# Trends in Youth Substance Use and How to Use Data to Guide Prevention Programming

Diana Doumas, PhD

Distinguished Professor, Counselor Education
Director, Institute for the Study of Behavioral Health and Addiction
Boise State University









# Agenda

- The Purpose of Data
- Data Sources
- Trends in Substance Use
- Risk and Protective Factors
- EPB Resources
- Application Practice











### Let's Talk about Data

Helps us understand the phenomenon we are interested in

Provides information to guide prevention efforts

Tells us how our prevention efforts are doing





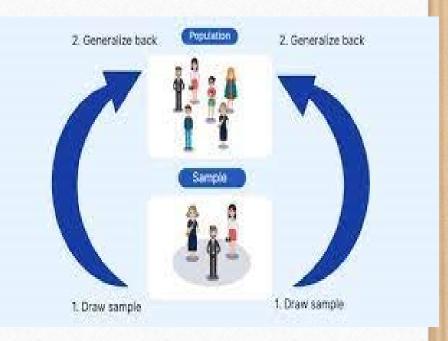




#### Let's Talk about Data

#### Generalizability

- Sample Size
- Sample Demographics
- Sample Location
- Selection Bias











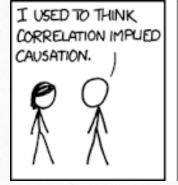
#### Let's Talk about Data

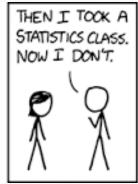
# Validity of Outcomes

- Statistical Significance
- Effect Size
- Cohort Effect (e.g., COVID)
- Third Variables
- Control Group



"Numbers don't lie. That's where we come in."













# Using Data to Guide Prevention Programming





Substance Use by Location

Substance Use By Gender

Substance Use By Grade

Other
Risk/Protective
Factors



Prevention Programing



Outcomes







#### Data Sources

- DrugFree Idaho CORE Survey
- Idaho Healthy Youth Survey Idaho Office of Drug Policy  $(6^{th} - 12^{th})$

https://odp.idaho.gov/wp-content/uploads/2022/08/IHYS-2021-State-Report.pdf

CDC: The Youth Risk Behavior Survey – National and State Level — High School (9<sup>th</sup> – 12<sup>th</sup>)

https://www.cdc.gov/healthyyouth/data/yrbs/results.htm

Monitoring the Future – National - Adolescent, College, Adult

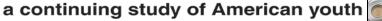
https://nida.nih.gov/research-topics/trendsstatistics/monitoring-future

















#### Trend Data



#### Lifetime Use

- IHYS
- Monitoring the Future

#### Past 30-Day Use

- IHYS
- Monitoring the Future
- YRBS

# Risk and Protective Factors

- IHYS
- YRBS









# 2021 Idaho Healthy Youth Survey (N = 9,381)



#### Grade

- $6^{\text{th}} = 30.7\%$
- $8^{\text{th}} = 30.3\%$
- $10^{\text{th}} = 19.5\%$
- $12^{\text{th}} = 19.5\%$

#### Gender

- Male = 50.3%
- Female = 46.7%
- Other = 3.0%

#### Race/Ethnicity

- White = 69.5%
- Multi-Racial = 12.4%
- Hispanic = 9.4%
- American Indian/Alaska Native = 1.9%
- Black/African American = 1.8%
- Asian = 1.2%
- Native Hawaiian/Pacific Islander = 0.5%
- Other = 3.1%

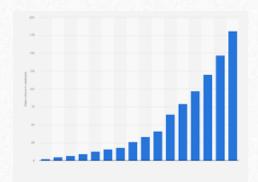








# 2021 Youth Risk Behavior Survey (N = 988)



#### Grade

- $9^{\text{th}} = 28.6\%$
- $10^{\text{th}} = 32.8\%$
- $11^{\text{th}} = 15.3 \%$
- $12^{\text{th}} = 23.3\%$

#### Gender

- Male = 48%
- Female = 52%

#### Race/Ethnicity

- White = 68.8%
- Hispanic = 19.9%
- Multi-Racial = 3.0%Other = 3.1%
- Other = 8.3%









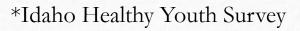
### Lifetime Substance Use 6<sup>th</sup> – 12<sup>th</sup> Grade

	Idaho 2017-2021				
	2017	2019	2021		
Alcohol Use	38.4%	39.1%	31.9%		
Vaping	23.9%	26.3%	17.5%		
Marijuana Use	17.6%	16.9%	11.7%		
Prescription Medication Misuse	11.0%	11.3%	9.9%		
Tobacco Use	16.1%	14.2%	8.2%		













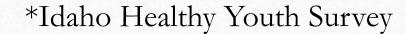


## Lifetime Substance Use 6<sup>th</sup> – 12<sup>th</sup> Grade by Gender

	Idaho 2017-2021 (N = 9,380)					
		Male				
	2017	2019	2021	2017	2019	2021
Alcohol Use	37.2%	37.0%	29.7%	39.3%	41.0%	33.3%
Vaping	23.9%	25.6%	15.5%	23.4%	26.9%	18.8%
Marijuana Use	17.3%	16.6%	10.4%	17.3%	17.3%	12.5%
Prescription Medication	10.1%	10.4%	9.1%	11.5%	11.7%	9.9%
Tobacco Use	17.4%	15.8%	8.7%	14.4%	12.5%	7.3%

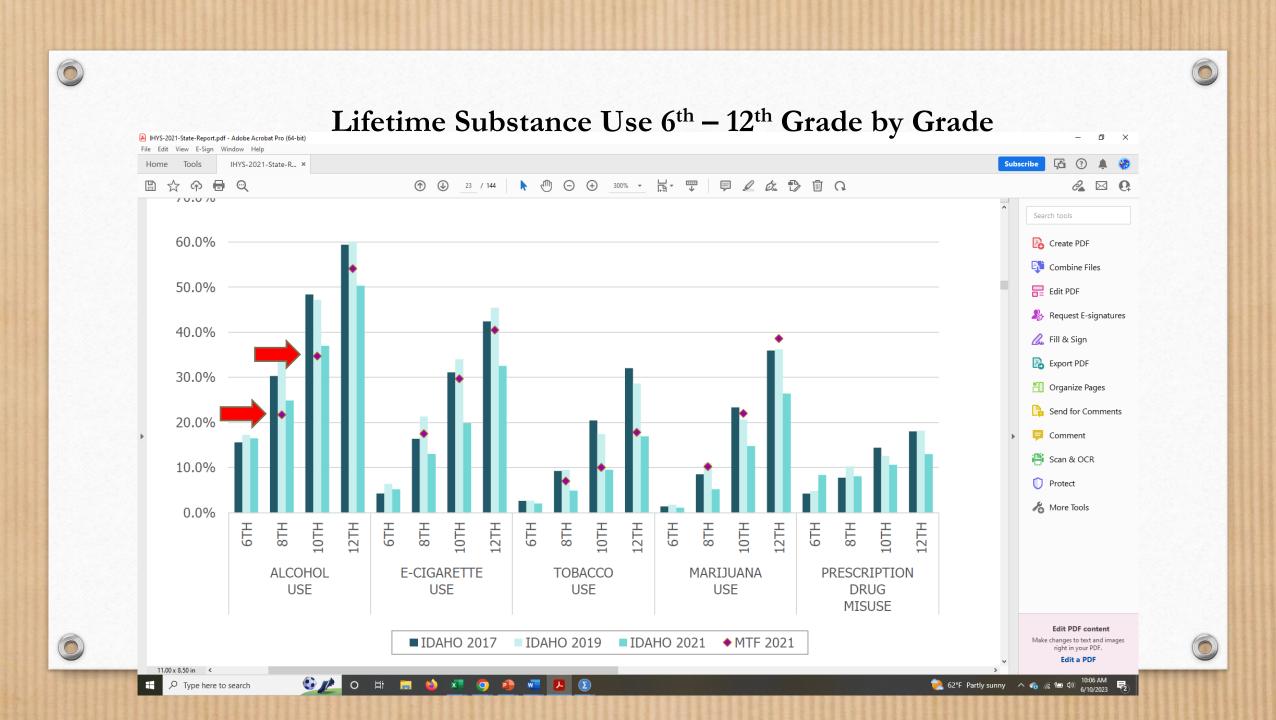






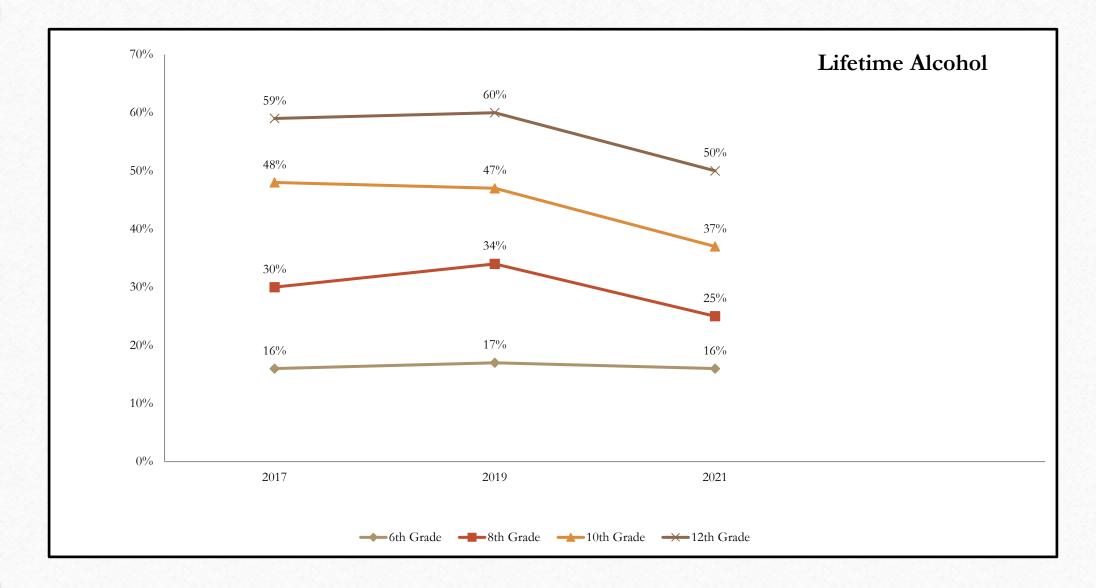










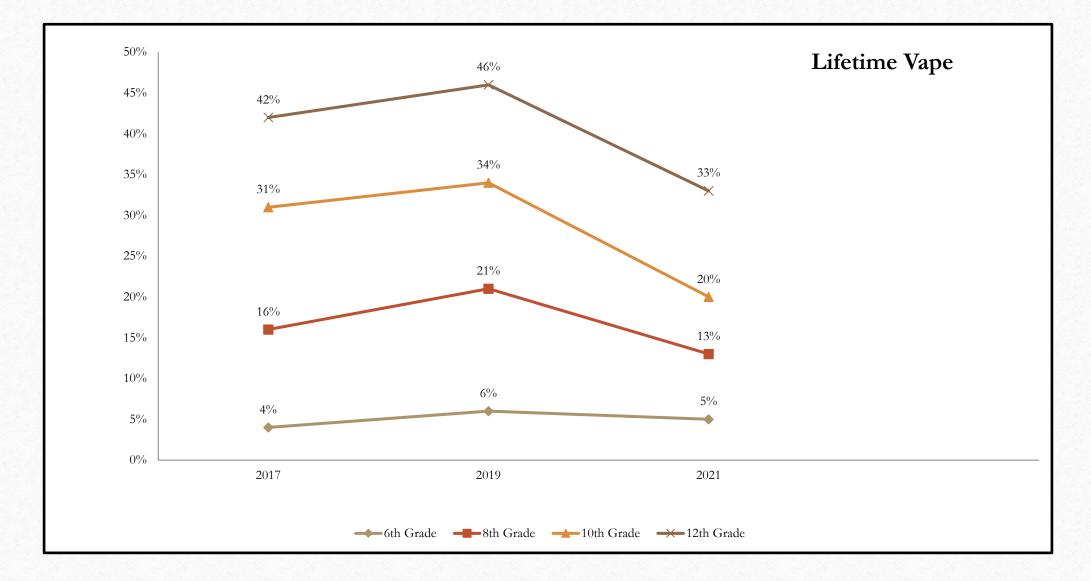










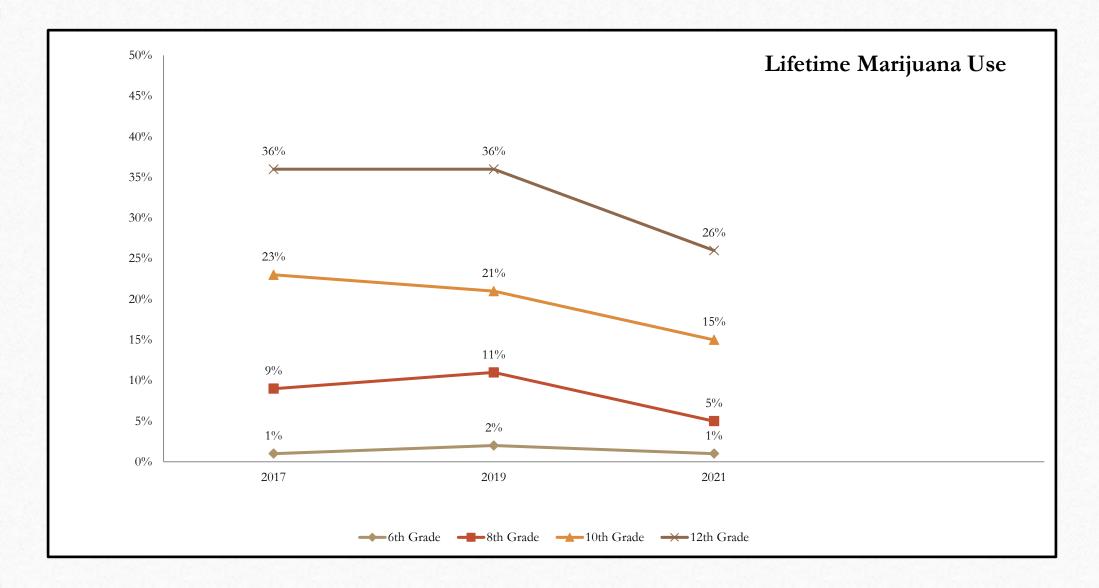










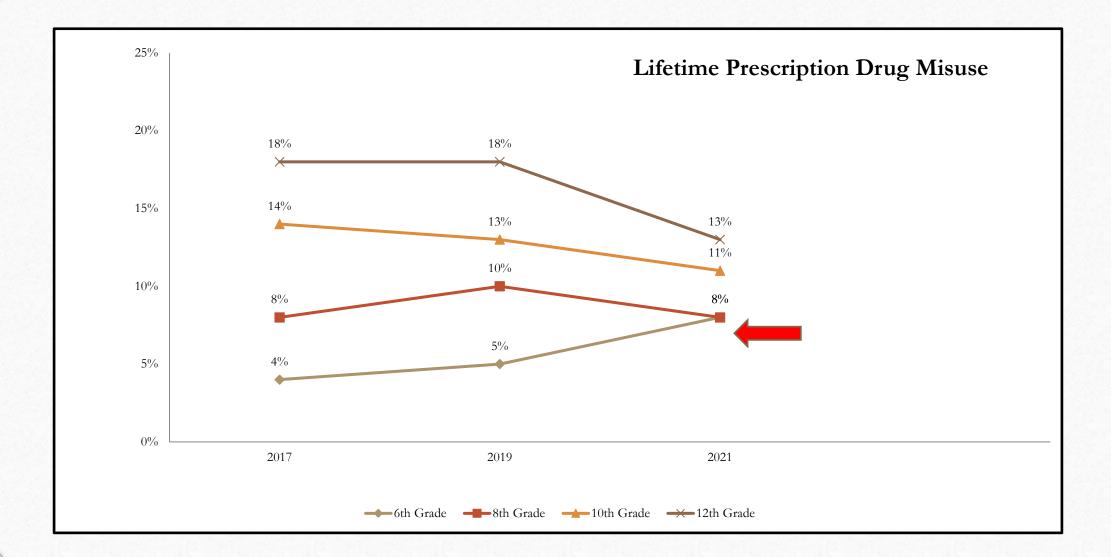










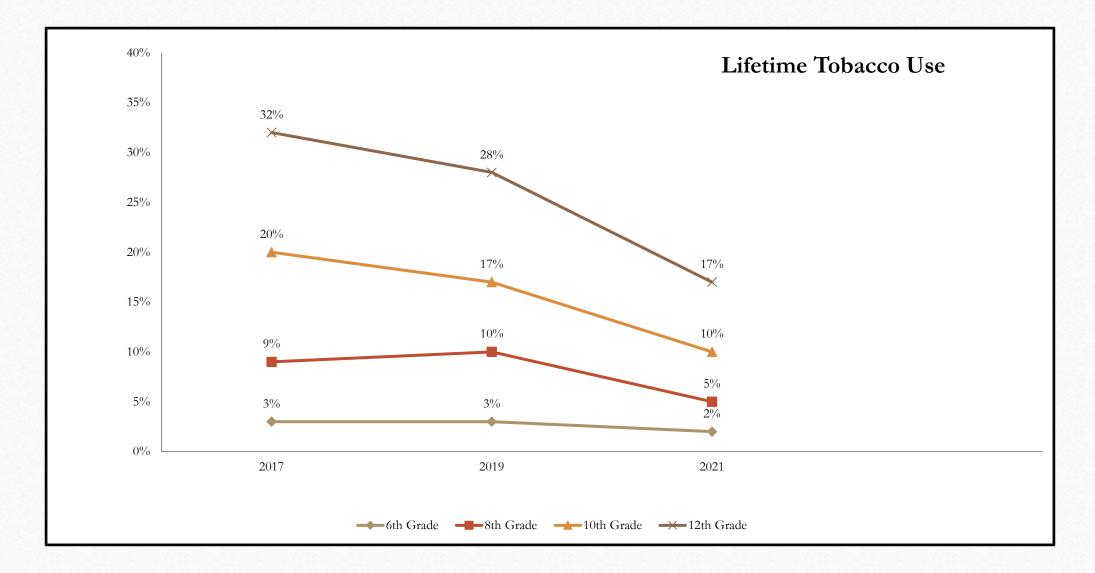












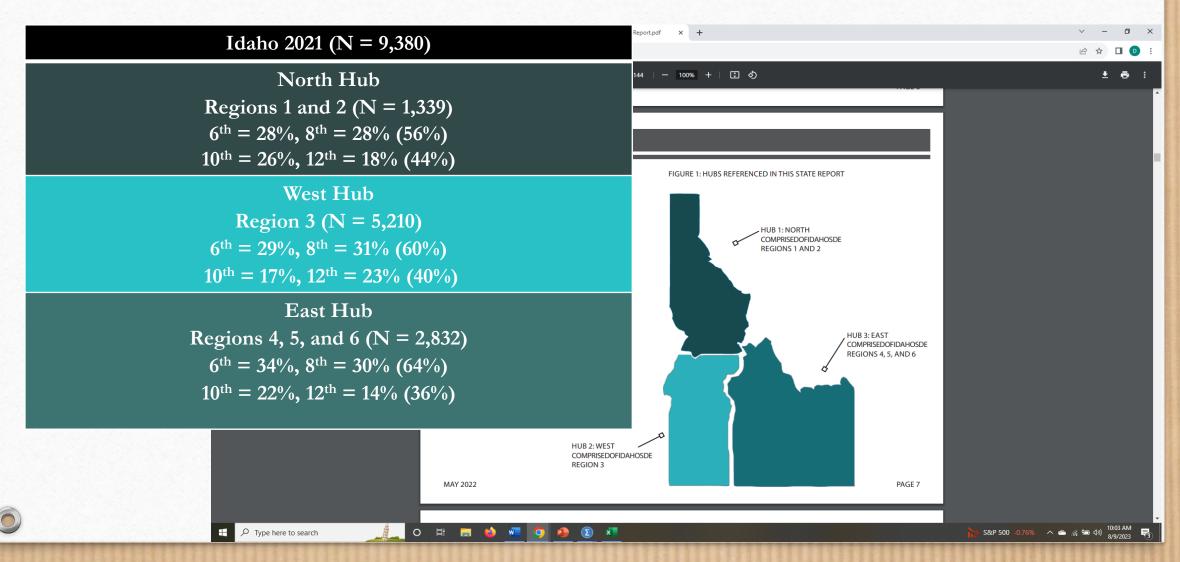








#### Location - Idaho Hubs







### Lifetime Substance Use 6<sup>th</sup> – 12<sup>th</sup> Grade by Hub

	Idaho 2021 (N = 9,380)				
	North Hub Regions 1 and 2 (N = 1,339) $6^{th} = 28\%$ , $8^{th} = 28\%$ (56%) $10^{th} = 26\%$ , $12^{th} = 18\%$ (44%)	West Hub Region 3 (N = 5,210) $6^{th} = 29\%, 8^{th} = 31\% (60\%)$ $10^{th} = 17\%, 12^{th} = 23\% (40\%)$	East Hub Regions 4, 5, and 6 (N = 2,832) $6^{th} = 34\%$ , $8^{th} = 30\%$ (64%) $10^{th} = 22\%$ , $12^{th} = 14\%$ (36%)		
Alcohol Use	45.0%	34.0%	24.9%		
Vaping	23.3%	18.2%	14.6%		
Marijuana Use	16.0%	13.7%	8.0%		
Prescription Medication	10.5%	10.8%	8.8%		
Tobacco Use	13.9%	8.0%	6.3%		









## Past 30-Day Substance Use 6<sup>th</sup> – 12<sup>th</sup> Grade

		Idaho 2017-2021	
	2017	2019	2021
Alcohol Use	14.7%	14.7%	9.8%
Binge Drinking	6.8%	6.7%	4.8%
Vaping	13.9%	14.6%	8.8%
Marijuana Use	9.2%	8.5%	5.6%
Prescription Medication	3.6%	3.3%	2.8%
Tobacco Use	5.8%	4.8%	2.1%





<sup>\*</sup>Idaho Healthy Youth Survey









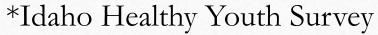
### Past 30-Day Substance Use 6<sup>th</sup> – 12<sup>th</sup> Grade by Gender

Idaho 2017-2021						
		Male			Female	
	2017	2019	2021	2017	2019	2021
Alcohol Use	13.4%	14.0%	8.6%	15.7%	15.3%	10.7%
Vaping	14.1%	14.6%	7.1%	13.3%	14.6%	10.3%
Marijuana Use	8.8%	8.4%	5.4%	9.3%	8.4%	5.6%
Prescription Medication	3.1%	3.0%	2.8%	3.8%	3.3%	2.6%
Tobacco Use	5.6%	4.9%	2.1%	5.3%	4.5%	1.8%















### Past 30-Day Substance Use 9th – 12th Grade by Gender

Idaho 2017-2021						
		Male		Female		
	2017	2019	2021	2017	2019	2021
Alcohol Use	23.6%	25.3%	19.3%	29.5%	28.3%	27.0%
Binge Drinking	13.6%	15.9%	9.6%	16.9%	16.0%	13.3%
Vaping	16.0%	24.2%	15.0%	12.6%	18.9%	20.5%
Marijuana Use	15.0%	17.3%	11.9%	17.4%	16.5%	15.9%
Prescription Medication	-	-	-	-	-	-
Tobacco Use	9.8%	6.7%	3.3%	8.3%	4.0%	3.7%

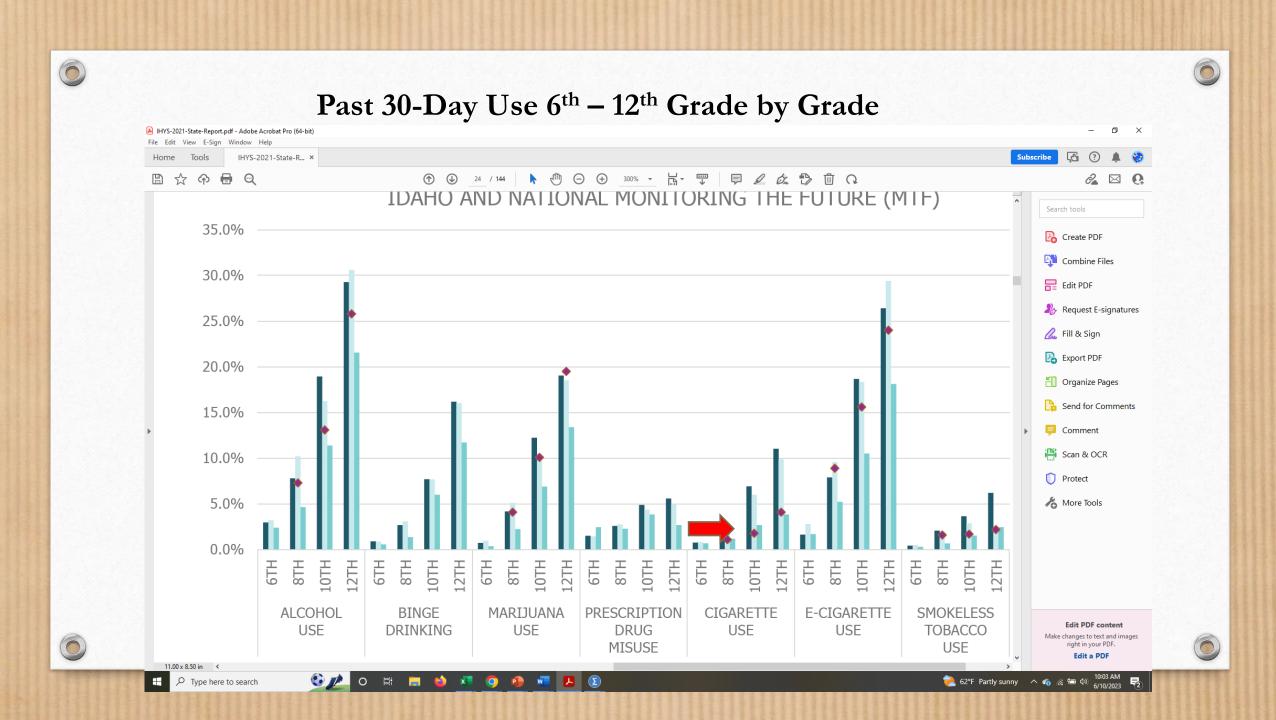






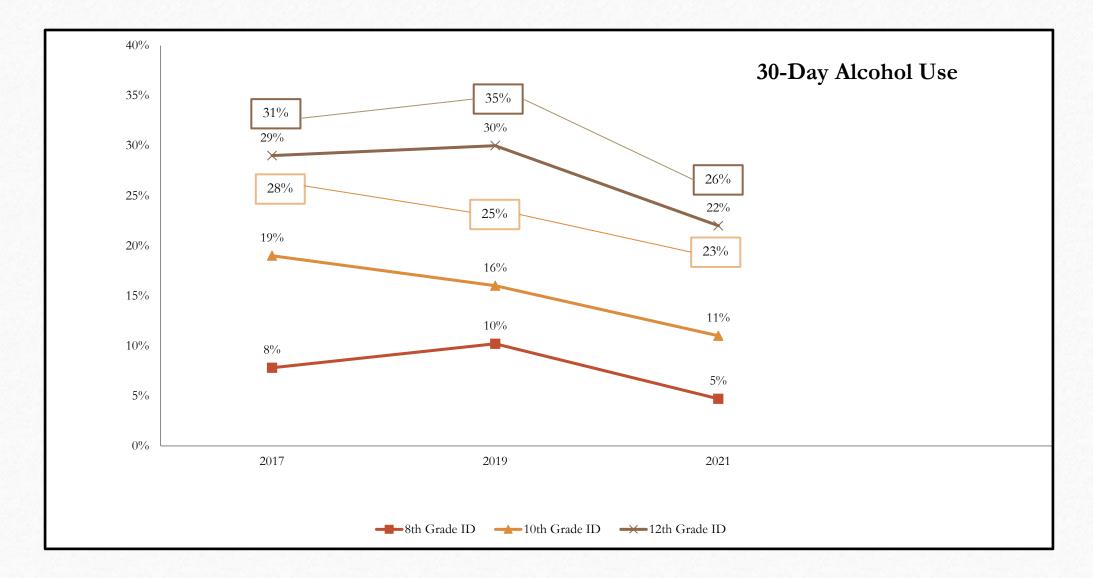










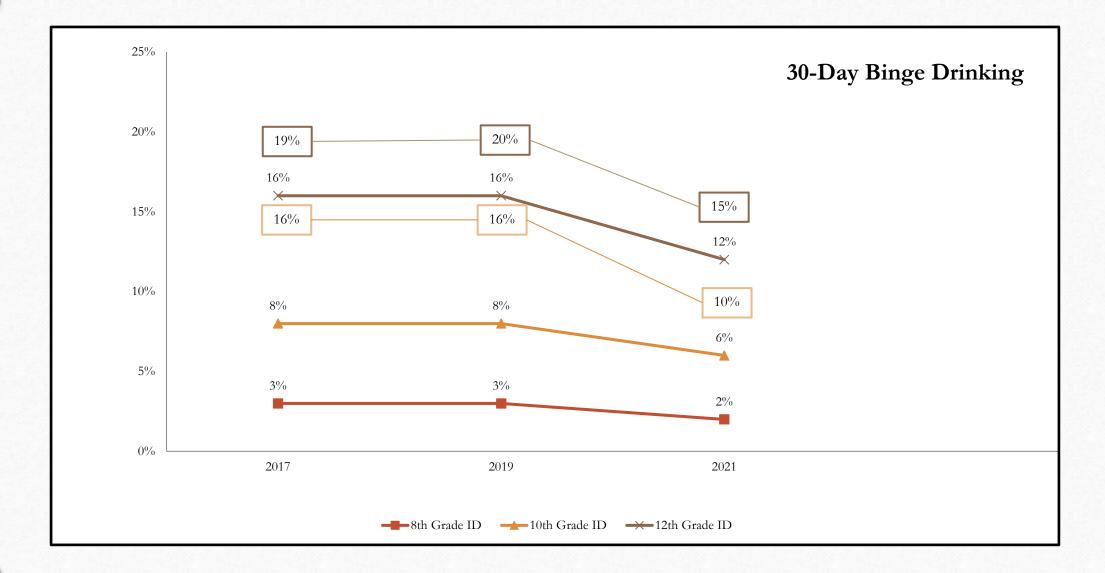










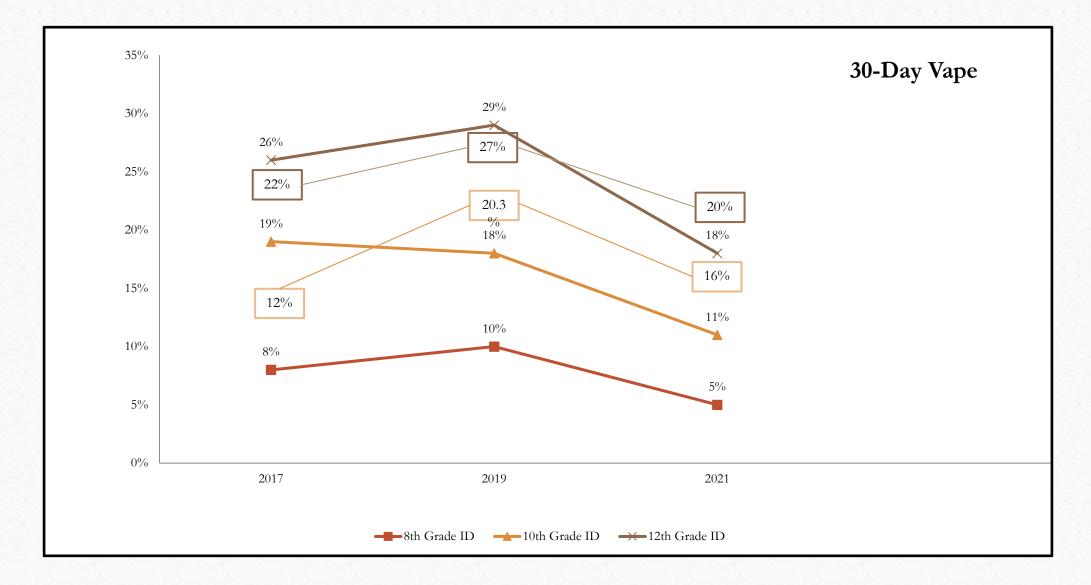










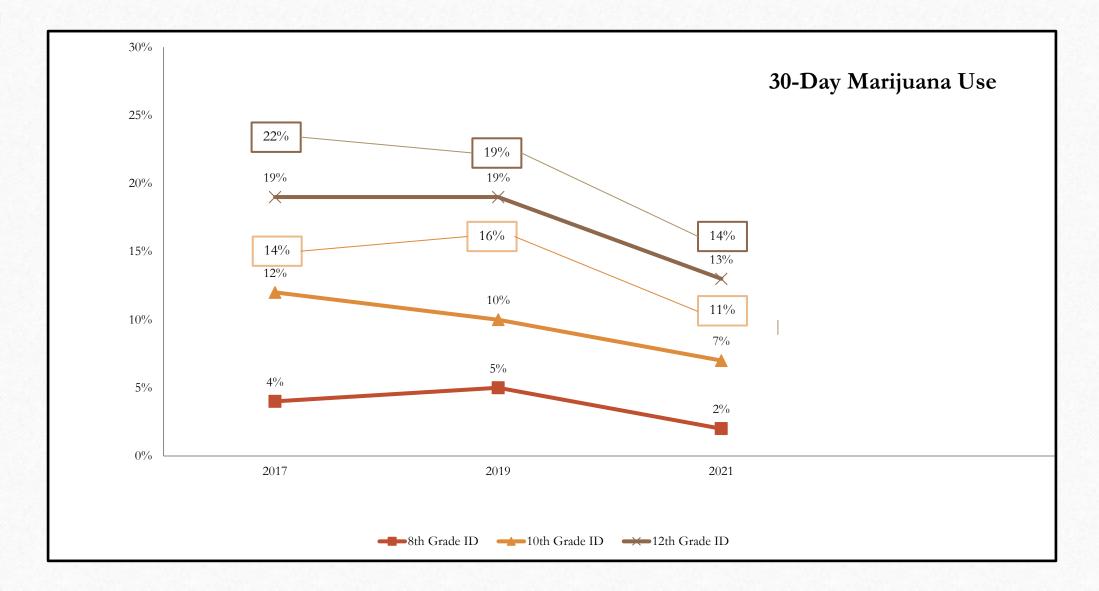










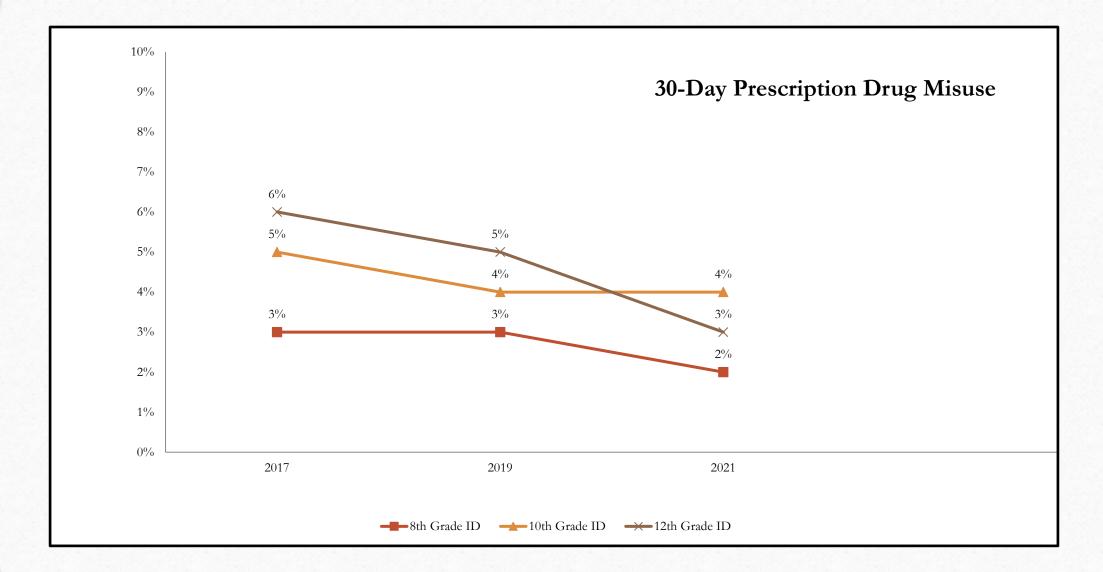










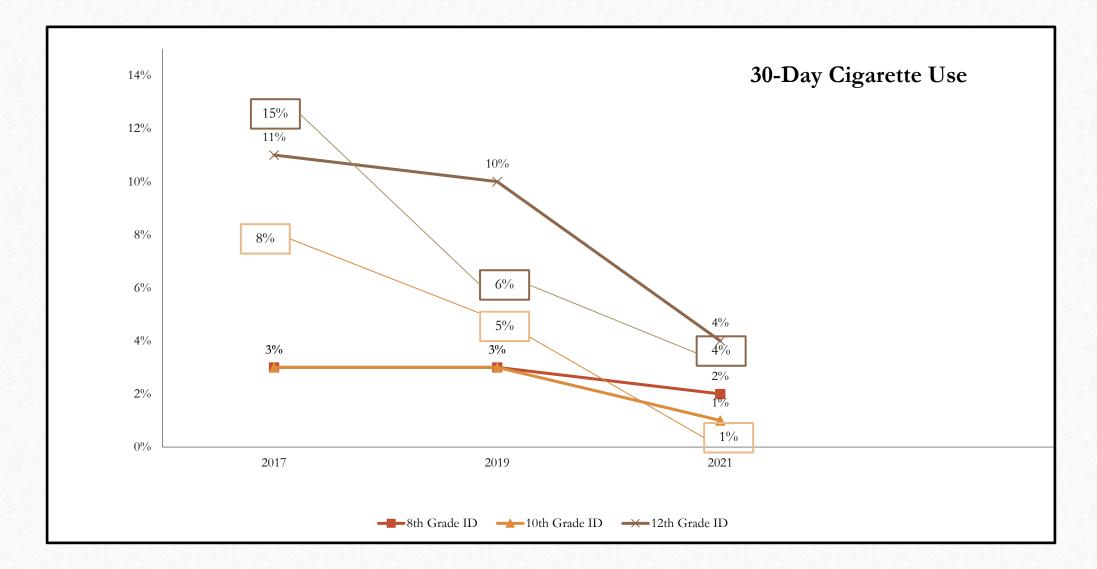




















## Past 30-Day Substance Use 6<sup>th</sup> – 12<sup>th</sup> Grade by Hub

	Idaho 2021 (N = 9,380)					
	North Hub Regions 1 and 2 (N = 1,339) $6^{th} = 28\%$ , $8^{th} = 28\%$ (56%) $10^{th} = 26\%$ , $12^{th} = 18\%$ (44%)	West Hub Region 3 (N = 5,210) 6 <sup>th</sup> = 29%, 8 <sup>th</sup> = 31% (60%) 10 <sup>th</sup> = 17%, 12 <sup>th</sup> = 23% (40%)	East Hub Regions 4, 5, and 6 (N = 2,832) $6^{th} = 34\%$ , $8^{th} = 30\%$ (64%) $10^{th} = 22\%$ , $12^{th} = 14\%$ (36%)			
Alcohol Use	15.7%	10.8%	6.5%			
Binge Drinking	7.8%	5.3%	3.1%			
Vaping	12.1%	9.5%	6.8%			
Marijuana Use	7.9%	6.8%	3.6%			
Prescription Medication	3.3%	2.6%	2.9%			
Tobacco Use	3.7%	2.0%	1.6%			

<sup>\*</sup>Idaho Healthy Youth Survey









# 9<sup>th</sup> – 12<sup>th</sup> Grade – Risk Factors

	Unite	d States (N =	= 16,500)	Idaho (N = 970)		
	2017	2019	2021	2017	2019	2021
1st drink before age 13	15.5%	15.0%	15.0%	15.5%	14.7%	17.3%
Tried marijuana before age 13	6.8%	5.6%	4.9%	6.0%	5.0%	5.8%
Rode in car with someone who had been drinking	16.5%	16.7%	14.1%	15.9%	13.1%	14.4%
Drive when drinking	5.5%	5.4%	4.6%	6.0%	3.8%	3.1%







\* Youth Risk Behavior Survey







# 9<sup>th</sup> – 12<sup>th</sup> Grade – Risk Factors

		Idaho 2021 (N = 970)				
	9th	10 <sup>th</sup>	11th	12th		
1st drink before age 13	23.9%	20.9%	15.2%	6.6%		
Tried marijuana before age 13	10.4%	5.0%	3.5%	2.7%		
Rode in car with someone who had been drinking	18.5%	15.0%	11.3%	11.9%		
Drive when drinking	1.5%	2.1%	4.3%	3.2%		













#### Risk/Protective Factors – Access



Research indicates ease of access to substances is a risk factor for youth substance use

#### In Idaho

- One third of students or less think it is easy to access substances
- Perceived access increases from 6<sup>th</sup>

   12<sup>th</sup> grade, with the highest rates
   of perceived access in 12<sup>th</sup> grade
- Perceived ease of access <u>decreased</u> from 2017-2019 and from 2019-2021

Substance	Percent that Believe Access is "Easy"
Alcohol	34.2%
Prescription Drugs for Purpose of Misuse	24.3%
Marijuana	18.5%
Tobacco	17.2%





#### Risk/Protective Factors – Perceived Risk of Use



Research indicates perceived risk of substance use is a protective factor for youth substance use

#### In Idaho

- About one half to two thirds of students perceive use of substances to be a "great risk"\_\_\_
- Perceived risk decreases from 6<sup>th</sup>

   12<sup>th</sup> grade, with the lowest rates of perceived risk in 12<sup>th</sup> grade
- Perceived risk <u>increased</u> from 2017-2021 for vaping, prescription drugs, and marijuana but <u>decreased</u> for tobacco; <u>no change</u> for alcohol

Substance	Percent that Believe Use is a "Great Risk"
Use Tobacco	65.7%
Misuse Prescription Drugs	65.7%
Binge Drink ≥ 1 Times a Week	57.0%
Vape or use e- Cigarettes	52.3%
Use Marijuana	49.6%
Drink 1-2 Drinks Nearly Every Day	47.9%





#### Risk/Protective Factors – Peer Disapproval



Research indicates perceived peer disapproval of youth substance use is a protective factor for youth substance use

#### • In Idaho

- Only one half to two thirds of students believe their peers feel it would be "very wrong" for them to use substances
- Perceived disapproval decreases from 6<sup>th</sup> – 12<sup>th</sup> grade, with the lowest rates of perceived disapproval in 12<sup>th</sup> grade
- Data is similar from 2017-2021 for alcohol and prescription drug use; <u>increase</u> in perceived disapproval for marijuana, vaping, and tobacco use

Substance	Percent that Believe Peers Would Feel it is "Very Wrong"
Use Tobacco	69.3%
Use Marijuana	65.4%
Binge Drink ≥ 1 Times a Week	63.7%
Drink 1-2 Drinks Nearly Every Day	57.4%
Misuse Prescription Drugs	56.1%







### Risk/Protective Factors – Parental Disapproval



Research indicates perceived parental disapproval of youth substance use is a protective factor for youth substance use

#### In Idaho

- Most students believe their parents feel it would be "very wrong" for them to use substances
- Perceived disapproval decreases from 6<sup>th</sup> – 12<sup>th</sup> grade, with the lowest rates of perceived disapproval in 12<sup>th</sup> grade
- Data is similar from 2017-2021

Substance	Percent that Believe Parents Would Feel it is "Very Wrong"
Misuse Prescription Drugs	84.8%
Use Tobacco	84.5%
Use Marijuana	80.7%
Use an e-Cigarette	80.3%
Binge Drink ≥ 1 Times a Week	81.0%
Drink 1-2 Drinks Nearly Every Day	73.9%







#### EBP Websites

- Blueprints for Healthy Youth Development <a href="https://www.blueprintsprograms.org/">https://www.blueprintsprograms.org/</a>
- National Institute of Justice

https://crimesolutions.ojp.gov/

WA State Matrix



https://www.wsipp.wa.gov/ReportFile/1727/Wsipp\_Updated-Inventory-of-Evidence-Based-Research-Based-and-Promising-Practices-For-Prevention-and-Intervention-Services-for-Children-and-Juveniles-in-the-Child-Welfare-Juvenile-Justice-and-Mental-Health-Systems\_Report.pdfIdaho Office of Drug Policy

Click this link for Updated Inventory of Evidence-Based, Research-Based, and Promising Practices

Idaho Office of Drug Policy

https://prevention.odp.idaho.gov/wp-content/uploads/2016 evidencebased practice selection planning workbook.pdf

College Aim Matrix (NIAAA)



https://www.collegedrinkingprevention.gov/sites/cdp/files/documents/NIAAA College Matrix Booklet.pdf







#### Boise State RADAR CENTER

Evidence-Based Practices Link

https://www.boisestate.edu/radar/resource-links/national-links/evidence-based-practices/

- New EBP Resources Page in Progress
- Contact: Leah Kalk, MA

208-426-3471

radar@boisestate.edu









## Putting it into Practice

- Sharon is a school counselor at a high school in Region 3. Sharon is interested in understanding:
- 1) How substance use in her area compares to the rest of the state
- 2) Which substances are being used most often
- 3) How are adolescents getting the most used substance
- 4) What programs might be useful for students at her school











# Questions?





