### The Intersection of Substance Misuse and Suicide Josh Esrick and Emily Patton June 29, 2023



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### Acknowledgement

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At the time of this publication, Miriam E. Delphin-Rittmon, Ph.D, served as Assistant Secretary for Mental Health and Substance Use in the U.S. Department of Health and Human Services and the Administrator of the Substance Abuse and Mental Health Services Administration.

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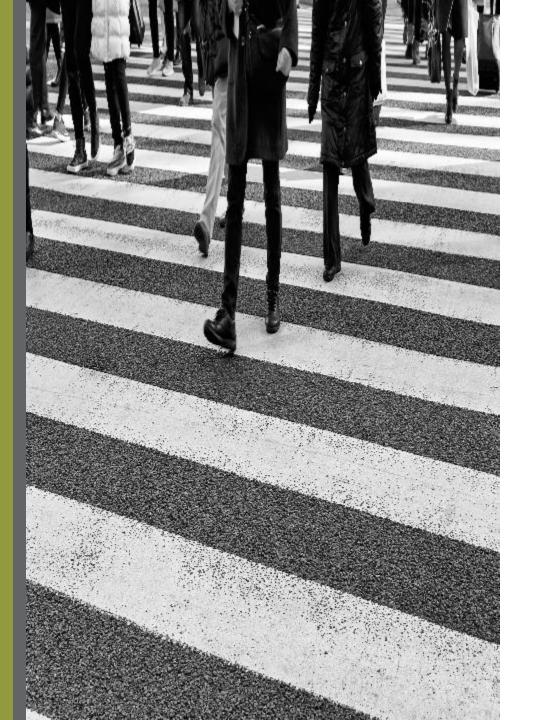
### Josh Esrick Chief of Training and Technical Assistance



### Emily Patton Senior Research Associate



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### Our Roadmap Today

- Learn about the research base for substance use and suicide
- Discuss the data on suicide among people who use substances
- Review evidence-based programs for preventing substance misuse and suicide
- Evaluation



### Learning Objectives



Summarize the data on rates of suicide among people who use substances



Examine the research on how substance use can increase risk of suicide



Distinguish between evidence-based programs for preventing substance misuse and suicide



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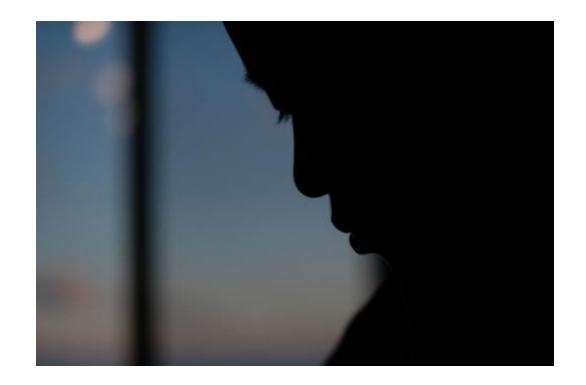
### Research on Substance Use and Suicide

- » Background on suicide
- Demographics of suicide
- » At-risk populations
- Impact of COVID-19
- Data on Substance Use

### Understanding Suicide

### Definitions

- Suicide
- Suicide attempt
- Suicidal ideation



#### Suicide and suicide attempts are types of self-directed violence



### Background on Suicide

- In 2021, 48,183 people in the U.S. died from suicide (CDC)
  - 1.7 million adults attempted suicide
- 11<sup>th</sup> leading cause of death
  - Has been top-12 every year since 1975
- 2<sup>nd</sup> leading cause of death for ages 10-34
- Adults aged 35–64 years account for 46.8% of all suicides in the US



### Background on Suicide

The lifetime prevalence rate for self-directed violence is around 6%

About 650,000 people are treated by hospital emergency departments each year after suicide attempts (SAMHSA)

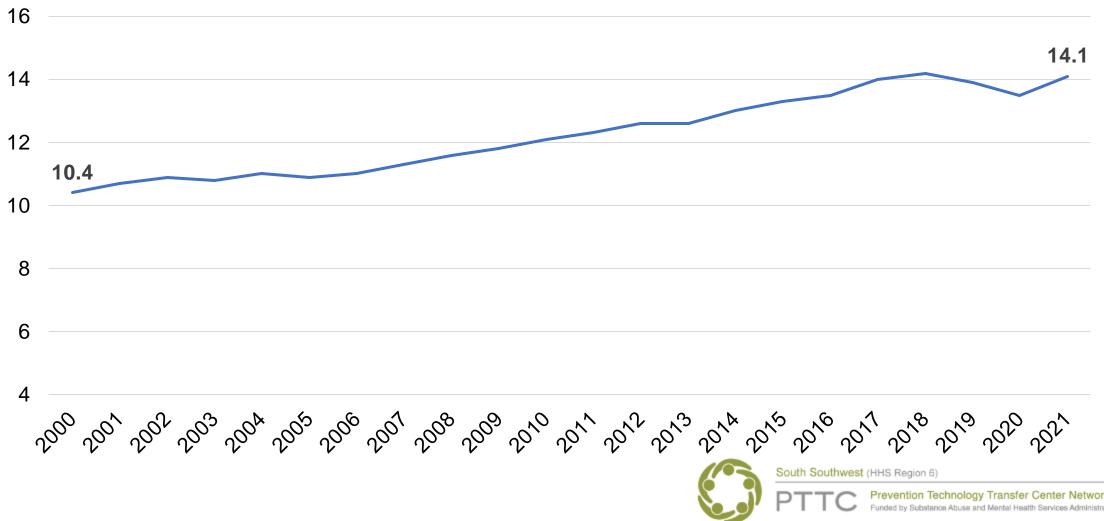




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### Rates of Suicide in the US

Suicides per 100,000 people



Centers for Disease Control and Prevention. (2023)

# Please answer the question in the chat box.

In your opinion, where should prevention efforts be focused to reduce suicide?

FRS

### **Demographics of Suicide**

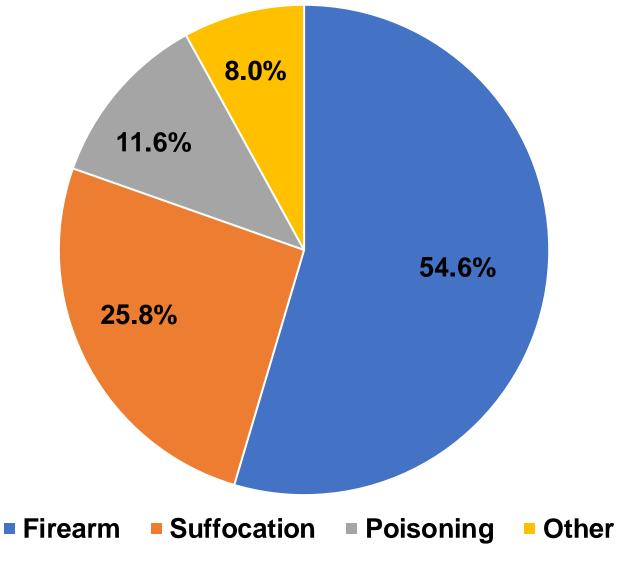
- In 2021, the highest rates of death by suicide occurred among American Indian, Alaska Native and White individuals.
- Most deaths occur for those around the middle-age and older adults age group.
- Men experience a suicide death rate 4x higher than women, however women attempt suicide at a higher rate.





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### Most Common Methods of Suicide



- In 2021 firearms were used in 26,328 suicide deaths
- Firearms are the most common method of suicide
- They account for over 50% of suicides



### Impact of COVID-19 on Suicide in the US

- COVID-19 pandemic increased suicide risk factors in the general population
  - Depression, anxiety, and social isolation
- Youth suicides increased during COVID-19
- Reduced access to certain mental health services
- Long COVID and suicide risk links





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### Social Determinants of Health and Suicide

- Suicide and suicidal behavior are influenced by negative conditions in which people live, play, work, and learn
- Five Domains
  - Economic Stability
  - Education Access and Quality
  - Health Care Access and Quality
  - Neighborhood and Built Environment
  - Social and Community Context





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### Populations Most At-Risk (SAMHSA)

- Individuals who have attempted suicide previously
- Individuals who experience chronic pain
- Individuals who have lost someone to suicide
- Individuals who participate in nonsuicidal self-injury
- Individuals who have a mental health and/or substance use disorder(s)





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### Prevalence of Substance Use (SAMHSA)

- Recent data (2021) from the United States found that:
  - 16.5% of individuals experienced a substance use disorder (SUD) = 46.3 million people aged 12 or older
  - 2.8 million people misused opioids in the past month
  - 29.5 million Americans experienced an alcohol use disorder in the past month
  - 94% of people aged 12 or older with a substance use disorder **did not receive any treatment**

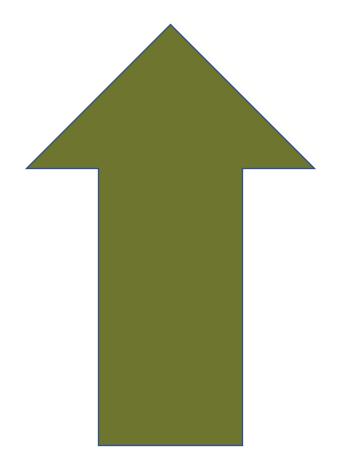
Substance Abuse and Mental Health Services Administration. (2016)

U.S. Department of Health and Human Services. (2023)



### Substance Use Fatalities (CDC)

- Between 1999 and 2021, the fatal druginvolved overdose rate increased 533%
- Fatal opioid-involved overdoses experienced the largest increase from 1999-2021, increasing 899%
- Estimates of alcohol-related deaths are up to 140,000 every year (NIH)





### Suicide Rates Among People Who Use Substances





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# Please answer the question in the chat box.

In your opinion, what substances are most commonly linked to suicide attempts?

ERS

### Linking Suicide to Substance Use

Research has shown that substance use, in particular **opioid or alcohol misuse**, directly increases the risk of suicide.





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### Substance Use and Suicide

Suicide Deaths in 2021	Substance-Related Cause
4,757	Intentional overdose
2,252	Mental health disorder resulting from substance use
2,206	Another alcohol- or substance-induced cause
1,176	Intentional alcohol poisoning

- Among these deaths:
  - 55% were males, 45% were females
  - AI/ANs and Whites had the highest rates
  - Most common among ages 45-54



### **Opioids and Suicide**



- Older adults (age 50+) had an 84% increase in suicidal ideation if they were misusing prescription opioids
- Opioid overdose is the 2<sup>nd</sup> most common cause of death (16.2%) for individuals experiencing chronic pain



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### Alcohol and Suicide

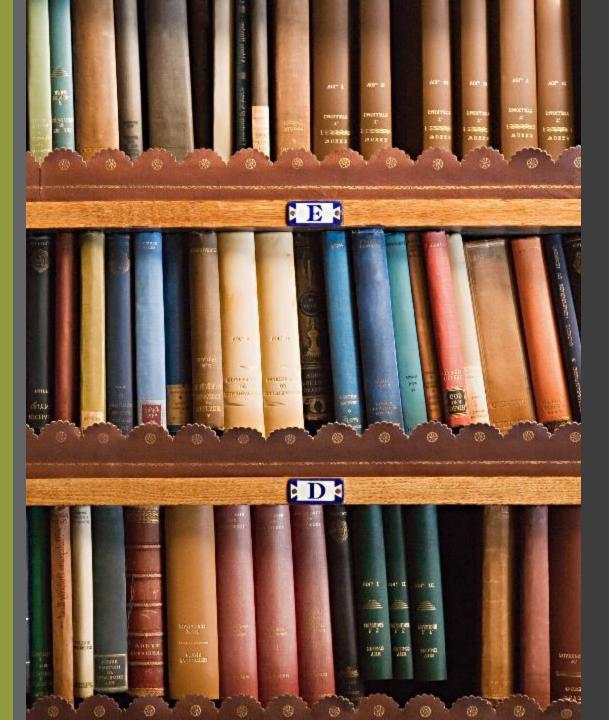
Alcohol has been closely associated with suicide

 Acute alcohol intoxication is present 30%-40% of the time when an attempted suicide occurs





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Evidence-Based Programs for Suicide Prevention and Substance Use

# Please answer the question in the chat box.

What evidence-based programs or practices have you used in your efforts to reduce suicide and substance misuse?

FRS

### Summary of Evidence-Based Practices

- Few EBPs *in prevention* exist to address both issues
  - Suicide prevention more commonly collaborates with substance use treatment
- Verified screening tools
- Environmental strategies
- Others?





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### Screening Tools

- Addiction Brief Risk Scale Assessment
- Stratification Tool for Opioid Risk
   Mitigation
- Reynolds Adolescent Depression Scale-2: Short Form & Alcohol Use Disorders Identification Test
- Ask Suicide-Screening Questions & HEADS-ED





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### **Environmental Strategies - Alcohol**

- Research identified several environmental strategies significantly associated with reducing rates of alcohol misuse and of suicide, including:
  - Increasing alcohol taxation rates
  - Increasing the minimum legal drinking age
  - Decreasing density of alcohol retail outlets



Strategies and Programs to Prevent Substance Use



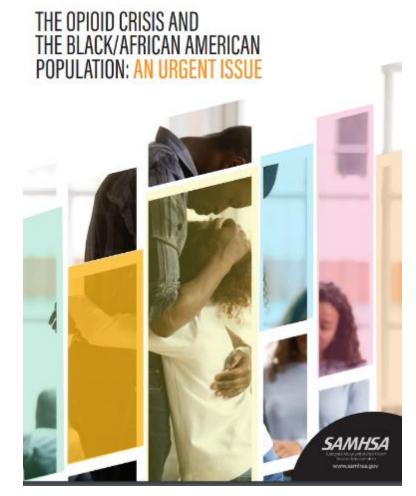
U.S. Department of Health and Human Services Substance Abuse and Nental Health Services Administration Center for Substance Abuse Prevention



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### **Environmental Strategies - Opioids**

- Prescriber education
- Prescription drug monitoring programs



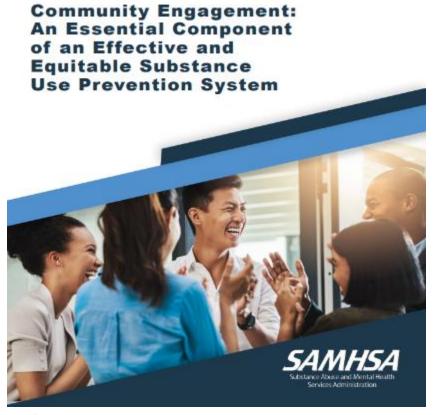


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### **Environmental Strategy Collaboration**

- Require outside stakeholder
   support to enact
- Strategies should be mutually beneficial to their goals

EVIDENCE-BASED RESOURCE GUIDE SERIES





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### Social Determinants of Health and Collaboration



- Addressing racial and health inequities
- Examining how public health relates to the SDOH
- Building a Public Health Approach

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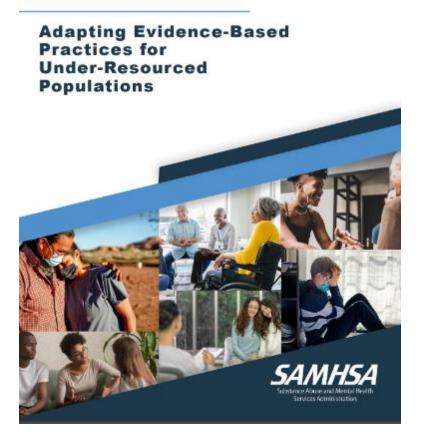
# Please answer the question in the chat box.

What are some ways you or your organization can help address the social determinants of health?

ERS

### Other Opportunities for Collaboration

EVIDENCE-BASED RESOURCE GUIDE SERIES



- Implementing EBPs
- Research
- Pilot programs
- Needs assessment
- Capacity assessment



### Conclusions

- Suicide and substance misuse is a major public health concern
- People who misuse substances are at an elevated risk for suicide
- There are many shared risk factors between substance use and suicide
- COVID-19 had a significant impact on both suicide and substance use rates
- Evidence-based programs and strategies exist to support suicide and substance use prevention efforts
- Room for growth to build the evidence base





### Let's hear from you!

### What are your questions?



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### Upcoming Events

## Continuing the Conversation About ACEs: ACE Talk with Family and Friends Workshop

• Thursday, July 13, 2023, from 11:30 AM to 1:00 PM CDT

## Addressing a Co-Occurring Epidemic: Substance Misuse and Suicide

• Thursday, July 27, 2023, 1:30 pm CT – 3:00 pm CT



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For further questions, contact: Derrick Newby, T/TA Specialist South Southwest PTTC Region 6

#### Connect with us @



#### <u>SSW PTTC website</u>



#### Join our mailing list



Products and resources

- American Public Health Association. (n.d.). *Public health vs. clinical health professions: What's the difference?* <u>https://www.apha.org/professional-development/public-health-careermart/careers-in-public-health-</u> newsletter/job-searching-salaries-and-more/public-health-vs-clinical-health-professions-whats-the-difference
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