounters  
with marijuana mention  
among Colorado youth*

# Youth



According to Rocky Mountain Poison & Drug Center data:

- Marijuana exposure calls for 9–17 year olds increased from 16 in 2009 to 42 in 2016

According to Colorado Hospital Association data:

- Among hospitalizations for 9–17 year olds, the percentage that had a marijuana code increased from 4.3% in 2001–09 to 7.3% in 2014–15

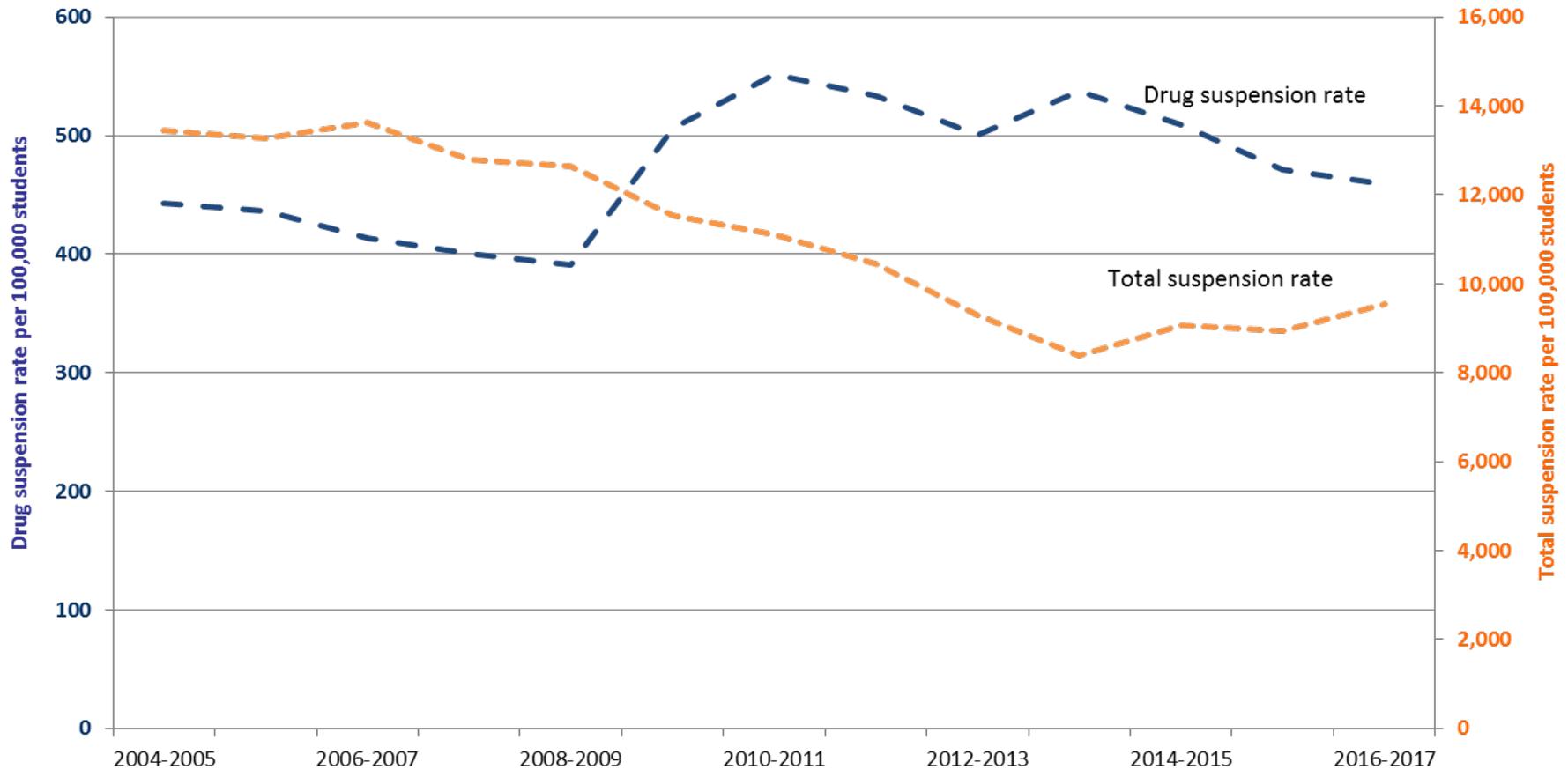
*Disciplinary data  
related to marijuana  
among Colorado youth*

# Youth

## School suspension rate



Total and drug suspension rate, per 100,000 students



Source: Colorado Department of Education.

Note: Marijuana was broken out separately from other drugs and reported completely for the first time in 2016-17. There were 3,147 marijuana suspensions in 2016-17 that accounted for 74% of all drug suspensions.

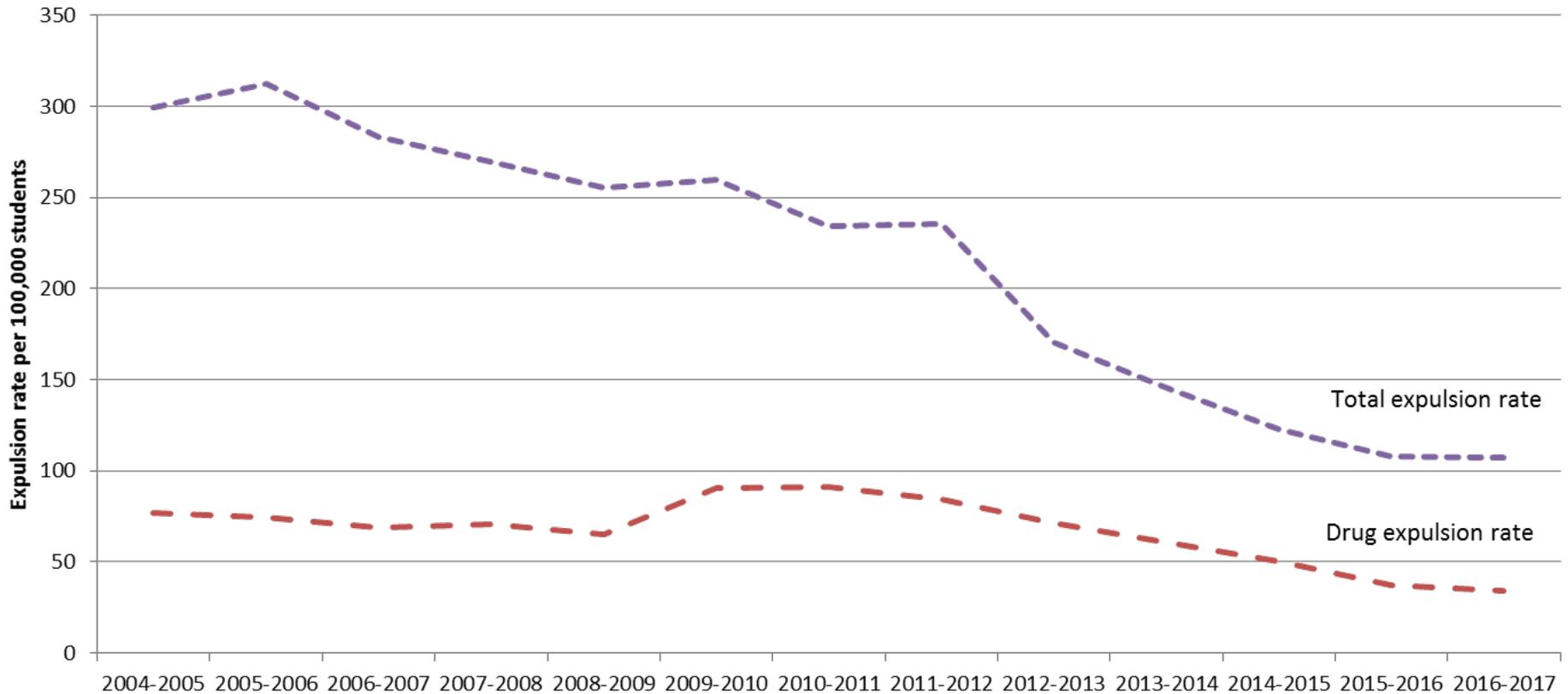


# Youth

## School expulsion rate



Total and drug expulsion rate, per 100,000 students

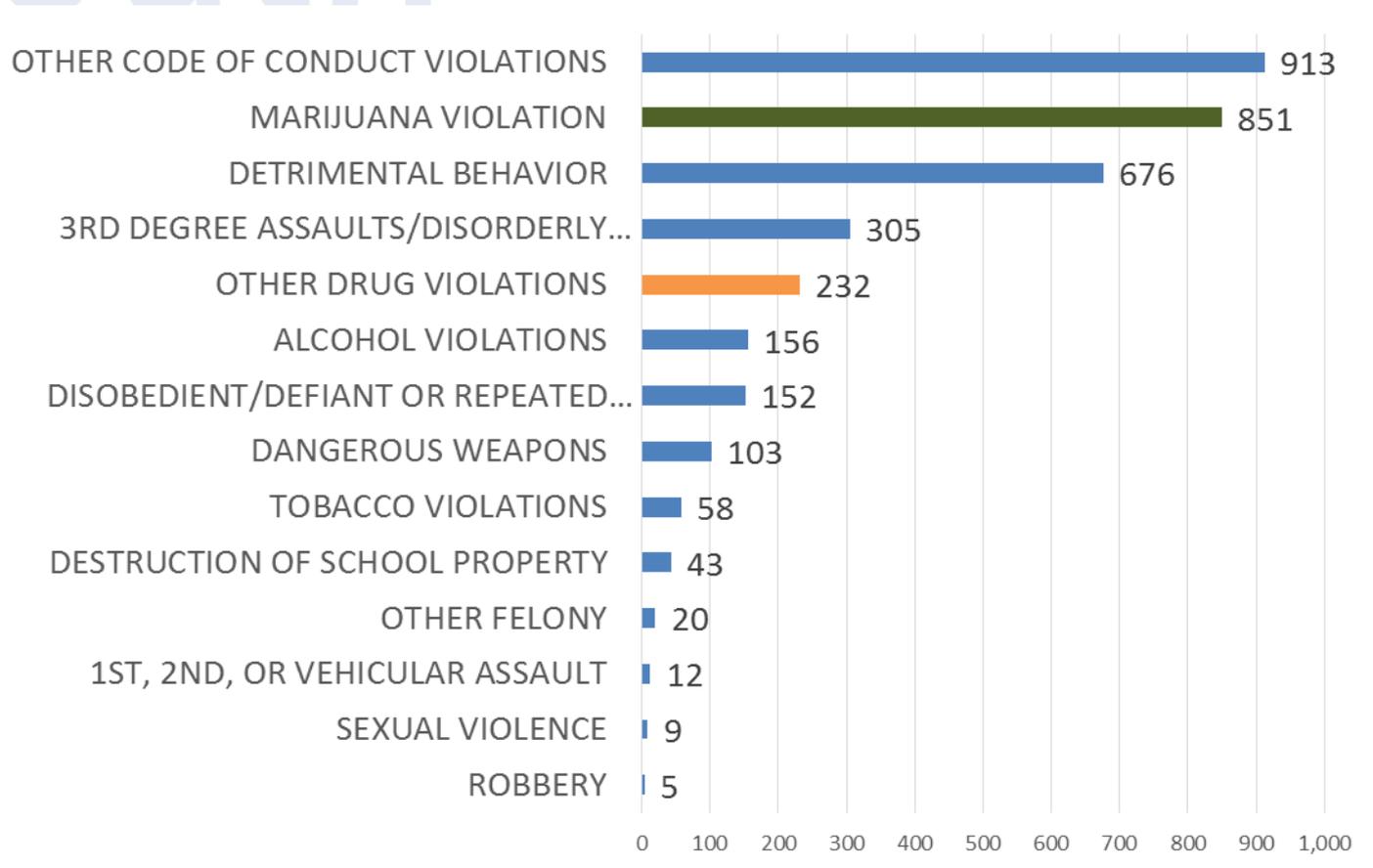


Source: Colorado Department of Education.

Note: Marijuana was broken out separately and reported completely for the first time in 2016-17. There were 211 expulsions for marijuana that accounted for 68% of all drug expulsions.



# Youth Law enforcement referrals in public schools, 2016-17



Source: Colorado Department of Education.

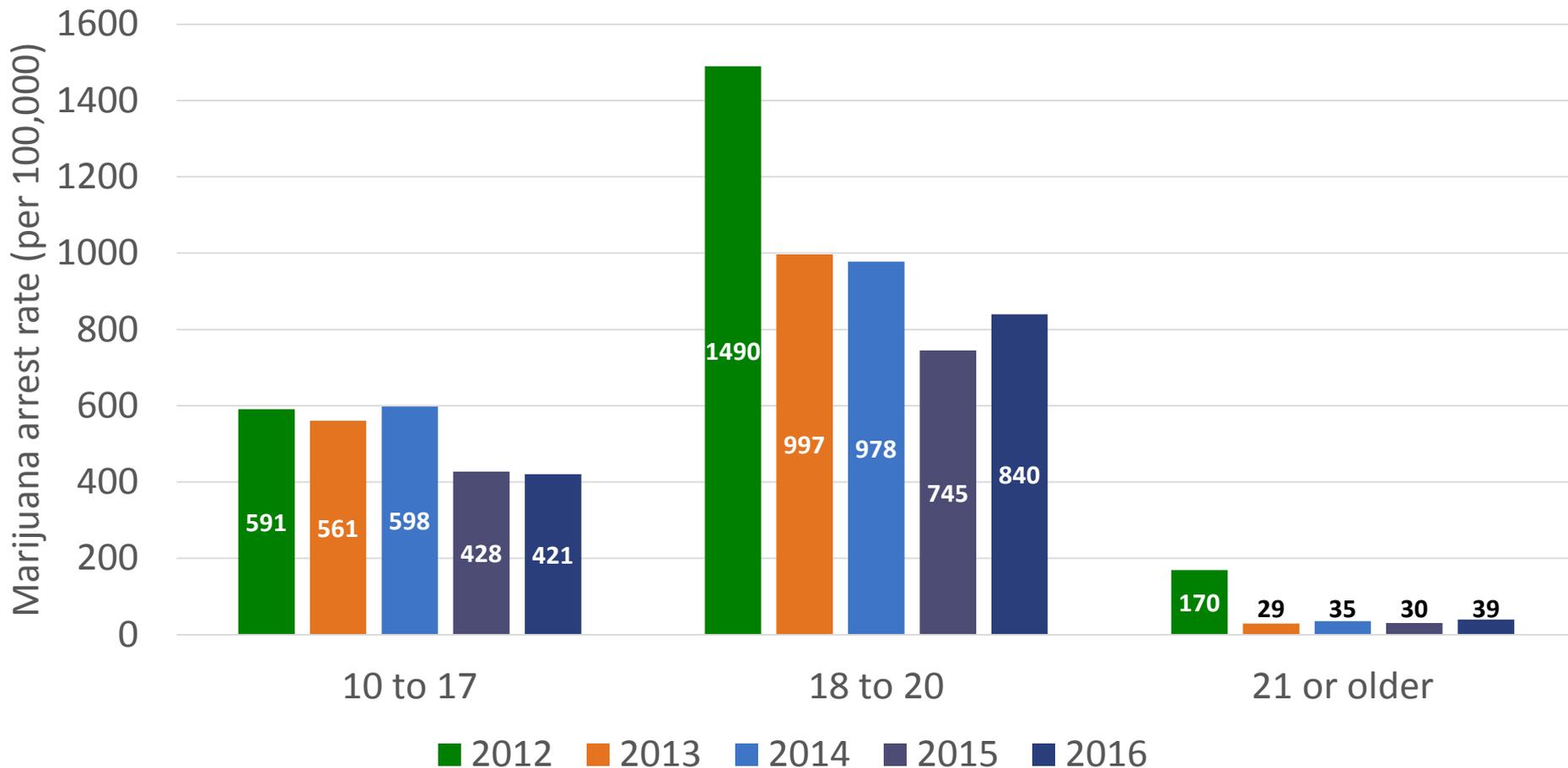
Note: The 2016-17 school year was the first complete year where marijuana was reported separately from other drugs.





# Youth

## Marijuana arrest rates, by age group



Source: Colorado Bureau of Investigation, National Incident-Based Crime Reporting System; Colorado Office of Demography.



# *Summary*

# The Impact of Legalization on Youth: Summary of Colorado Data



- Adolescent past-30-day marijuana use has not increased
- Adolescent addiction treatment has increased
- Poison center calls and hospitalizations have increased for both young children and adolescents
- School suspensions for drugs have increased and most are for marijuana
- Marijuana arrests have decreased
- A portion of the increases seen may be due to changes in the amounts or ways marijuana is used, and a portion may be due to greater willingness to admit use, more “open” use, and increased awareness
- 2017 data should help to clarify trends

# Youth



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Marijuana Health Monitoring and Research Program

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# Youth

## Poll Question #3

# Youth

## Questions

# Youth

## For More Information

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