

# Welcome

## Central East PTTC Webinar

# Preventing Underage Alcohol Use An Overview of Data and Strategies

August 31, 2020

*The Central East PTTC is housed at the Danya Institute in Silver Spring, MD*

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Central East (HHS Region 3)

PTTC

Each TTC Network includes 13 centers.\*



Network Coordinating Office

National American Indian and Alaska Native Center

National Hispanic and Latino Center

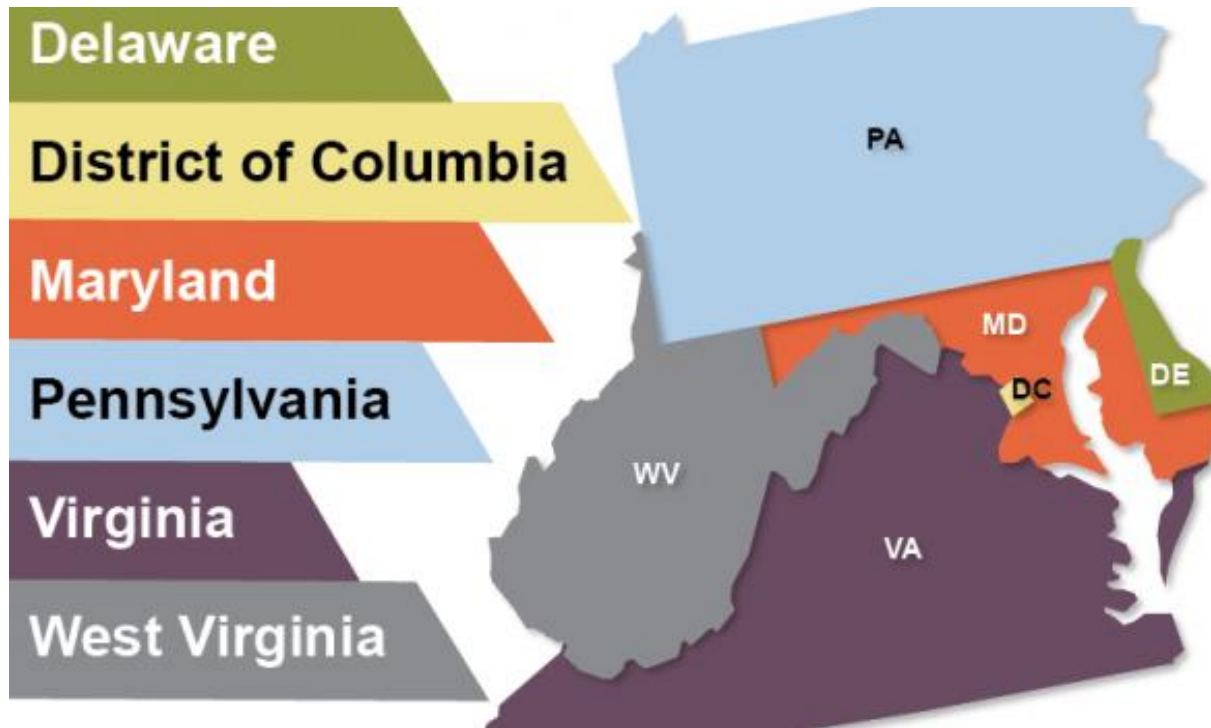
10 Regional Centers (aligned with HHS regions)

*\*The ATTC Network also includes 4 international HIV centers funded by the President's Emergency Plan for AIDS Relief.*



# Central East Region

## HHS REGION 3



# What We Do

- **Accelerate** the adoption and implementation of evidence-based and promising treatment and recovery-oriented practices and services
- **Strengthen** the behavioral health awareness, knowledge, and skills of the health care and prevention workforce that address the needs of people with behavioral health disorders
- **Foster regional** and national alliances among culturally diverse practitioners, researchers, policy makers, funders, and the recovery community
- **Ensure** the availability and delivery of publicly available, free of charge, behavioral health training and technical assistance to health care and prevention professionals



# PTTC Mission

To Strengthen **the Capacity of the Workforce to Deliver Evidence-Based Prevention Strategies and Facilitate Opportunities for Preventionists to Pursue New Collaboration Opportunities, which include Developing Prevention Partnerships and Alliances**



# Central East PTTC Specialty Area

Engaging and Collaborating with Primary Care Providers for Substance Use Prevention



# Eligibility

Behavioral health and health care providers, consumers, families, state and local public health systems and other stakeholders

Consistent with  
Regional, State  
and Local  
Needs

No cost

Data Driven

EBPs provided  
by Subject  
Matter Experts



# PTTC Focus Areas

- Opioid/harm reduction strategies
- Suicide prevention and substance use overdoses
- Youth vaping/tobacco
- Youth alcohol and suicide
- Health equity and the elimination of disparities
- Trauma
- Workforce leadership development series-  
strategic planning/SPF; data-informed decision-  
making; environmental strategies





# Other Resources in Region 3



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ATTC

Addiction Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration



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MHTTC

Mental Health Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration



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PTTC

The use of affirming language inspires hope.

**LANGUAGE MATTERS.**

**Words have power.**

**PEOPLE FIRST.**

The PTTC Network uses affirming language to promote the application of evidence-based and culturally informed practices.



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PTTC

Prevention Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

# Preventing Underage Alcohol Use

## An Overview of Data and Strategies

August 31, 2020

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# Presenters



Josh Esrick  
*Presenter*



Robin LaVallee  
*Presenter*



# Learning Objectives

- Review data on the state of underage drinking and its consequences
- Review research on risk factors
- Discuss Federal prevention efforts/environment
- Highlight evidence-based prevention strategies and related resources



# Patterns of Alcohol Use

- Lifetime use
- Past-year use
- Past-month use
- Past-month binge use
- Past-month heavy use
- Simultaneous alcohol & marijuana (SAM) use

## What is a **standard drink**?

<b>12 fl oz of regular beer</b>	<b>8 - 9 fl oz of malt liquor</b> (shown in a 12 oz glass)	<b>5 fl oz of table wine</b>	<b>1.5 fl oz of distilled spirits</b> (gin, rum, tequila, vodka, whiskey)
			

Each beverage portrayed above represents one standard drink of "pure" alcohol, defined in the United States as 0.6 fl oz or 14 grams. The percent of pure alcohol, expressed here as alcohol by volume (alc/vol), varies within and across beverage types. Although the standard drink amounts are helpful for following health guidelines, they may not reflect customary serving sizes.

HHS.gov



# Review of the Data

- Data sources:
  - National Survey on Drug Use and Health (NSDUH) (SAMHSA)
    - Annual
    - ages 12-65
  - Monitoring the Future (MTF) (NIDA)
    - Annual
    - 8<sup>th</sup>, 10<sup>th</sup>, 12<sup>th</sup> graders
  - Youth Risk Behavior Survey (YRBS) (CDC)
    - Biannual
    - 9<sup>th</sup>-12<sup>th</sup> graders



# Lifetime Alcohol Use

Grade	1991	2019
8 <sup>th</sup>	70.1%	24.5%
10 <sup>th</sup>	83.8%	43.1%
12 <sup>th</sup>	88.0%	58.5%
overall	80.1%	41.5%

*MTF, 2019*





# Age of Onset

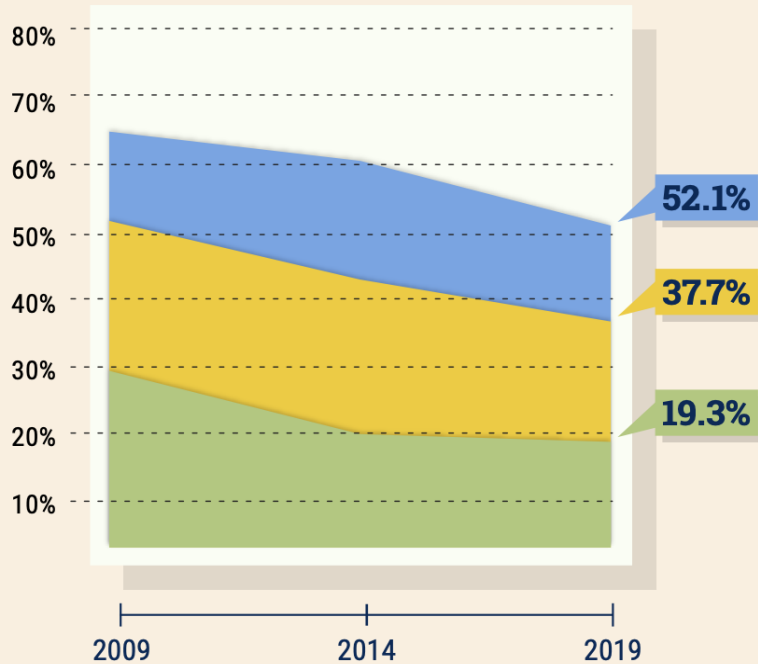
- 15.5% of students had their first drink of alcohol (other than a few sips) before age 13 (*YRBS, 2017*)
- Evidence of delaying onset of alcohol use (*NSDUH*)
  - Past-year initiates under age 21
    - 2016: **16.2** years old
    - 2004: 15.6 years old



# Past-Year Alcohol Use

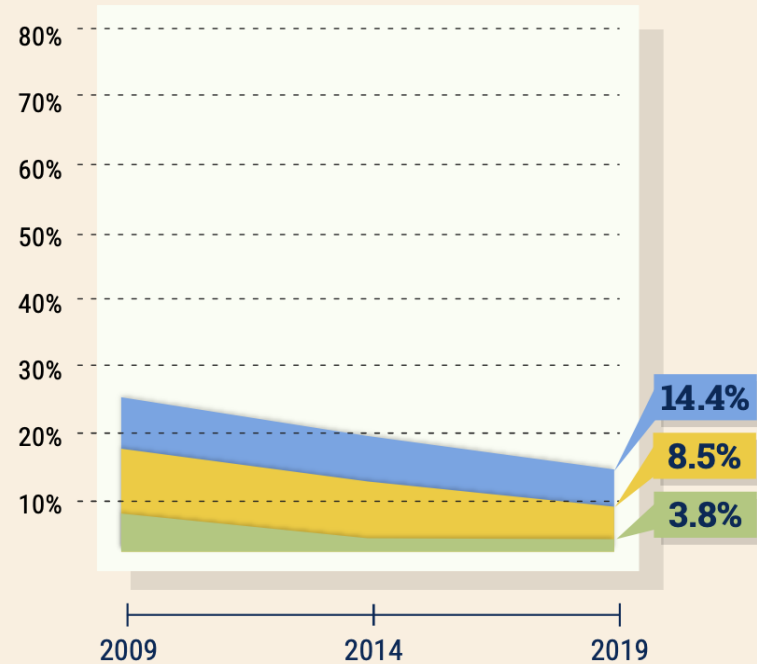
## PAST YEAR ALCOHOL USE

Significant long-term decrease in all grades



## BINGE DRINKING\*

Significant long-term decrease in all grades



8th graders

10th graders

12th graders

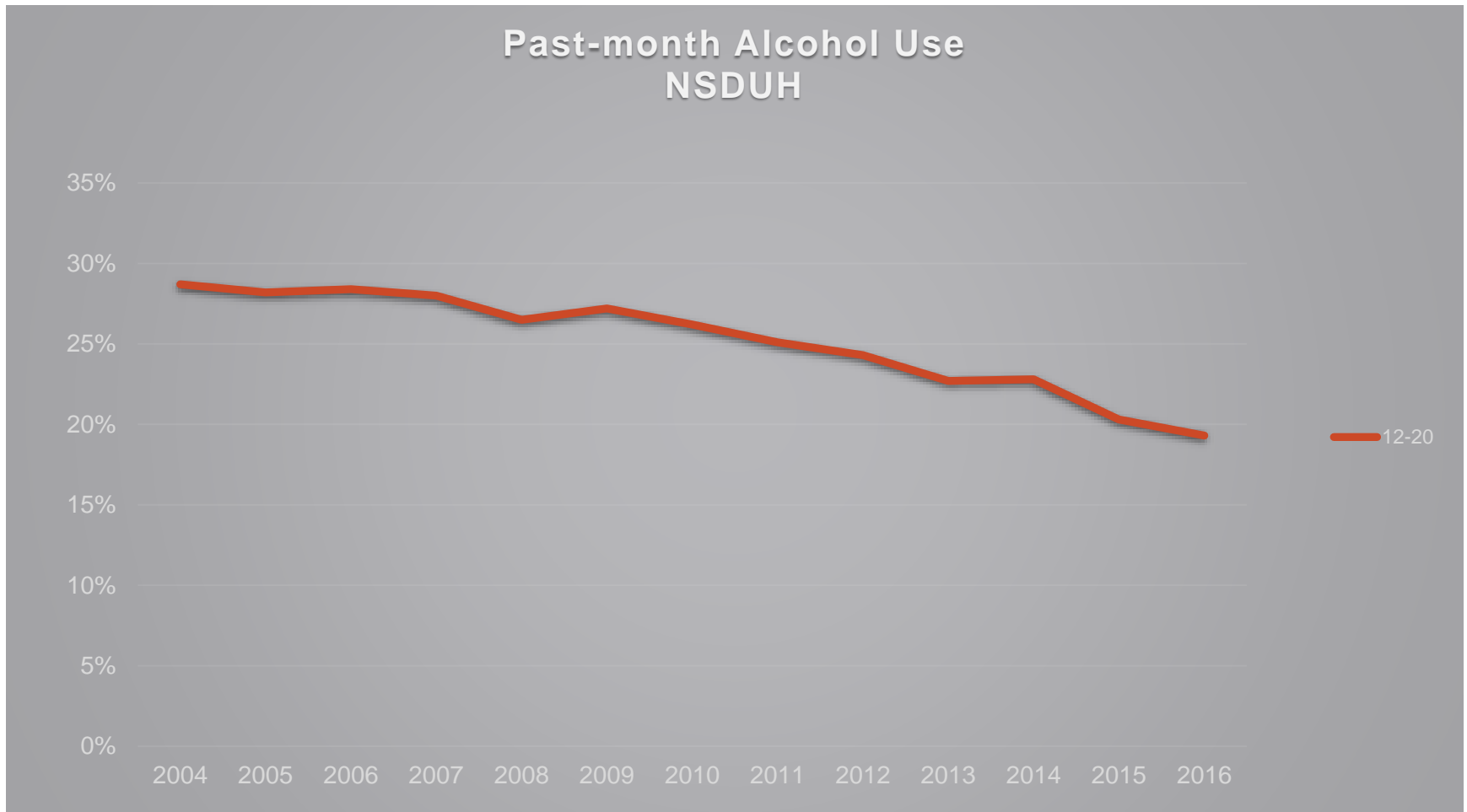
\*5 or more drinks in a row in the past two weeks

MTF, 2019. Source: NIDA

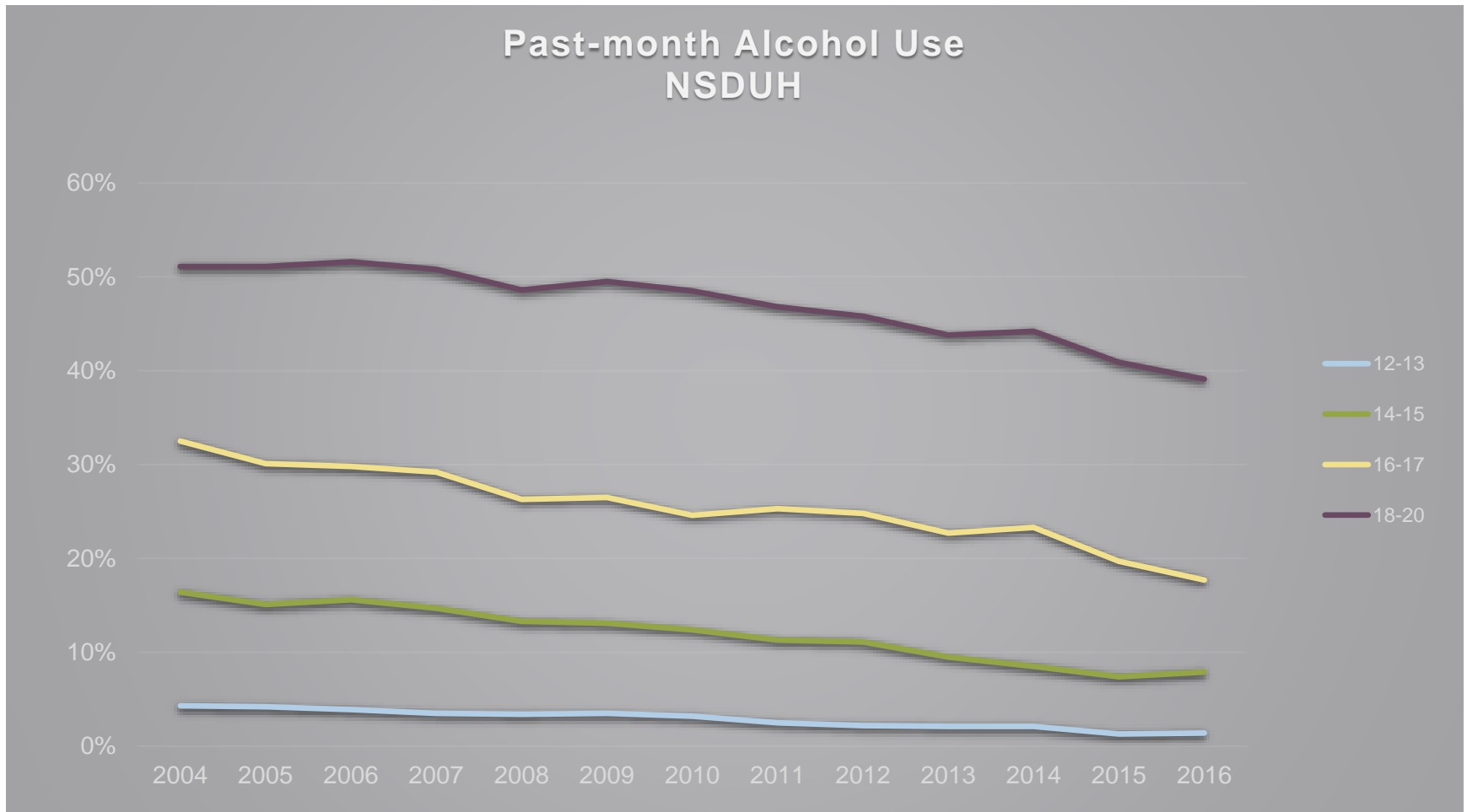
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# Past-Month Alcohol Use



# Past-Month Alcohol Use



# Past-Month Binge Alcohol Use

Age	2015	2016	% Change
12-13	0.7%	0.3%	-52.7%*
14-15	3.8%	3.7%	-1.9%
16-17	12.6%	10.2%	-18.8%*
18-20	27.4%	26.3%	-6.1%
12-20	13.3%	12.1%	-9.6%*

*NSDUH, 2016*



# Past-Month Heavy Alcohol Use

- Heavy drinking: consuming 5+ drinks on the same occasion on each of 5 or more days in the past 30 days
- **2.8%** of 12- to 20-year-olds engaged in heavy drinking (*NSDUH, 2016*)
  - **0.2%** (age 12)
  - **9.9%** (age 20)



# Simultaneous Alcohol & Marijuana Use

- Among 12th graders who use both alcohol and marijuana, the majority use simultaneously (*Patrick et al, 2018*)
- SAM use during the past year was reported by 20% of 12th graders overall (*Patrick et al, 2017*)
- Among HS seniors, the heaviest drinkers and marijuana users are more likely to use both substances simultaneously (*Patrick et al, 2017*)
  - Past-year simultaneous alcohol and marijuana (SAM) use was greater among those who reported higher-intensity drinking in the past 2 weeks:
    - **12%** who had 0–4 drinks, **50%** who had 5–9 drinks, and **60%–61%** who had 10–14 or 15+ drinks



# College Drinking

- **60%** of college students ages 18–22 drank alcohol in the past month (*NSDUH, 2014*)
  - **38%** engaged in binge drinking during that same timeframe (*NSDUH, 2014*)
- Students attending schools with strong Greek systems and with prominent athletic programs tend to drink more than students at other types of schools (*NIAAA, 2015*)
- Study of college students found about **75%** of participants reported at least 1 occasion of SAM use in the past year with an average frequency of 2x per month (*White, 2019*)
  - Students in a state with decriminalized recreational marijuana use reported higher frequency of past-year SAM use than students in states with legalized or criminalized use.





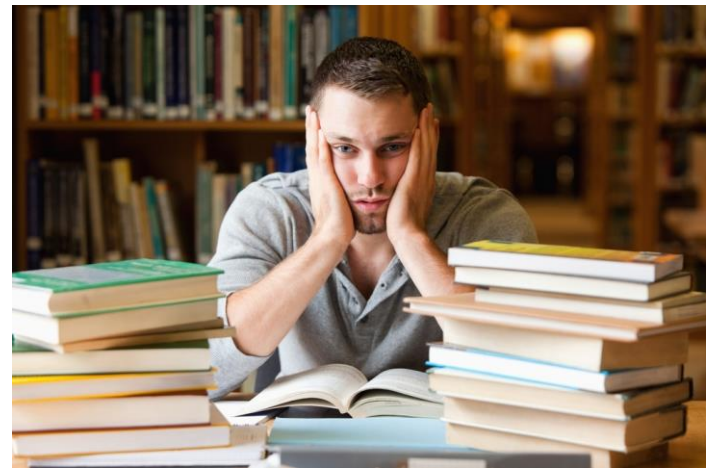
# Consequences of Use

- Academic consequences
- Unsafe driving
- Assaults/Violence
- Injury & Death
- Alcohol use disorder (AUD)



# Academic Consequences

- About **25%** of college students report academic consequences as a result of their drinking, including missing class, falling behind, doing poorly on exams or papers, and receiving lower grades overall (*NIAAA, 2015*)



# Unsafe Driving

- Higher frequency of alcohol use and SAM use associated with higher rate of unsafe driving (*Terry-McElrath et al, 2014*)
- In the past 30 days (*2017 YRBS*):
  - **6%** of HS students drove after drinking
  - **17%** rode with a driver who had been drinking
- Youth who started drinking before age 15, compared to those who waited until they were 21, were **7x** more likely to be in a motor vehicle crash after drinking (*National Research Council, 2004*)
- In 2014, **4%** of 16- to 20-year-olds reported driving after SAM use (*Lipari et al, 2016*)



# Assaults/Violence

- Underage youth who drink are more likely to carry out or be the victim of a physical or sexual assault after drinking than others their age who do not drink (*NIAAA*)
- Youth who started drinking before age 15, compared to those who waited until they were 21, were **10x** more likely to have been in a physical fight after drinking (*National Research Council, 2004*)
- Roughly half of all reported and unreported sexual assaults involve alcohol consumption by the perpetrator, victim or both (*Abbey et al, 2004*)



# Injury

- Youth who started drinking before age 15, compared to those who waited until they were 21, were **12x** more likely to be unintentionally injured while under the influence of alcohol (*National Research Council, 2004*)
- Individuals who began drinking at earlier ages were more likely to have, under the influence of alcohol, unintentionally injured themselves and someone else. Persons other than respondents experienced 20% of those unintentional injuries, more than one third of them in traffic (*Hingson, 2009*)
- Emergency department (ED) visits among patients aged 12 to 20 involving alcohol and other drugs were more likely than visits involving alcohol only to result in a serious outcome (33 vs. 12 percent) (*DAWN*)



# Death

- CDC estimates that, on average, alcohol is a factor in the deaths of 4,358 young people under age 21 each year.
  - 1,580 deaths from motor vehicle crashes
  - 1,269 from homicides
  - 245 from alcohol poisoning, falls, burns, and drowning
  - 492 from suicides
- **20%** of teen drivers involved in fatal crashes had some alcohol in their system in 2010. **81%** had BACs higher than the legal limit for adults (*CDC*)
- In 2016, of the drivers ages 15 to 20 who were killed in motor vehicle crashes, **47%** had a positive BAC (*STOP Act Report to Congress, 2018*)



# Alcohol Use Disorder

- 1.5% of youth ages 12–17 met the diagnostic criteria for alcohol abuse or dependence in 2018 (*NSDUH*)
  - Down from 5.5% in 2005
- The highest prevalence of alcohol dependence in the U.S. population is among 18- to 20-year-olds (*Surgeon General's Call to Action, 2007*)



# College Drinking

- Injury and violence (*Hingson et al 2009*)
  - 10.5% full-time 4-year college students were injured because of drinking
  - 12% were hit or assaulted by another drinking college student
  - 2% were victims of alcohol-related sexual assault or date rape
- 20% of college students meet the criteria for an AUD (*NIAAA, 2015*)





# Risk Factors

- Age of onset
- School engagement
- Perceived risk of alcohol use
- Disapproval of alcohol use
- Accessibility



# Age of Onset

- Earlier age of onset associated with greater likelihood of experiencing alcohol dependence/abuse, drinking 5 drinks per occasion at least weekly, driving under the influence of alcohol, and placing themselves in situation after drinking where they could be hurt (*Hingson, 2009*)
- Youth who start drinking before age 15 years are **6x** more likely to develop alcohol dependence or abuse later in life than those who begin drinking at or after age 21 years (*2015 NSDUH*)
- Onset in childhood or early adolescence is associated with later use of drugs, drug dependence, and drug-related crash involvement (*STOP Act RTC*)



# School Engagement

- While in high school, those students who say they are not college-bound have been at considerably higher risk for using illicit drugs, drinking heavily, and particularly smoking cigarettes. *(MTF, 2019)*



# Perceived Risk

Perceive great risk of:	8 <sup>th</sup>	10 <sup>th</sup>	12 <sup>th</sup>
Trying 1 or 2 drinks	14.5%	13.5%	10.3%
Drinking 1 or 2 drinks nearly every day	30.1%	32.4%	22.5%
Drinking 5+ drinks once or twice each weekend	53.2%	52.9%	40.9%

*MTF, 2019*



# Disapproval

Disapprove or strongly disapprove of:	8 <sup>th</sup>	10 <sup>th</sup>	12 <sup>th</sup>
Trying 1 or 2 drinks	48.6%	40.7%	28.3%
Drinking 1 or 2 drinks nearly every day	77.6%	78.5%	73.8%
Drinking 5+ drinks once or twice each weekend	82.9%	80.6%	72.5%

*MTF, 2019*



# Access to Alcohol

	8 <sup>th</sup>	10 <sup>th</sup>	12 <sup>th</sup>
Fairly easy or easy to get alcohol	49.4%	66.8%	82.9%

*MTF, 2019*



# Data Recap

- Data trends are generally moving in right direction, but still progress to be made
- Challenges remain:
  - Drinking and driving
  - College drinking
  - Impact of changing marijuana regulatory environment



# Federal Prevention Efforts



- Supporting research, surveillance, outreach, and education
- Legislation
- Promoting underage drinking as a public health issue





# Research, Surveillance, and Education

- Established the National Institute on Alcohol Abuse and Alcoholism (NIAAA) – 1970
- Created the Substance Abuse and Mental Health Services Administration (SAMHSA) – 1992
- Mandated that DOJ, through OJJDP, establish and implement the Enforcing the Underage Drinking Laws (EUDL) program – 1998
- Directed the HHS Secretary to establish the Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD) – 2004



# Research, Surveillance, and Education

- Annual national surveys:
  - Monitoring the Future (NIDA)
  - National Survey on Drug Use and Health (SAMHSA)
  - Youth Risk Behavior Survey (CDC)



# Research, Surveillance, and Education

- Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs and Health (2016)
- The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking (2007)
- The Community Preventive Services Task Force Guide to Community Preventive Services: Preventing Excessive Alcohol Consumption (2016)
- Reducing Underage Drinking: A Collective Responsibility (NRC & IOM, 2004)
- Call to Action: Changing the Culture of Drinking at U.S. Colleges (NIAAA, 2002) and CollegeAIM: College Alcohol Intervention Matrix (NIAAA, n.d.)



# Legislation

- National Minimum Drinking Age Act of 1984
- Sober Truth on Preventing Underage Drinking Act (STOP Act), originally passed by Congress in 2006 and reauthorized in 2016



# National Minimum Drinking Age Act of 1984



- Mandated reduced federal highway funds to states that did not raise their minimum legal drinking ages (MLDAs) to 21.
- Only 22 states had an MLDA of 21 prior to the Act
- All remaining states raised their MLDAs to 21 by 1987



# STOP Act

- “formally establish and enhance the efforts of the interagency coordinating committee (ICCPUD) that began operating in 2004.”
- Requires annual reports:
  - STOP Act Report to Congress
  - Reports on state prevention and enforcement activities



# Evidence-Based Prevention Strategies

- Environmental Strategies
  - Enforcement
  - Policy
  - Communication
  - Multi-Component
- Behavioral Strategies



# Environmental vs. Behavioral Strategies

- Environmental strategies seek to change the environment and context away from supporting use
  - E.g. Increased compliance checks on alcohol retailers to ensure they are not selling to youth
- Behavioral strategies seek to impact individuals' knowledge, skills, and behaviors related to their risk of substance use
  - E.g. A course that teaches life skills to high school students to reduce underage alcohol use





# Environmental: Enforcement Strategies

- Numerous laws and regulations exist to prevent underage alcohol use; enforcement improves their effectiveness (SAMHSA)
  - Retailer compliance surveys
  - Compliance sales checks
  - Police enforcement
  - Sobriety checkpoints
  - Juvenile diversion programs



# Recommendations to Improve Effectiveness

- Enforce minor-in-possession laws as well as minimum-age-of-purchase laws
- Enforce impaired driving laws
- Implement zero tolerance driving laws
- Educate the community about enforcement efforts
- Expand complementary prevention efforts, such as beverage server training

(SAMHSA)



# Environmental: Policy Changes

- Many different policies exist, with a variety of goals (SAMHSA):
  - Prevent youth from obtaining alcohol
  - Deter adults from selling or providing alcohol to youth
  - Make alcohol less attractive to youth



# Preventing Youth from Obtaining Alcohol

- Minimum-age-of-purchase and of-possession laws
- Alcohol home delivery restrictions
  - Changing due to COVID-19
- Restricted alcohol availability at community events
- Location or density restrictions on retailers
- ID sales check requirements



# Deter Adults From Providing Access

- Responsible beverage retailer/seller training requirements
- Dram shop liability laws
- Educating retailers/sellers about enforcement efforts

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- Social host liability laws
- Beer keg registration



# Making Alcohol Less Attractive

- Advertising restrictions
- Happy hour restrictions
- Price increases
- Education about enforcement activities
- Sanctions for violating policies



# Recommendations to Improve Effectiveness

- Make sure adults are held accountable for providing underage access
- Ensure there are deterrents against use and incentives for not using
- Restrict alcohol access generally in settings where youth may have access
- Provide education on enforcement efforts and policy changes



# Environmental: Communication Strategies

- Efforts to change negative community norms and reinforce positive norms related to preventing underage alcohol use (SAMHSA)
  - Media advocacy
  - Social norms campaigns
  - Counter-advertising
  - Marketing campaigns





# Recommendations to Improve Effectiveness

- Combine with more intensive and interactive efforts
- Present messages that appeal to youth and directly counter their perceptions of alcohol
- Tailor messages to different groups
  - “Underage youth” are NOT homogenous
- Place messages where youth are likely to encounter them



# Multi-Component Strategies



- Efforts to combine behavioral strategies with environmental strategies
- Rely on bringing different sectors of the community together to collaborate
- Take a public health approach to preventing underage alcohol use



# Examples of Multi-Component Strategies

- Border Binge Drinking Reduction program
- Midwestern Prevention Project
- Massachusetts Saving Lives program
- Communities Mobilizing for Change on Alcohol
- Community Trials Intervention to Reduce High-Risk Drinking



# Recommendations to Improve Effectiveness



- Focus on complimentary strategies
- Coordinate with other prevention efforts
- Collaborate with experts and other stakeholders
- Focus on preventing adult problem alcohol use as well



# Behavioral Strategies

- Many behavioral strategies with evidence of effectiveness at preventing underage alcohol use exist.
- Different focuses for different needs:
  - Family situation
  - Conduct problems
  - Attitudes and perceptions
  - Skills
- Range in implementation timing from pre-natal through high school/college



# Examples of Behavioral Strategies (Blueprints)

- *Functional Family Therapy*
- *LifeSkills Training*
- *Multi-Systematic Therapy*
- *Brief Alcohol Screening and Intervention for College Students (BASICS)*
- *Maryland Ignition Interlock License Restriction*
- *New Beginnings*
- *Nurse-Family Partnership*
- *Positive Action*
- *Project Towards No Drug Abuse*
- *Achievement Mentoring*
- *Athletes Training and Learning to Avoid Steroids*
- **Be Proud! Be Responsible!**
- **Big Brothers Big Sisters**
- **Communities That Care**
- **Early Literacy and Learning Model**
- **EFFEKT**
- **Eisenhower Quantum Opportunities Program**
- **Familias Unidas**
- **Good Behavior Game**
- **Guiding Good Choices**
- **Incredible Years- Parent**
- **InShape Prevention Plus Welless**
- **And Many Others!**



# Screening, Brief Intervention, Referral to Treatment

- Evidence supports both in-person (SBIRT) and virtual (e-SBI) as indicated prevention interventions (*Pediatrics*, 2016)
  - Screen for excessive alcohol consumption
  - Deliver a brief intervention
    - Common elements are using motivational interviewing techniques and providing a comparison to average peer alcohol consumption
  - Provide a referral to a treatment provider if appropriate



# Conclusion

- Although significant progress has been made over the past several decades, underage drinking remains a national public health concern
- Various environmental and behavioral evidence-based strategies exist to address and prevent underage alcohol use
  - Use a planning process, like the Strategic Prevention Framework, to determine which are most appropriate to your needs





# Contact Us



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PTTC

Prevention Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

*a program managed by*



Central East PTTC website:  
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