# Marijuana Use Trends & THC Concentration in Colorado

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Elyse Contreras

Manager of Marijuana Health Monitoring & Research, Epidemiologist

Colorado Department of Public Health and Environment



## Marijuana use in Colorado

### **Populations**

- 1. Children and adolescents (ages 0-17)
- 2. Adults 18 years and older
- 3. Pregnant women

## Outcomes/Impact

- Discharges from Hospital and Emergency Dept.
- 2. Exposures reported to poison center
- 3. THC Concentration

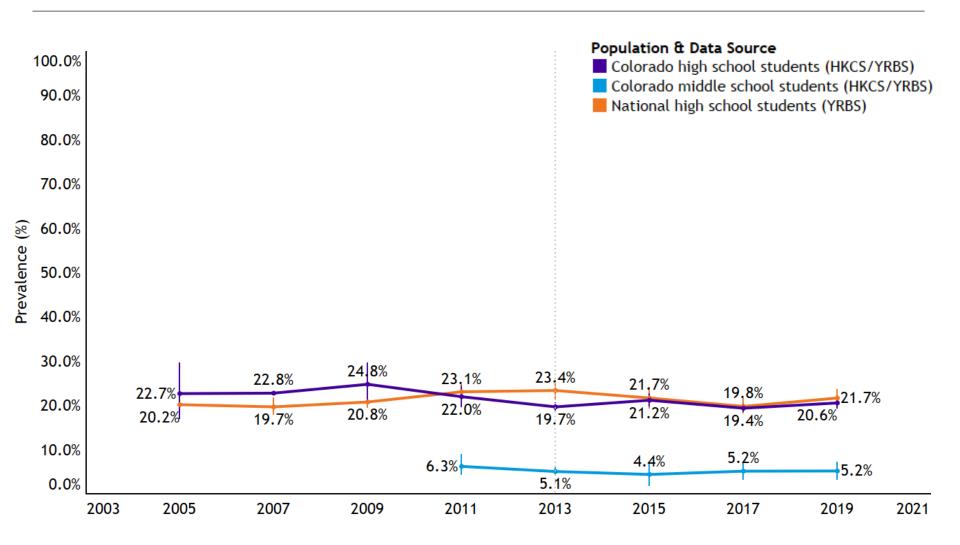
# Youth Marijuana Use & Trends

#### Methods

## Healthy Kids Colorado Survey (HKCS)

- Every 2 years, self-reported, school-based Colorado survey
- Determine prevalence of substance use with weighted analyses and statistical significance by non-overlapping confidence intervals

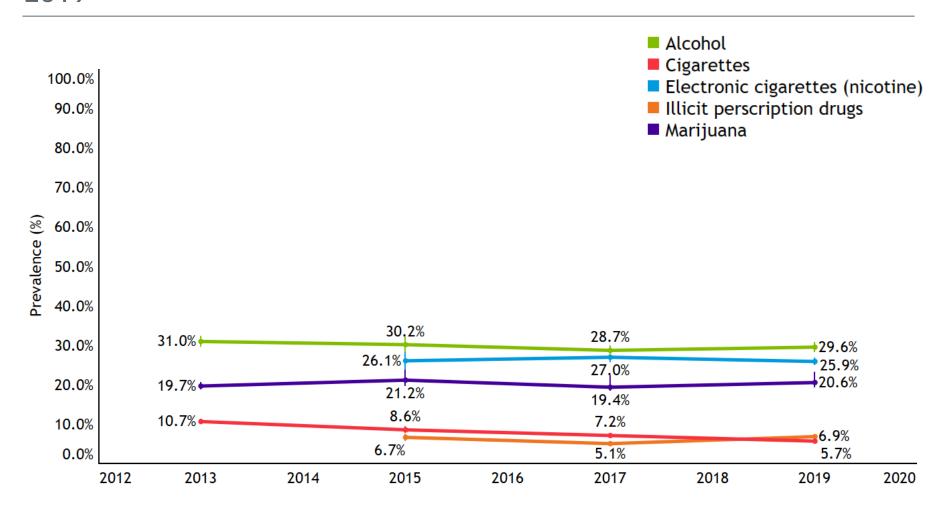
#### Biennial prevalence of past 30 day marijuana use, 2013-2019



Produced by: Colorado Department of Public Health & Environment 2020 Data Sources: Healthy Kids Colorado Survey (HKCS)



# Past 30 day substance use among high school students, Colorado 2005-2019



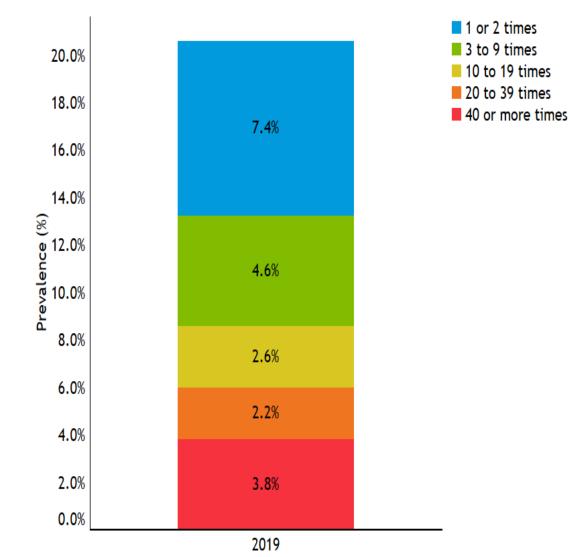
Produced by: Colorado Department of Public Health & Environment 2020 Data Sources: Healthy Kids Colorado Survey (HKCS)



## Marijuana use among high school students, 2019



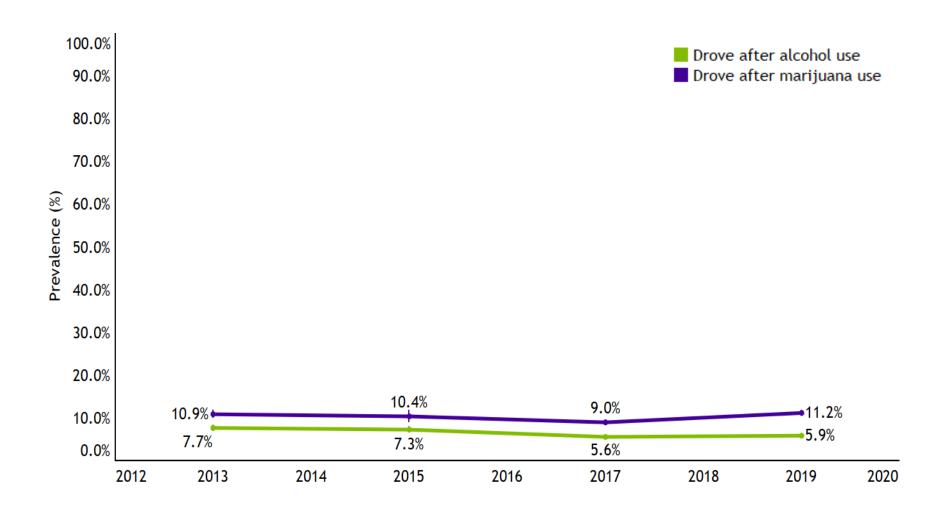
Past 30 Days 20.6%



Produced by: Colorado Department of Public Health & Environment 2020 Data Sources: Healthy Kids Colorado Survey



# Driving after substance use among high school students that drove in the past 30 days, 2013-2019 \*\*\*CORRECTED 9/15/2020\*\*\*



Produced by: Colorado Department of Public Health & Environment 2020 Data Sources: Healthy Kids Colorado Survey (HKCS)



## Methods of Marijuana Consumption

#### Methods of use

Any use of any method in the past 30 days

Can select multiple methods used

#### Method of usual use

Method used the most in the past 30 days, can still be a multiple-methods user

Can select only one method used



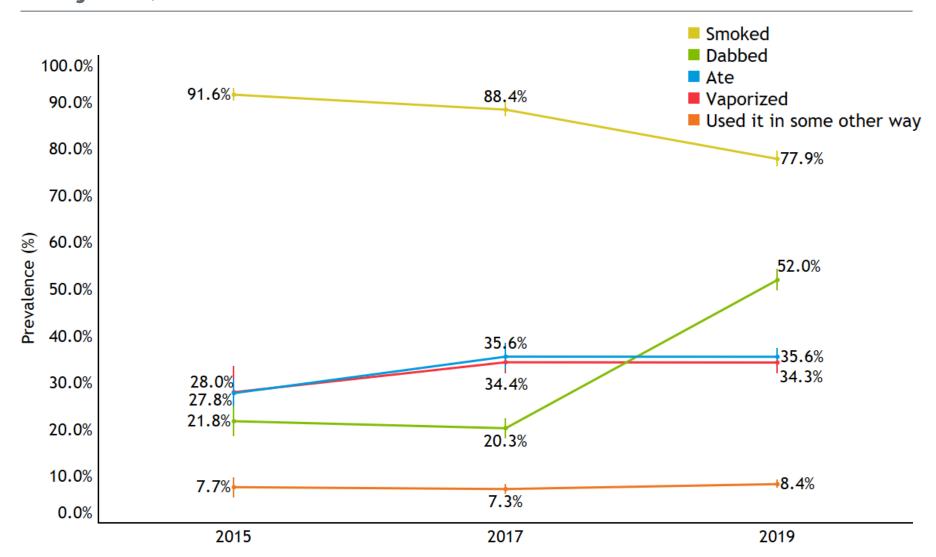








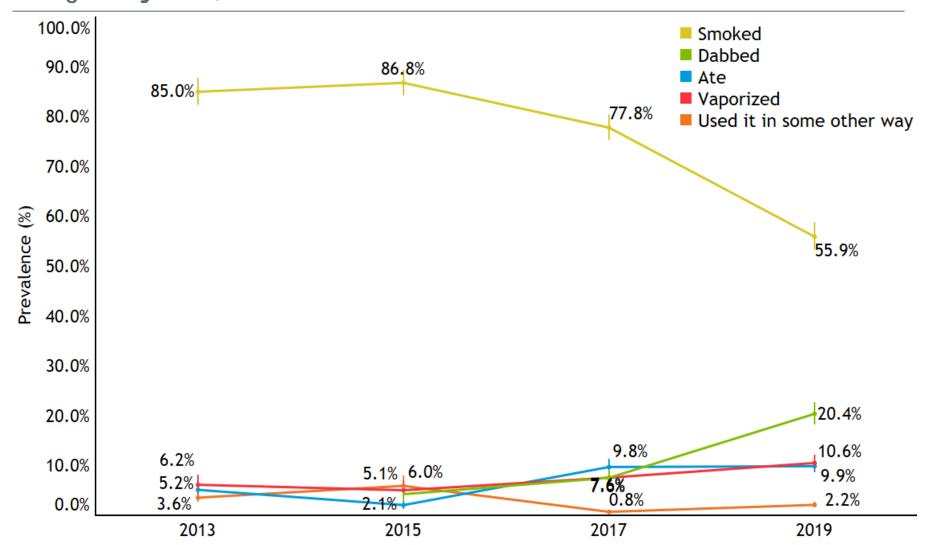
# Marijuana method of use among high school students currently using marijuana, 2015-2019



Produced by: Colorado Department of Public Health & Environment 2020 Data Sources: Healthy Kids Colorado Survey (HKCS)



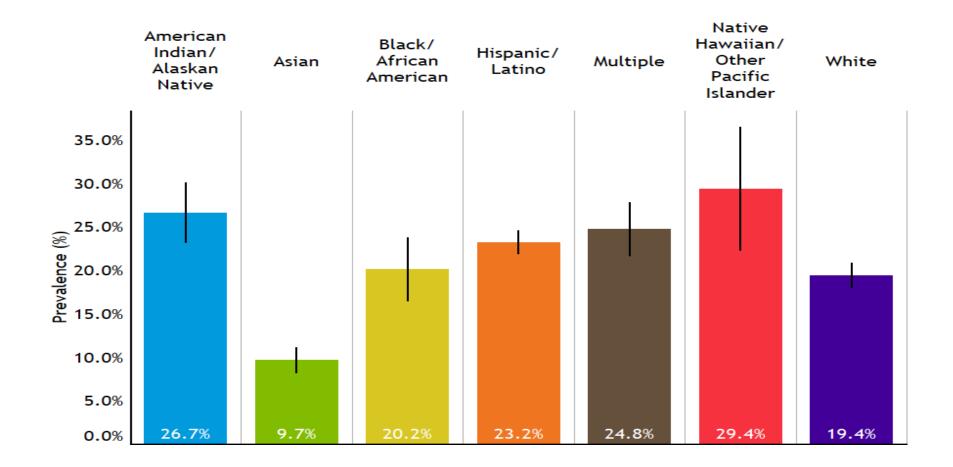
# Marijuana method of <u>usual</u> use among high school students currently using marijuana, 2013-2019



Produced by: Colorado Department of Public Health & Environment 2020 Data Sources: Healthy Kids Colorado Survey (HKCS)



# Marijuana use demographics among high school students, 2019





# Adult Marijuana Use & Trends

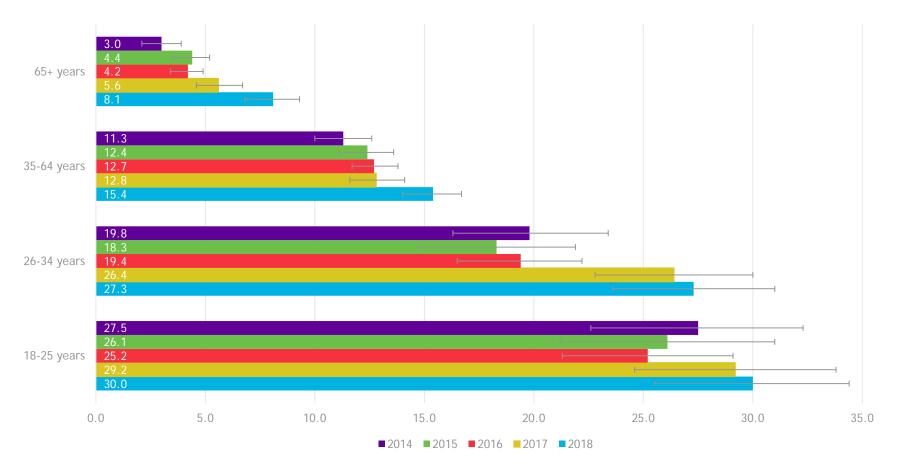
#### Methods

- Behavioral Risk Factor Surveillance System (BRFSS)
  - ➤ Annual self-reported, telephone-based survey (Adults 18+)
  - Largest survey asking about adult substance use in Colorado

#### Past 30 day marijuana use among adults in Colorado and the U.S., 2006-2018

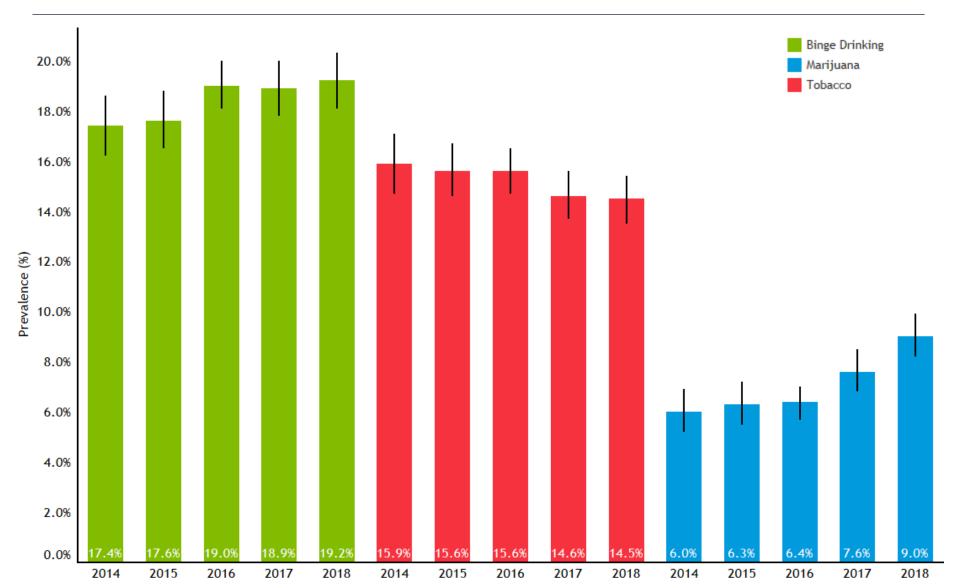


## Current marijuana use among Colorado adults (18+ years) by age categories, 2014-2018



This figure shows the prevalence of past thirty day marijuana use out of all Colorado adults

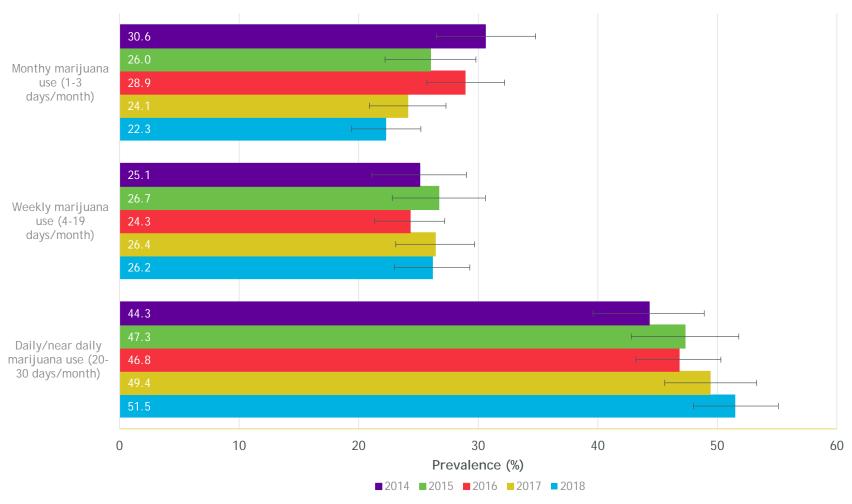
#### Daily or near daily substance use among adults, Colorado 2014-2018



Produced by: Colorado Department of Public Health & Environment 2020 Data Sources: Behavioral Risk Factor Surveillance Survey (BRFSS)



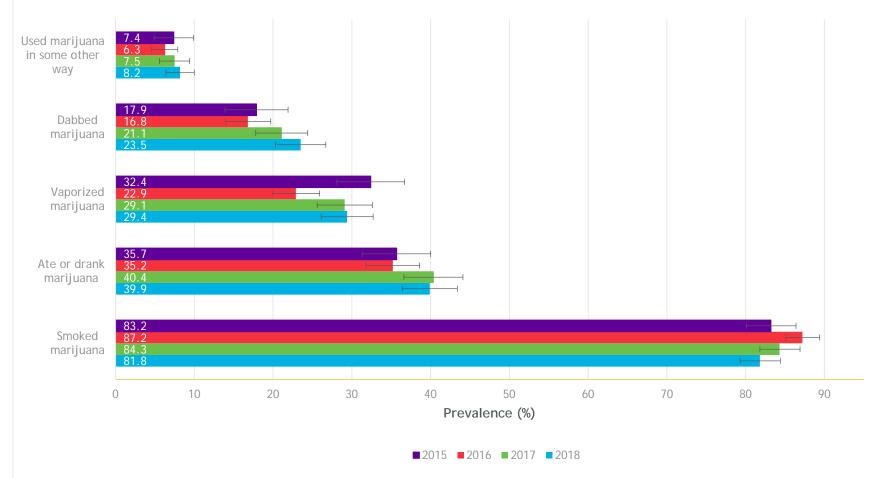
#### Frequency of use among adult marijuana users in Colorado, 2014-2018



This figure shows the prevalence of frequency of use out of Colorado adults who reported past thirty day marijuana use



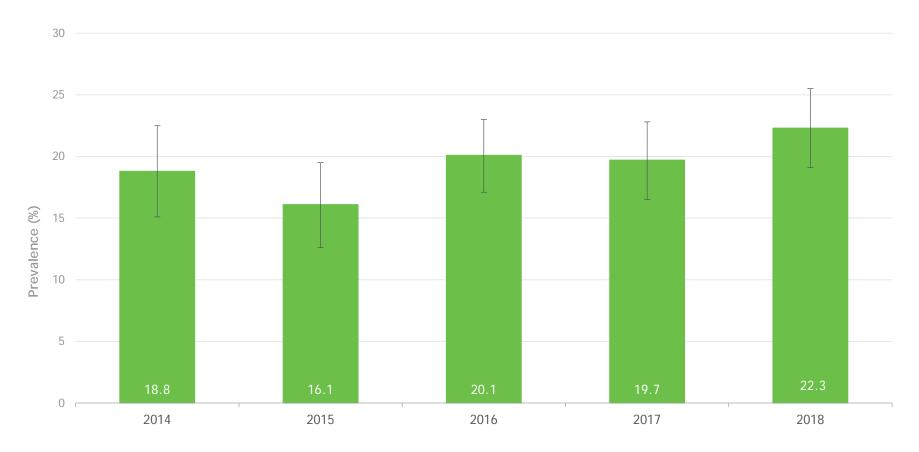
#### Methods of marijuana use among adult marijuana users in Colorado, 2015-2018



This figure shows the prevalence of frequency of use out of Colorado adults who reported past thirty day marijuana use



# Reported driving after marijuana use among adult marijuana users in Colorado, 2014-2018

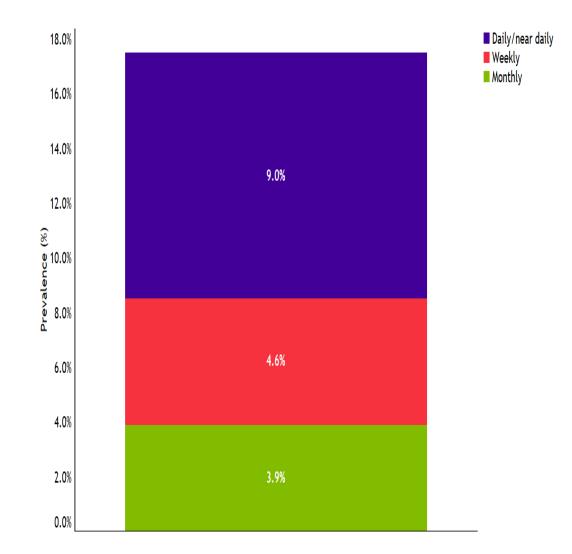


This figure shows the prevalence of frequency of use out of Colorado adults who reported past thirty day marijuana use

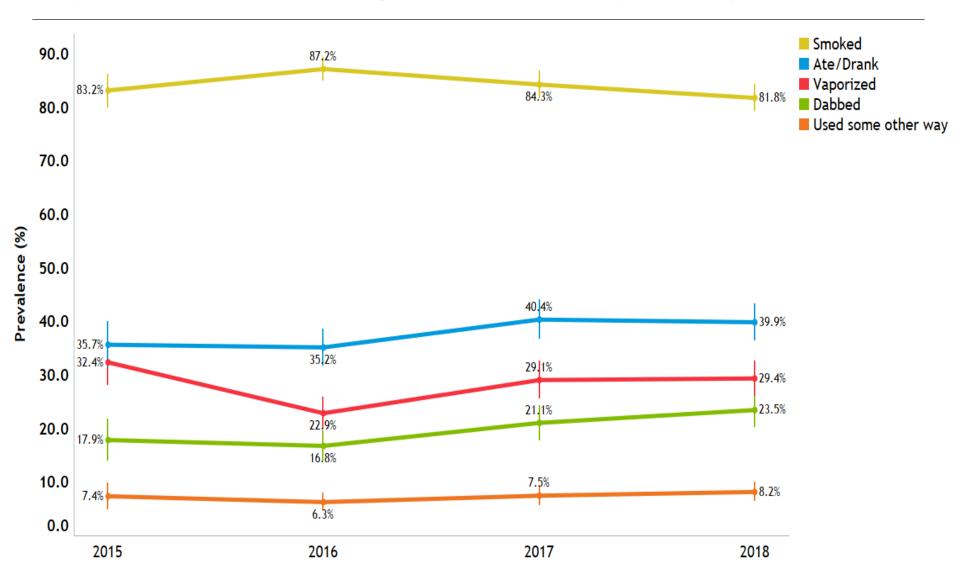
## Marijuana use among adults, Colorado 2018

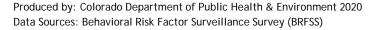


Driving after use 3.8%



#### Marijuana method of use among adults that currently use marijuana, 2015-2018







# SUMMARY: MARIJUANA USE IN COLORADO

- Past 30 day use is stable among Colorado populations, daily use increasing for adults
- Methods of consumption changing for youth
- Driving after use is increasing in adults and youth

# THC Concentration Report

# Background

### Footnote 88a, 2019 Long Bill (CDPHE)

"...Review and study data...peer-reviewed studies on THC potency of marijuana and any related health effects."

#### Statement of Concern

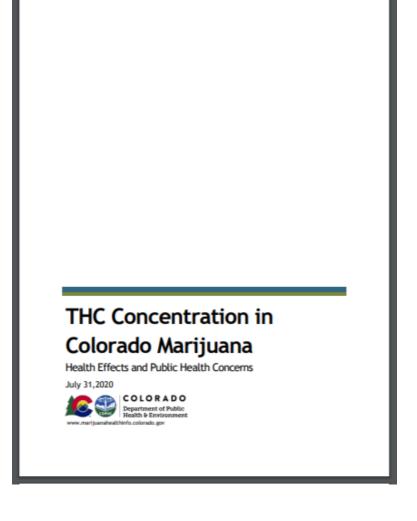
"Products containing a high THC concentration raise public health concern because increased dose may lead to higher potential for adverse health effects in consumers of these products."

# Approach to research

Systematic review of literature

Analyze use trend and health effects data

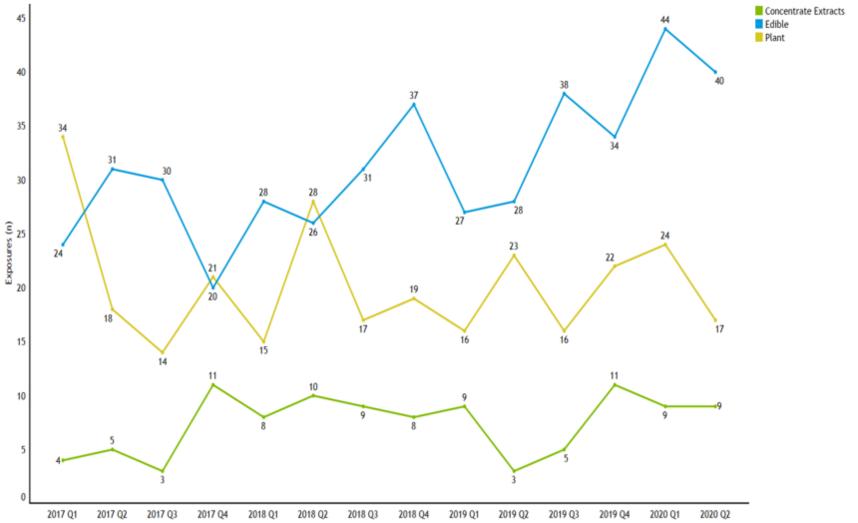
Approval by Retail Marijuana Public Health Advisory Committee



www.marijuanahealthinfo.colorado.gov/reports-and-summaries



Figure 2: Quarterly count of top three marijuana exposures reported to RMPDS, Colorado January 2017 - June 2020



Produced by: Marijuana Health Monitoring Program, Colorado Department of Public Health & Environment 2020.

Data Source: Rocky Mountain Poison and Drug Safety.

# Key Findings

Strong to moderate evidence THC concentration ~mental health effects adolescents, young adults and adults

Insufficient evidence concentrate products ~ dependence concentrate products ~ acute health effects

Effect on blood levels varies by product type

# SUMMARY: THC CONCENTRATION

Almost all retail MJ products in CO contain THC in concentration >10%

### More research needed

- products with higher THC concentration
- higher THC concentration and association with health effects

Improvement needed in data collection, include type of product and % THC





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