#### Legalization of Marijuana in Washington State: Then and Now

Sarah Mariani, CPP Behavioral Health Administrator Division of Behavioral Health & Recovery



### Learning Objectives: Then and Now

- Review Washington's marijuana policy
- Discuss national and Washington statistics on marijuana use
- Explore types of marijuana products sold in Washington
- Learn about marijuana misuse and abuse prevention efforts



#### Washington State

- **7, 427,600** people as of April 2018 \*
- 39 Counties
- 29 Federally Recognized Tribes
- 12.7% of the population are Hispanic or Latino\*
- 11.3% of the population live in poverty \*
- A majority of the population lose their sunglasses three times a year.

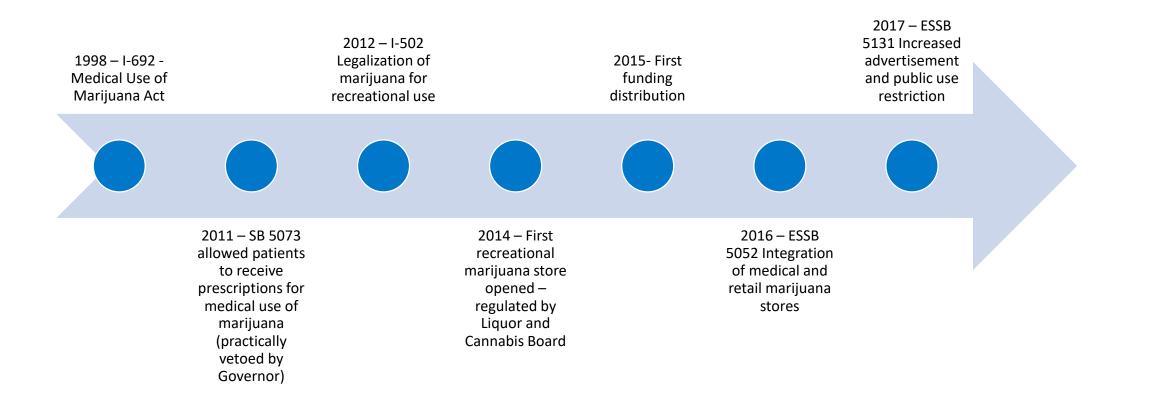
STATE

\* Washington Office of Financial Management, U.S. Census

#### **Washington State Marijuana Policy**

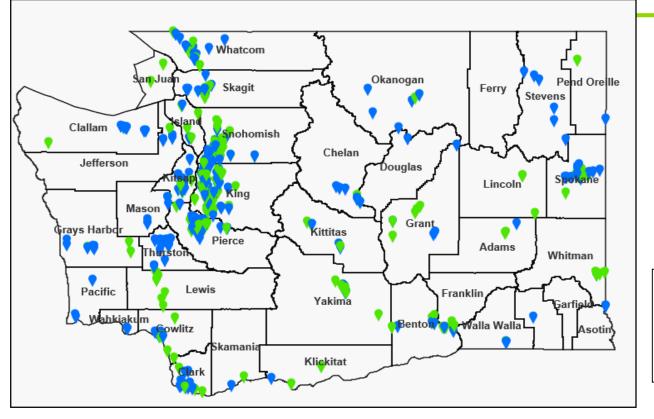


#### Washington Marijuana Legalization Timeline





#### 2018 Retail and Medical Marijuana Locations





Retail– GREEN Retail/Medical – BLUE Total: 497 Starbucks Locations – 757



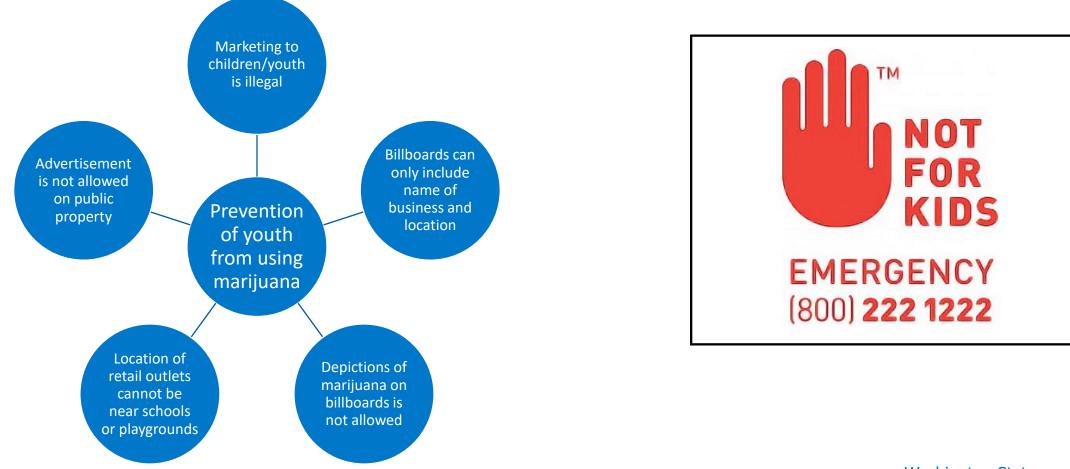
Source: Washington Liquor and Cannabis Board

#### **Policies**

Earmarked funds for prevention, treatment, education	No delivery allowed.	Illegal to use marijuana in public	Local Zoning/Bans
Taxes – highest in the country	Businesses can now use banks, which prevents cash on hand	Cannot infuse into alcohol or tobacco	Marijuana research license allows researcher to produce, process and possess marijuana for research



#### **Advertisement Restrictions**





#### **Group Activity**

• At your tables, discuss:

- The current status of marijuana legalization in your state
- Challenges/unanticipated consequences:
  - > Monitoring sales?
  - Increased use by youth/adults?
  - > How to spend the revenue fairly across the state?
- Successes
  - > Decreased criminal activity related to marijuana sales?
  - Increased tax revenue for public substance abuse prevention?
- Share back to the larger group



## Statistics on Marijuana Use and Impacts



#### Surveillance Data

- Prevalence
- Use patterns
- Poisoning
- Driving Under the Influence



#### National Youth Risk Behavior Surveillance System 2015

38.6% youth have used Marijuana in their life

21.7% youth currently use Marijuana

7.5% youth tried Marijuana before the age of 13

Center for Disease Control and Prevention Youth Risk Behavior Surveillance System 2015



# National Marijuana Use in past month by Age for 2016

6.5% of 12-17 year olds stated that they used within the last 30 days

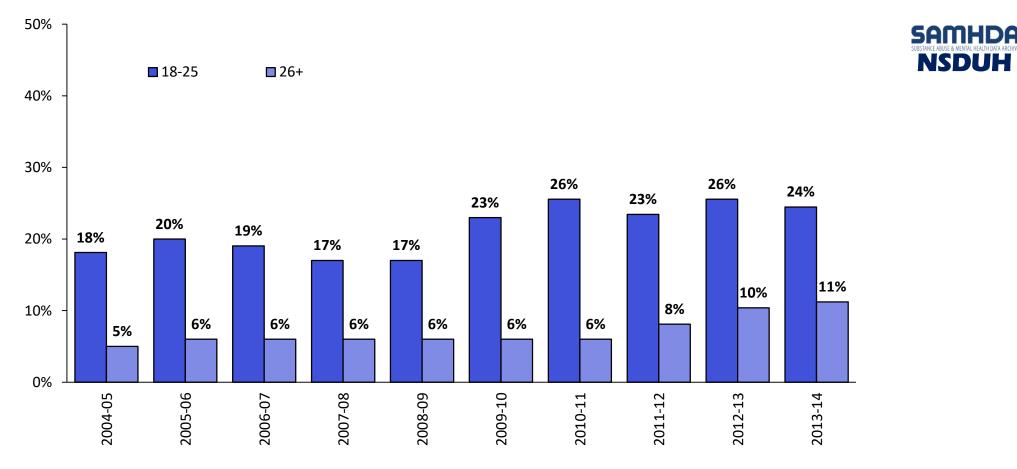
20.8% of 18-25 year olds were current users

7.2% of those older than 26 were current users

SAMSA: https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.htm#fig17



#### National Marijuana Use: Adults, Past Month



National Survey on Drug Use and Health (NSDUH), 2004-2014.

Washington State Health Care Authority

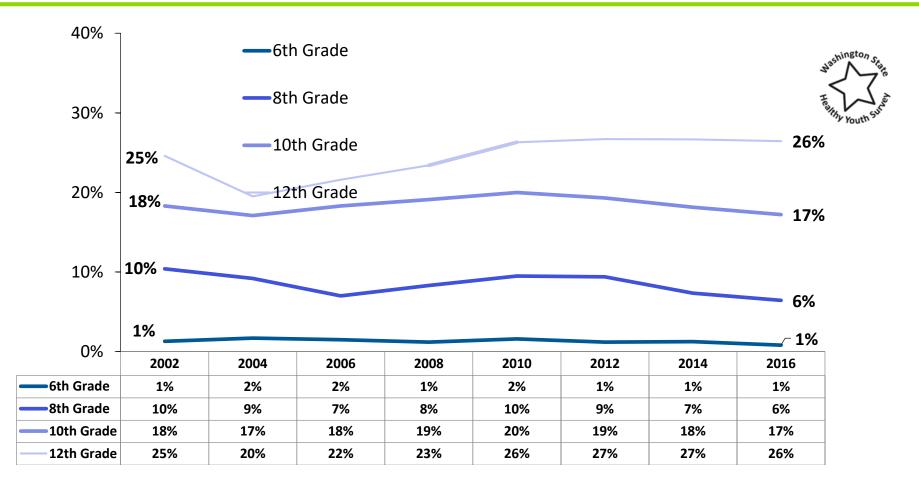
#### WA State Healthy Youth Survey (HYS)

- 234,012 students participated in the HYS survey in 2016
- Grades 6, 8, 10, 12
- Surveyed every two years last year was 2016
- Partnership with Health Care Authority, Department of Health, Office of Superintendent of Public Instruction and Liquor and Cannabis Board (LCB) to administer
- The youth use prevalence rate for marijuana has remained the same since legalization of marijuana

HYS 2016 report



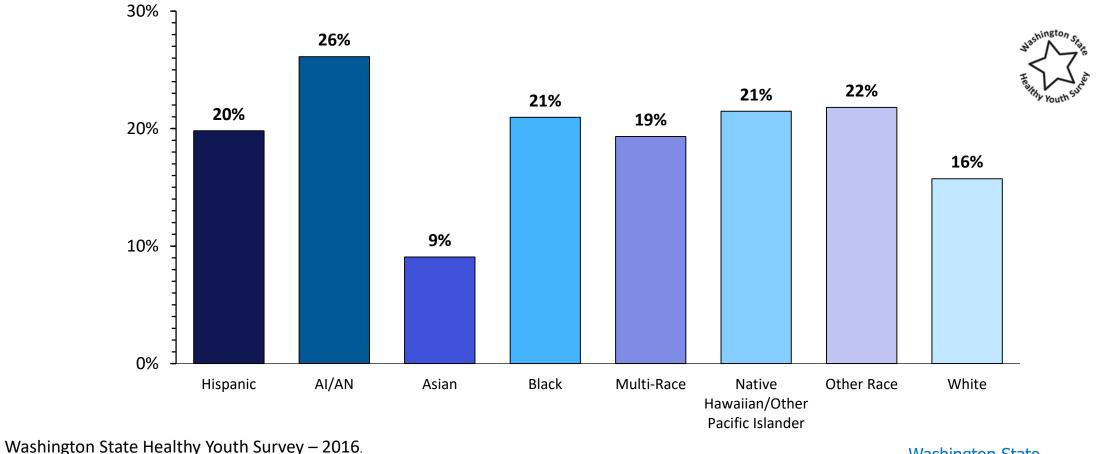
#### Marijuana Use: Past 30 Days remains steady



Washington State Health Care Authority

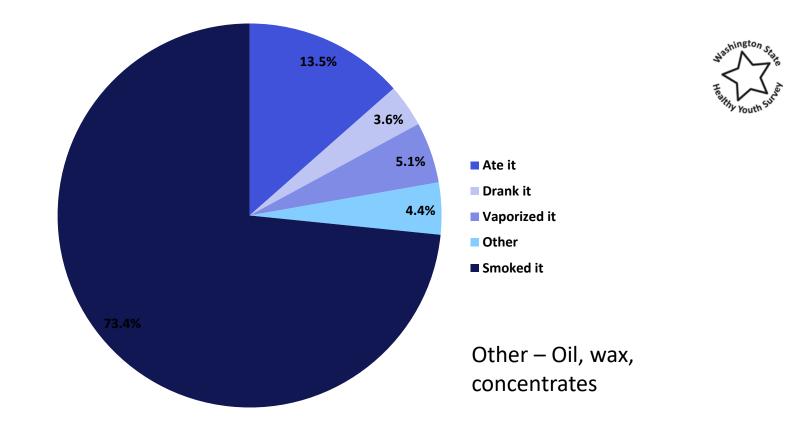
Washington Healthy Youth Survey - 2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016.

#### Marijuana Use, Past 30 Days by Race/Ethnicity





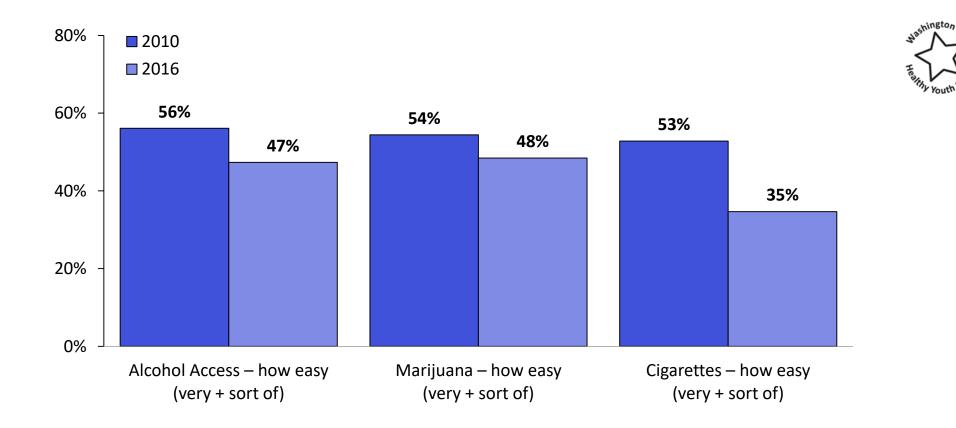
## Marijuana consumption method in 2016 (ages 12-18)





Washington Healthy Youth Survey - 2016.

#### Youth Perceptions on Ease of Availability





Washington Healthy Youth Survey - 2010, 2016.

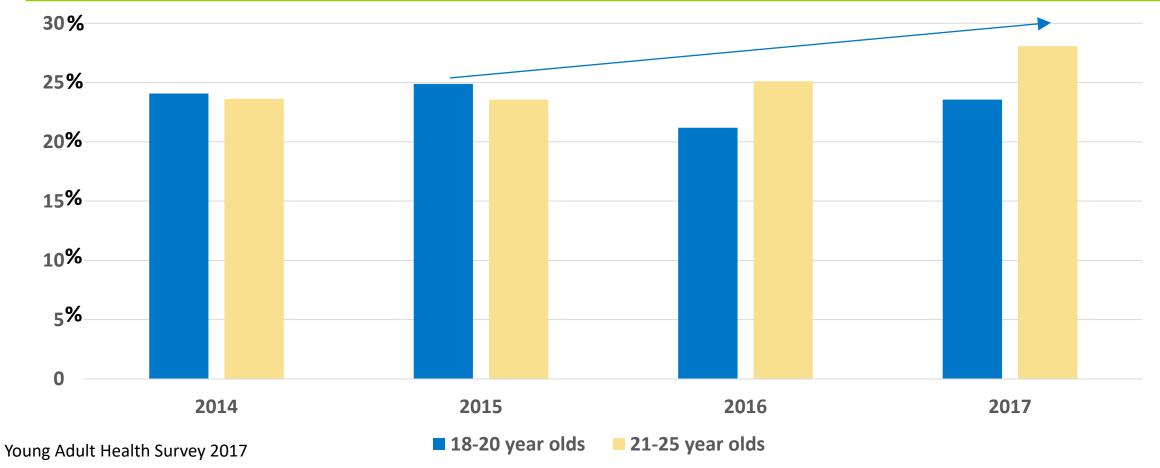
#### WA State Young Adult Survey

Surveys 18-25 year olds through social media

Implemented and monitored by University of Washington



## Washington marijuana use by young adults: 18-25





#### How young adults use marijuana (18-25)

#### How used

	<u>2015</u>	<u>2016</u>	<u>2017</u>
Smoked it	76.36%	73.92%	70.31%
Ate it	6.51%	9.54%	11.35%
Drank it	0.49%	0.62%	0.37%
Vaporized it	8.56%	6.90%	9.74%
Used it some other way	1.74%	2.12%	2.17%
Dabbed	6.33%	6.90%	6.05%

The potency level of marijuana increases in edibles, oils and dabs from 10% to 80% THC



#### Where do 18-20 year olds get marijuana?

From friends – 77.4% ○ Gave money to someone – 41.45% Medical dispensary – 10% ○ At a party – 24.92% Family – 9.75% 1 Other – 9.02% Parents – 10.44% 1 **C** Grew it - .23% Retail store – 1.9%

Arrows indicate statistically significant change since 2014



23 Young Adult Health Survey 2017

#### Where 21-25 year olds get marijuana

Friends 36.5%

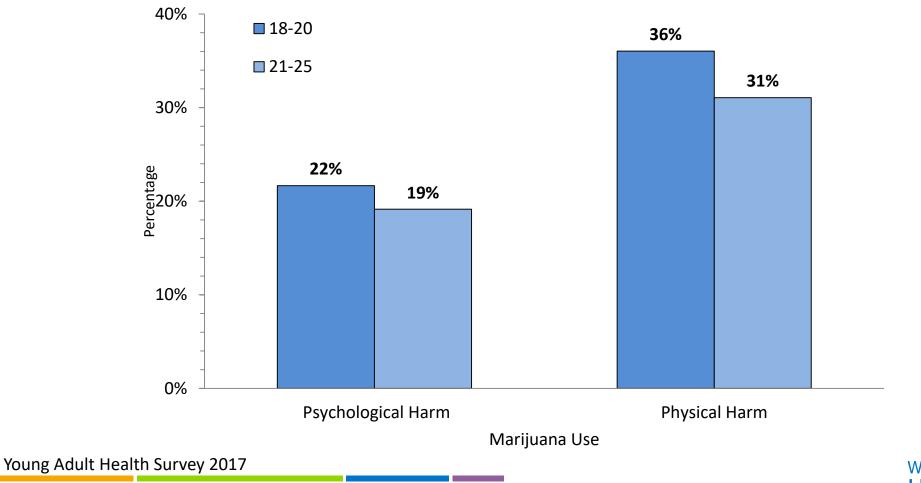
Gave money to someone 5.6%

- Medical dispensary 12%
- Party 8%
- Family 7%
- Retail store 76.3%
- Parents 4.3%
- Grew it 2%
- Stole it .3%

Arrows indicate statistically significant change since 2014



#### Perceived Risk of Harm from Marijuana Use: Young Adults





#### WA State Poison Center

**The Washington Poison Center (WAPC)** provides immediate, free, and expert treatment advice and assistance on the telephone in case of exposure to poisonous, hazardous, or toxic substances. All calls are confidential.

**OUR MISSION:** To prevent and reduce harm from poisoning through expertise, collaboration, and education.



#### Cannabis poisonings 2011-2017

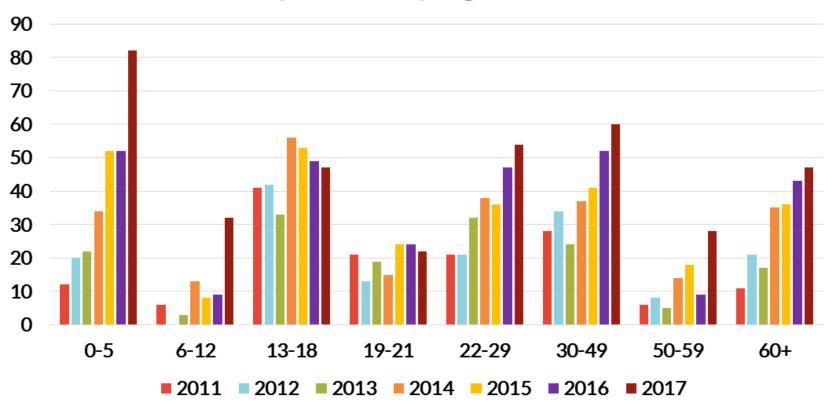
#### Cannabis Exposures 2011-2017



WA Poison Center: https://www.wapc.org/data/toxic-trend-reports/cannabis-toxic-trends/

#### Age of poisoning (exposure)

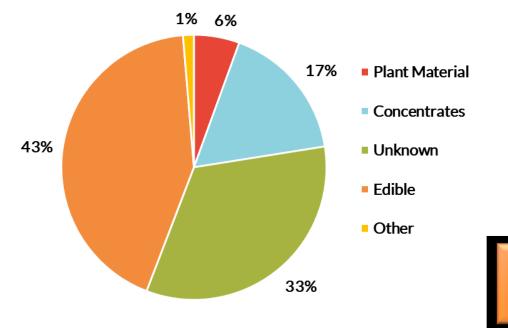
Cannabis Exposures By Age from 2011-2017



Washington State Health Care Authority

#### Washington Poison Center: 2017 Annual Toxic Trend Report: Cannabis

Types of Cannabis



This chart shows that the most common cannabis poisoning comes from ingesting edibles/unknown.

- Higher potency levels
- Delayed 'high' reaction so consume more
- Cannabis not locked in secure location
- Looks like candy or dessert

23.2% of individuals exposed developed moderate or life-threatening symptoms.

Washington Poison Control Center: https://www.wapc.org/wp-content/uploads/2017-Cannabis-Toxic-Trend-Report.pdf



# Marijuana use impact on driving

Washington State Traffic Safety Commission Washington State University Washington Health Youth Survey Washington Young Adult Survey



#### Driving while high – Get a DUI

- Washington state law set the DUI limit at 5 nanograms per milliliter of blood
- 80% of those who use marijuana will fall below this measure
- State and local law enforcement implement these restrictions

International Association of Chiefs of Police, Drug Evaluation and Classification Program 2013



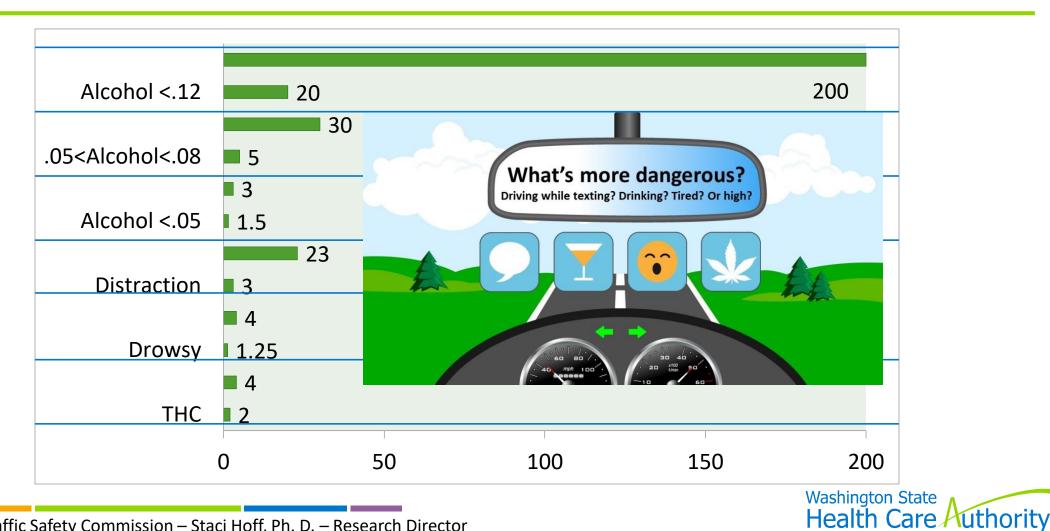
#### **Detection of Marijuana Consumption**

- No Validated methods for rapid detection of THC in field settings that are operationally feasible.
  - Saliva is most promising
- Chronic vs. Casual User results
  - Chronic users have THC in system longer
  - Casual users experience impairment at lower THC rates (Chemring Detection systems)

Research conducted by WSU Alcohol and Drug Abuse Research Program

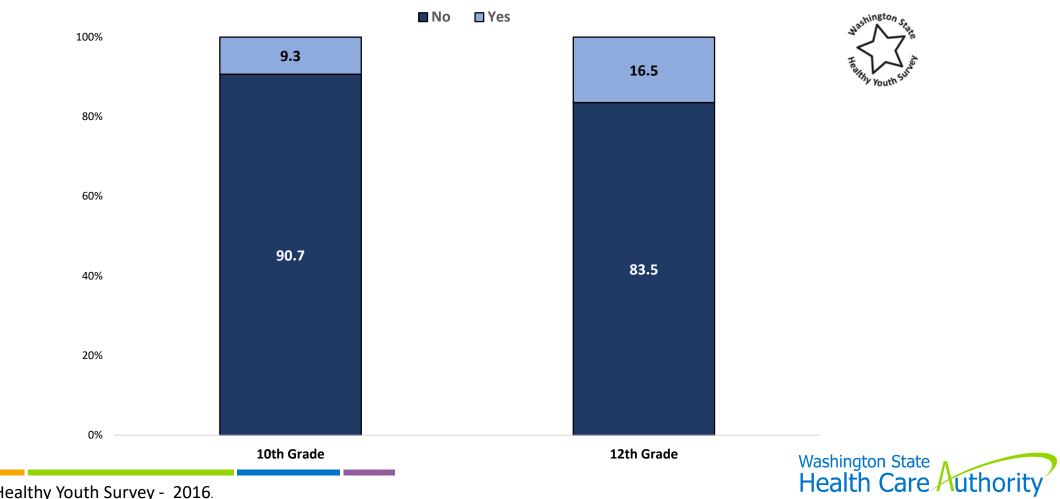


#### Marijuana Use Impact on Crash Risk



WA Traffic Safety Commission - Staci Hoff, Ph. D. - Research Director 33

# Driving within 3 hours of Marijuana Use in the past 30 days (ages 15-18)



34 Washington Healthy Youth Survey - 2016.

#### Driving within 3 hours of use (ages 18-25)

#### Driving after marijuana use

"During the past 30 days, how many times did you drive a car or other vehicle within three hours after using cannabis (e.g., marijuana, hashish, edibles)?"

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Never	50.59%	55.29%	58.19%	58.56%
1 time	14.13%	13.13%	12.50%	12.85%
2-3 times	13.28%	12.34%	11.97%	11.98%
4-5 times	6.43%	4.35%	3.48%	4.48%
6 or more times	15.57%	14.88%	13.85%	12.12%

\*\*There are declines in driving after marijuana use between cohort 3 and cohort 1 (p<.05) and between cohort 4 and cohort 1 (p<.01), as well as a significant linear trend (p<.01).\*\*

Young Adult Health Survey 2017



## Marijuana Products



## **Requirements for Marijuana Packaging**

FOR KIDS



Preapproval for all edibles



Maximum dosage: 10mg THC per serving

Childproof Packaging with warning labels



No gummies, cotton candy, lollipops, or bright colored products

Washington Liquor and Cannabis Packaging Process

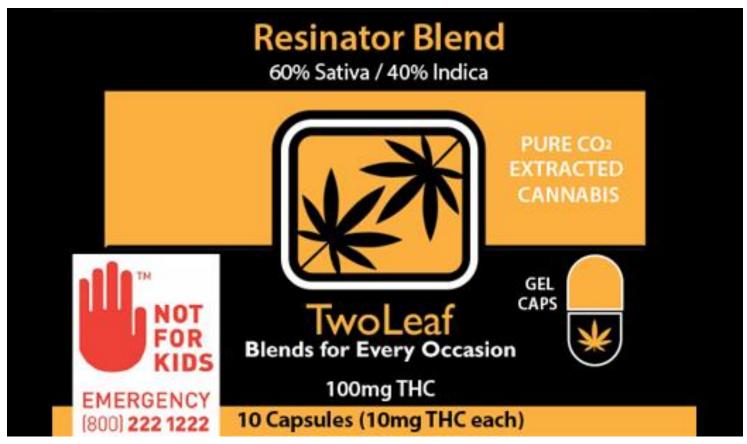


# Advertising Warning Labels

- This product has intoxicating effects and may be habit forming
- Marijuana can impair concentration, coordination and judgement. Do not operate a vehicle or machinery while under the influence of this drug.
- There may be health risks associated with consumption of this product.
- For use only by adults, twenty-one and older.
- Keep out of reach of children.



# New Packaging Requirements



Washington Liquor and Cannabis Board



#### General Use vs. High THC vs. High CBD Compliant Products

- General use up to 10 mg THC per serving size not to exceed 10 servings
- High THC Product
  - Up to 50 mg THC/serving size not to exceed 10 servings
  - Tinctures, patches, suppositories, concentrates
- High CBD Product
  - Marijuana extracts up to 2 mg THC with at least 25 times the CBD
  - Marijuana infused edibles up to 2 mg THC with at least 5 times the CBD



#### **General Use Products**









# **High CBD Products**













#### CANNABIS CONCENTRATES



CRUMBLE Dried oil with a honeycomb like consistency



BADDER/BUDDER Concentrates whipped under heat to create a cake-batter like texture



SHATTER A translucent, brittle, & often golden to amber colored concentrate made with a solvent



DISTILLATE Refined cannabinoid oil that is typically free of taste, smell & flavor. It is the base of most edibles and vape cartridges



CRYSTALLINE Isolated cannabinoids in their pure crystal structure



DRY SIFT Ground cannabis filtered with screens leaving behind complete trichome glands. The end-product is also referred to as kief



ROSIN End product of cannabis flower being squeezed under heat and pressure



BUBBLE HASH

Uses water, ice, and mesh screens to pull out whole trichomes into a pastelike consistency



# Marijuana Misuse/Abuse Prevention

**Evidence Based Programs** 

Media Initiatives



#### **EBP** Partners

- University of Washington's Social Development Research Group
- Washington State University
- Washington State Institute for Public Policy
- Pacific Institute for Research and Evaluation
- Washington State Prevention Research Subcommittee
- Washington State DSHS Division of Behavioral Health and Recovery



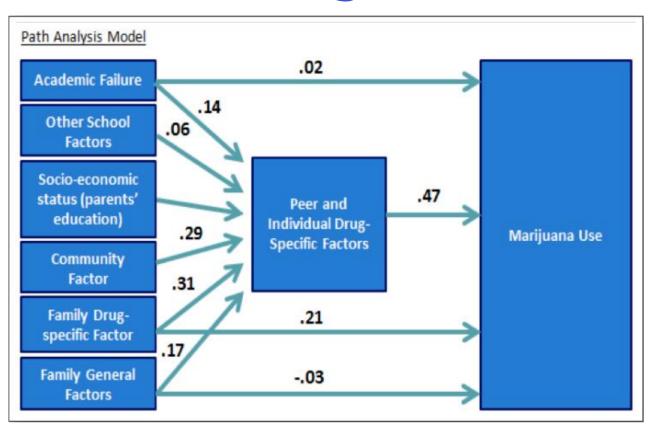
#### **Evidence Based Programs (EBP) and Practices**

Identify programs with outcomes in youth marijuana use prevention & reduction. Determine risk factors that most strongly related to youth marijuana use.

Identify programs that are shown to impact risks and have costbenefit when known.



### Path Analysis for Marijuana Prevention Programs





#### **Best Practice Program List Results**





# Youth marijuana prevention EBP list

#### Prevention Programs and Practices for Youth Marijuana Use Prevention (for DMA CPWI Enhancement Services)

Note: No less than 85% of DMA funds can be used to support Evidence-Based and Research-Based Programs and no more than 15% of DMA funds can be used to support Promising Programs from the list below.

#### Evidence-Based & Research-Based Programs

- Communities that Care
- Family Matters (adapted for marijuana)
- Good Behavior Game (GBG)\*
- Guiding Good Choices\*
- Incredible Years\*
- LifeSkills Training Middle School (Botvin Version; Grades 6, 7, and 8)
- Lions Quest Skills for Adolescence\*
- Community-based Mentoring\* (Big Brothers Big Sisters, Across Ages, Sponsor-a-Scholar, Career Beginnings, the Buddy System, or innovative design- must be approved by Mentoring Works WA)<sup>1</sup>
- Nurse Family Partnership (NFP)\*
- Positive Action\*
- Project Northland (Class Action may be done as booster)
- Project STAR
- Project Towards No Drug Abuse
- Project Towards No Tobacco Use (adapted for marijuana)
- PROSPER
- SPORT Prevention Plus Wellness
- Strengthening Families Program: For Parents and Youth 10-14 (Iowa Version) \*
- Strong African American Families
- Strong African American Families Teen

#### Promising Programs

- Athletes Training & Learning to Avoid Steroids
- keepin it REAL\*
  Keep Safe

Raising Healthy Children (using SSDP model)

- Environmental Strategies (Promising)
  - Community Trials Intervention to Reduce High-Risk Drinking (adapted for marijuana)
  - Policy Review and Development
  - Purchase Surveys coupled with Reward and Reminder
  - Restrictions at Community Events
  - Social Norms

Familias Unidas

#### Washington State

#### Programs & Practices for Youth Marijuana Use Prevention updated April 2017

Behavioral Health Administration Division of Behavioral Health and Recovery



www.theathenaforum.org/prevention-101/excellence-prevention-strategy-list



# Youth marijuana prevention EBP List

- Communities That Care (CTC)
- Community-based Mentoring
- Family Matters (adapted for marijuana)
- Good Behavior Game (GBG)
- Guiding Good Choices
- Incredible Years
- LifeSkills Training Middle School (Botvin SPORT Prevention Plus Wellness version; Grades 6, 7, and 8)
- Lions Quest Skills for Adolescence
- Nurse Family Partnership (NFP)
- Positive Action

- Project Northland (Class Action may be) done as booster)
- Project STAR
- Project Towards No Drug Abuse
- Project Towards No Tobacco Use -(adapted for marijuana)
- PROSPER
- Strengthening Families Program: For Parents and Youth 10-14 (Iowa Version)
- Strong African American Families
- Strong African American Families Teen



#### Youth marijuana prevention EBP List -Promising Programs

- Athletes Training & Learning to Avoid Steroids
- Familias Unidas
- Keepin' it Real
- Keep Safe
- Raising Healthy Children (using SSDP model)

- Environmental/Media Strategies (Promising)
  - Community Trials Intervention to Reduce High Risk Drinking (adapted for marijuana)
  - Policy Review and Development
  - Purchase Surveys coupled with Reward and Reminder
  - Restrictions at Community Events
  - Social Norms Marketing

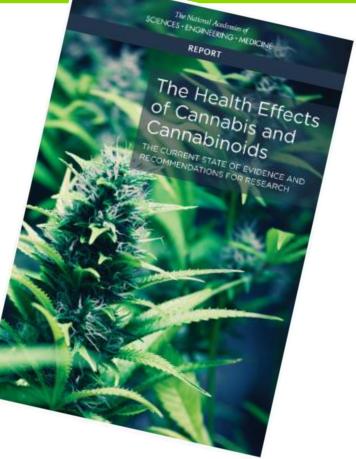


#### **Public Health Education**



# **Consistent Messaging of Health Risks**

- Marijuana is addictive for 1 in 10 users, addiction rates increase as age of initial use decreases \*
- Memory loss, attention and learning difficulties \*
- Increased risks of testicular cancer \*
- Increased risk of chronic psychosis disorders (including schizophrenia)\*



Washington State

Health Care Authorit

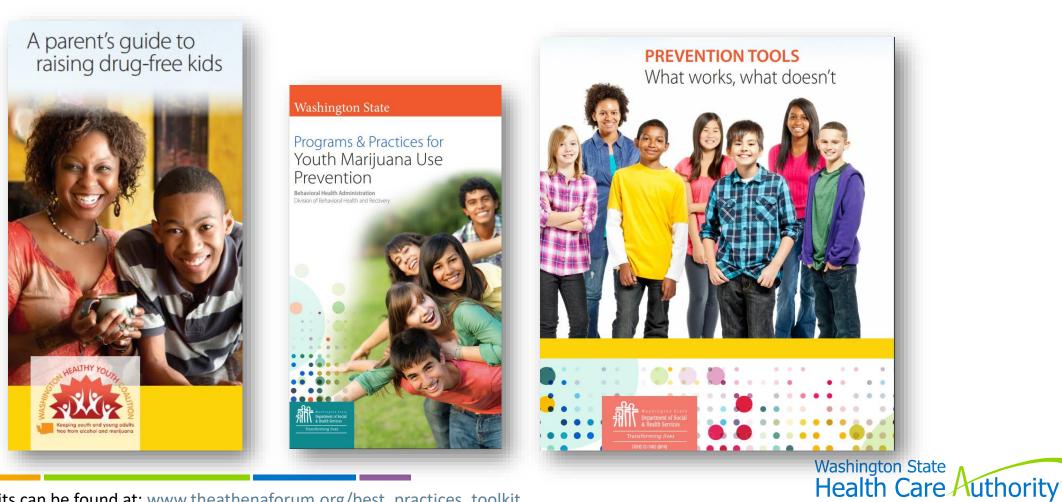
\*CDC: https://www.cdc.gov/marijuana/health-effects.html

NAS: https://www.nap.edu/catalog/24625/the-health-effects-of-cannabis-and-cannabinoids-the-current-state

# **Education and Media Campaigns**



#### **Prevention Tools**





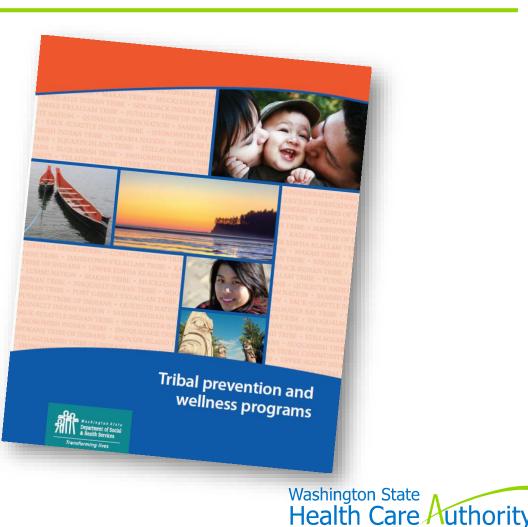
# **Prevention Services**

- Tribal Prevention Services
- Community Prevention Services Community Prevention Wellness Incentive and Community Based Organizations
- Life Skills Training (OSPI)
- Home Visiting (DEL)
- Prevention EBP Training



## **Tribal Prevention Services**

- \$772,000 in grants for SFY 18-19 for 29 federally recognized tribes
- Prevention and Treatment services
- Training and Technical Assistance
- Tribal Prevention Gathering
- Culturally competent programs



## **Community Prevention Services**

Community Prevention and Wellness Initiative (CPWI)

- ► 64 community coalitions
- Prevention Intervention Services in 90 middle and high schools
- Community Based Organizations (CBO)
  - 6 funded by Dedicated Marijuana Account
  - 4 funded by State Targeted Response on Opioid
- Mental Health Promotion and Suicide Prevention
  - 10 funded by State General Funds



# Home Visiting

- DBHR contracts with the Division of Children, Youth and Family Services for \$4,868,000 in home visiting services in SFY 18-19.
  - Individualized home visits
  - Family education and support
  - Substance misuse prevention by parents of infants

High-need Families



# LifeSkills Training

- Life Skills Training Program \$250,000 annually
- Partnership through the Office of Superintendent of Public Instruction
- Grants cover curriculum materials and training
- Offering Life Skills curriculum in over 35 schools statewide



# What does this mean for Washington?

- Rates of youth using marijuana use has remained steady since legalization
- Smoking marijuana is still the most popular use of marijuana
- Significant increase in vaping of marijuana
- There's a need for increased research on driver impairment testing
- The majority of those who use marijuana do not drive within 3 hours



**Troubling Trends** 

Higher THC concentrates in products (concentrates)

Cannabis poisoning increases of children 0-5 years old

Marijuana at private events - infused food or "weed bar"

Juuling is a vaping product that appeals to kids with marijuana infused pods in various flavors.

Marijuana misuse is at disproportionately higher rates for American Indian/Alaska Native youth



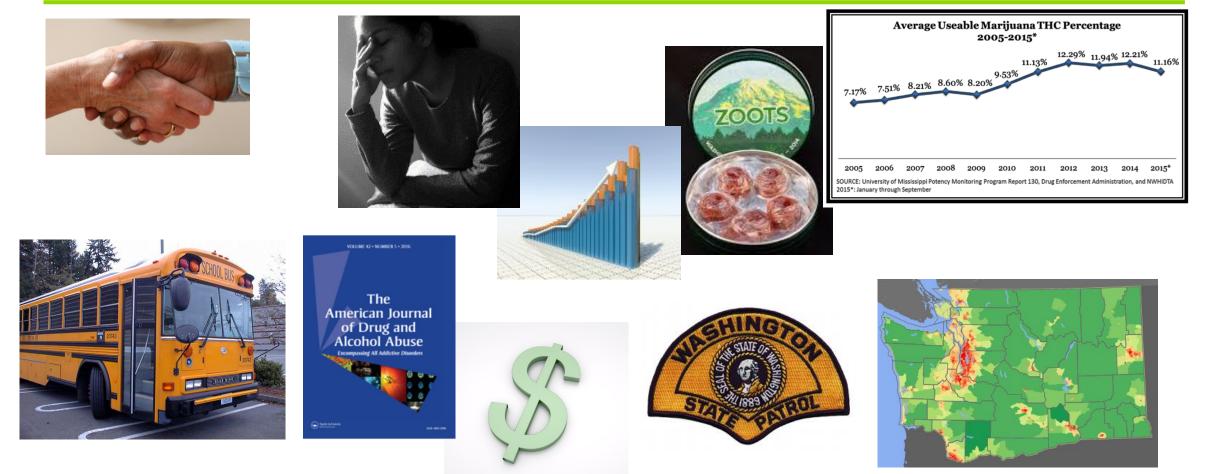


Health Care Huthori





#### Lessons Learned





#### Successes

- Expanded Prevention Services
- Advertising Restrictions
- Packaging Restrictions
- Edible dosage Limitations
- Increased Research
- Decrease in Marijuana Use by Youth



#### Resources

- Athena Forum <u>www.TheAthenaForum.org/Marijuana</u>
- Healthy Youth Survey <u>www.AskHYS.net</u>
- You Can WA <u>www.youcanwa.org</u>
- Know This About Cannabis <u>www.knowthisaboutcannabis.org</u>
- Start Talking Now <u>www.starttalkingnow.org</u>
- Liquor and Cannabis Board <u>https://lcb.wa.gov</u>
- University of Washington Alcohol and Drug Abuse Institute www.LearnAboutMarijuanaWA.org
- CDC <u>https://www.cdc.gov/marijuana/</u>
- SAMHDA (Substance Abuse & Mental Health Data Archive) <u>https://datafiles.samhsa.gov/study-publication/effect-medical-marijuana-laws-adolescent-and-adult-use-marijuana-alcohol-and-other</u>





Sarah Mariani, Behavioral Health Administrator Division of Behavioral Health Resources Health Care Authority <u>Sarah.mariani@hca.wa.gov</u> Tel: 360-725-3774

