


# Expanding Prevention's Response to Stimulant Misuse and Polysubstance Use

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## Presenters



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*Speaker*




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## Learning Objectives

- Explain trends in stimulant and polysubstance use and consequences
- Compare similarities and differences between current and past stimulant use and understand the risk factors for use
- Describe evidence-based practices for preventing stimulant use and the barriers facing practitioners





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## What Types of Use Are We Talking About Today

- Stimulant use
  - Cocaine, methamphetamine, and prescription stimulants
- Polysubstance use
  - Concurrent use of multiple substances; today we are focusing on polysubstance use that involves stimulants



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## Defining Polysubstance Use

- Over time, opioid use in conjunction with stimulant use has become significantly more common
- Intentional
  - Wide variety of combinations of substances that people choose to use
- Unintentional
  - Frequently the result of fentanyl unknowingly being consumed due to its presence in other substances
  - 42% of all fentanyl seized by the DEA in 2019 was mixed with other substances (NDTA)

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## Why Does Polysubstance Use Occur

- Suppliers seeking to cheaply increase potency of products (DEA)
- Consumers self-medicating (e.g., trying to “balance” depressants and stimulants), seeking multiple sensations, or having multiple use disorders (CDC)
- Consumers accidentally/unthinkingly mixing substances (CDC)
  - E.g., consuming alcohol alongside another substance

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## Importance of Addressing Polysubstance Use

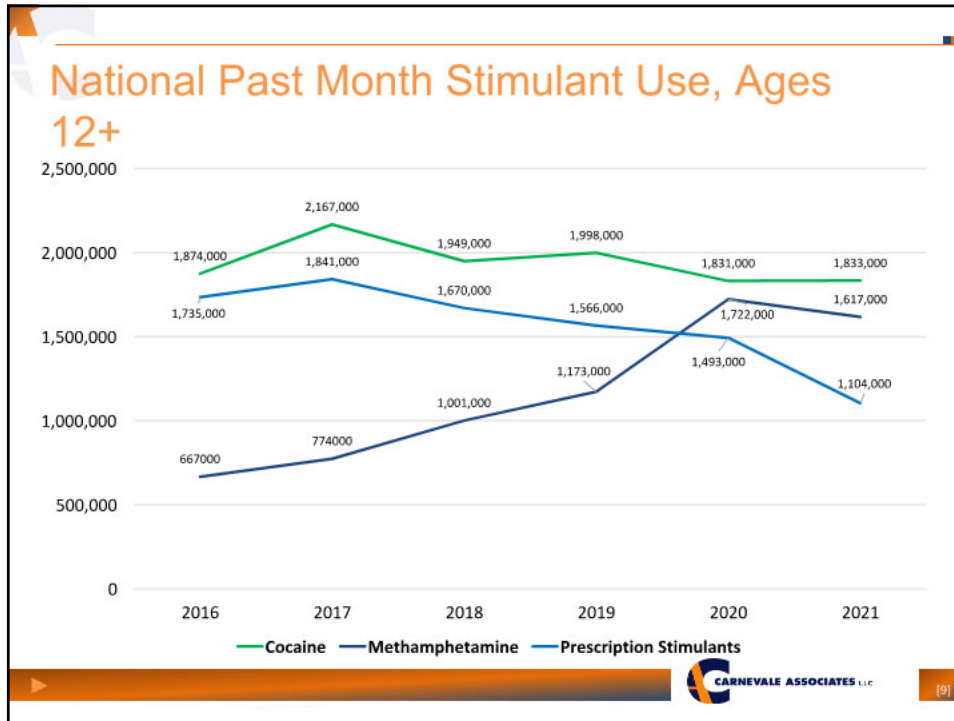
- Polysubstance use is associated with significantly higher risks of (Conner et al):
  - Co-occurring behavioral disorders
  - Cognitive disorders
  - Physical health problems
- More common among populations that suffer from discrimination and prejudice (Banks et al)
- Prevention a key step to improving health outcomes and reducing disparities

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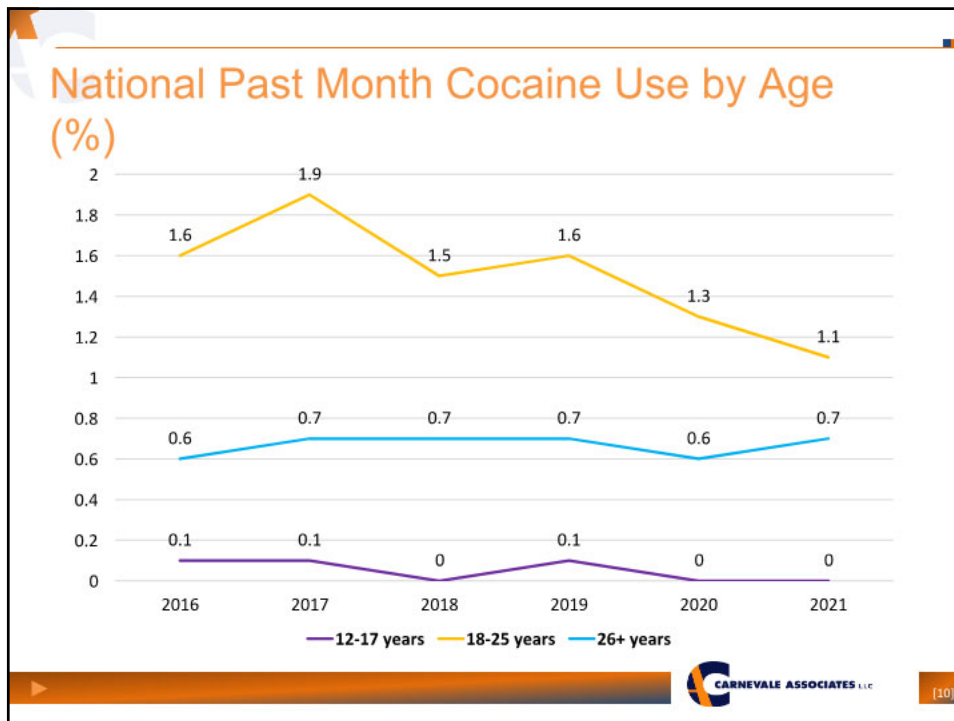
## Stimulant Use Trends Examining the Data



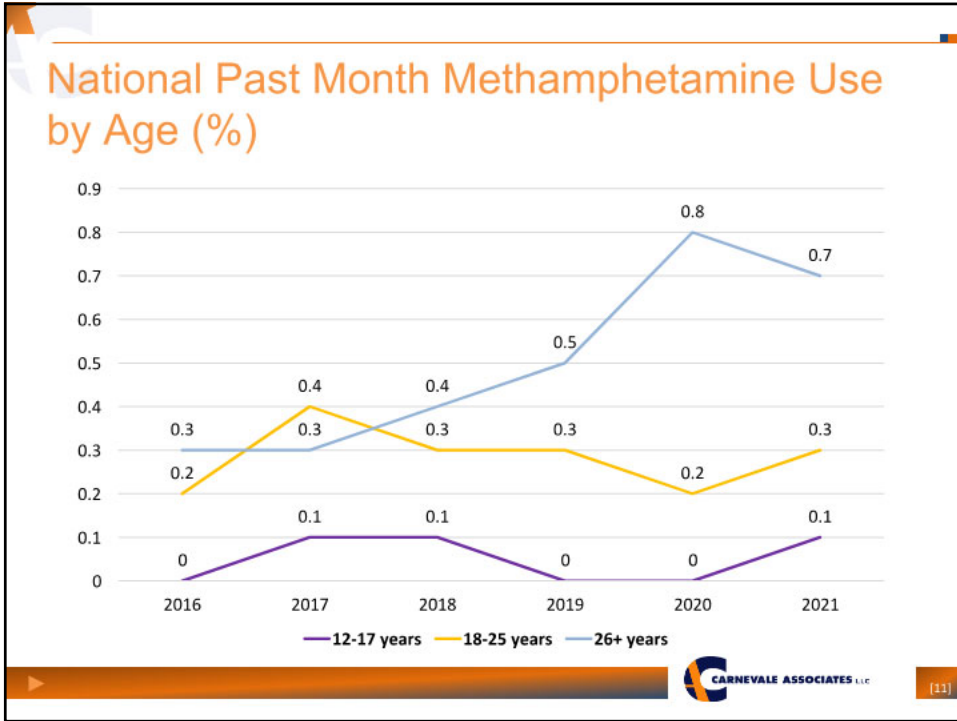
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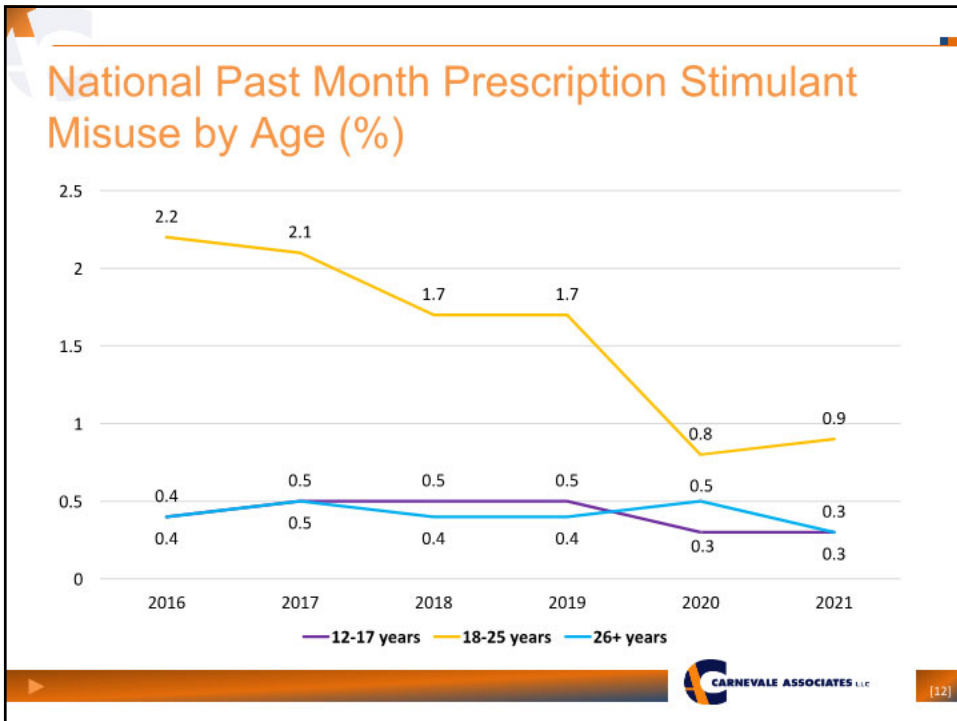
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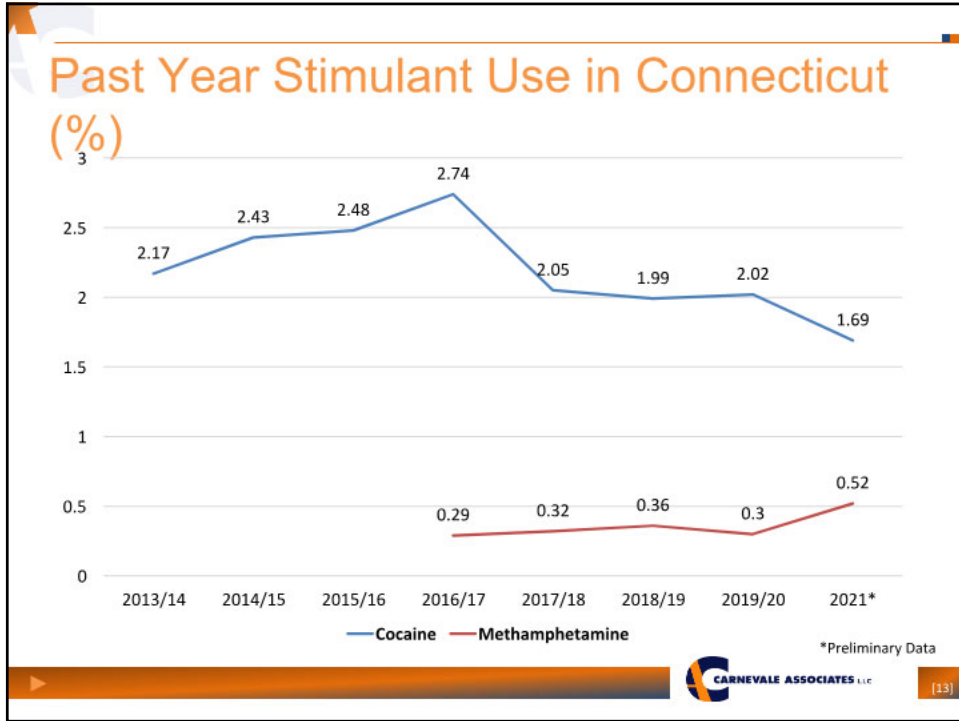
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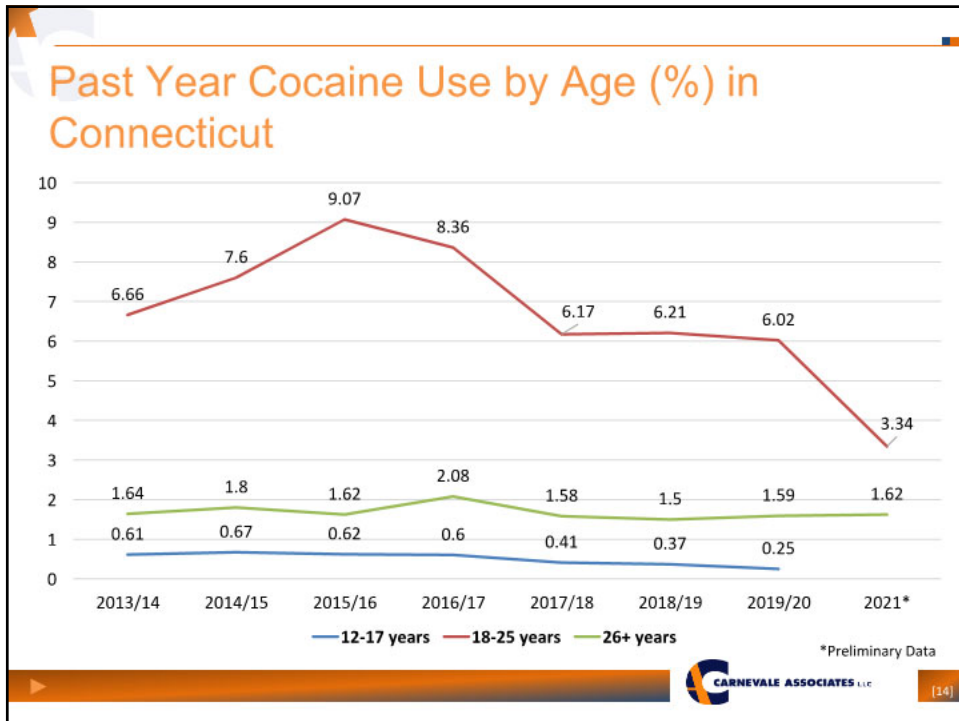
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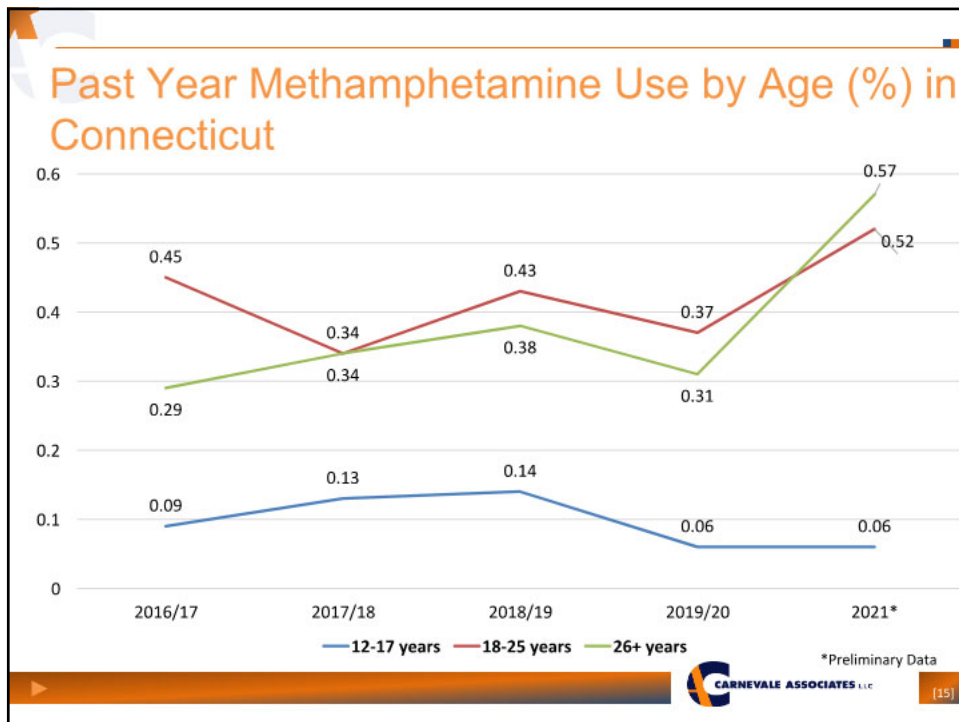
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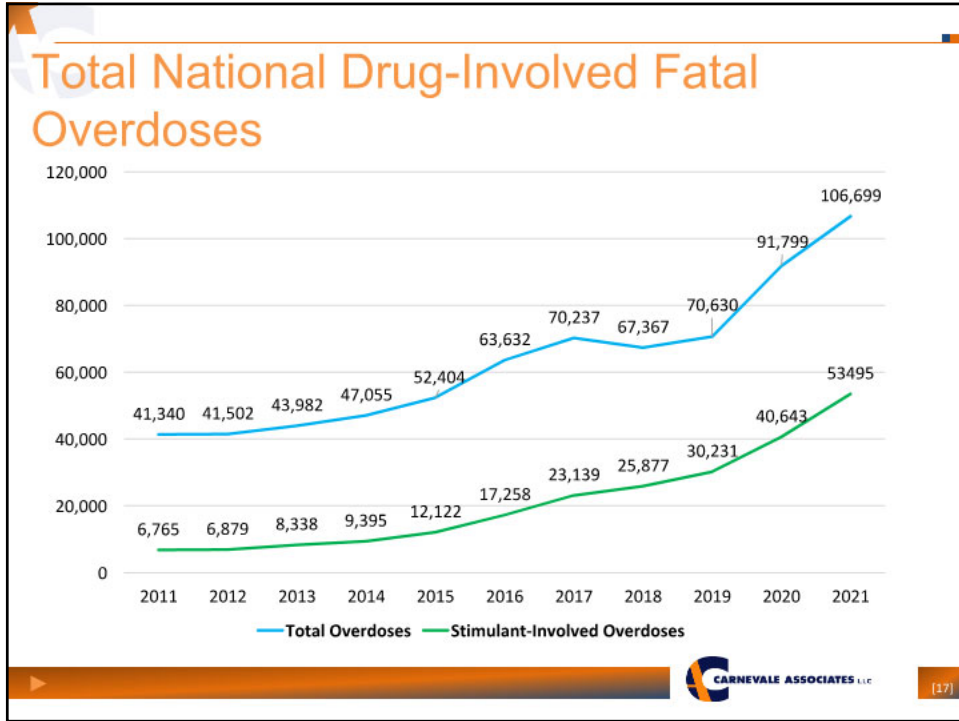


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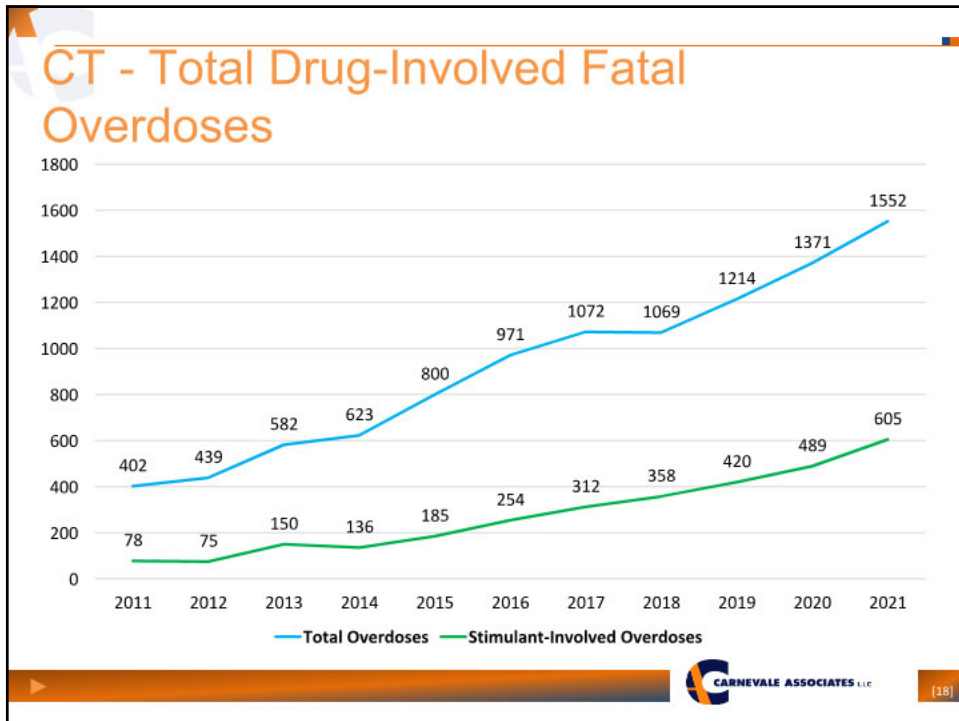


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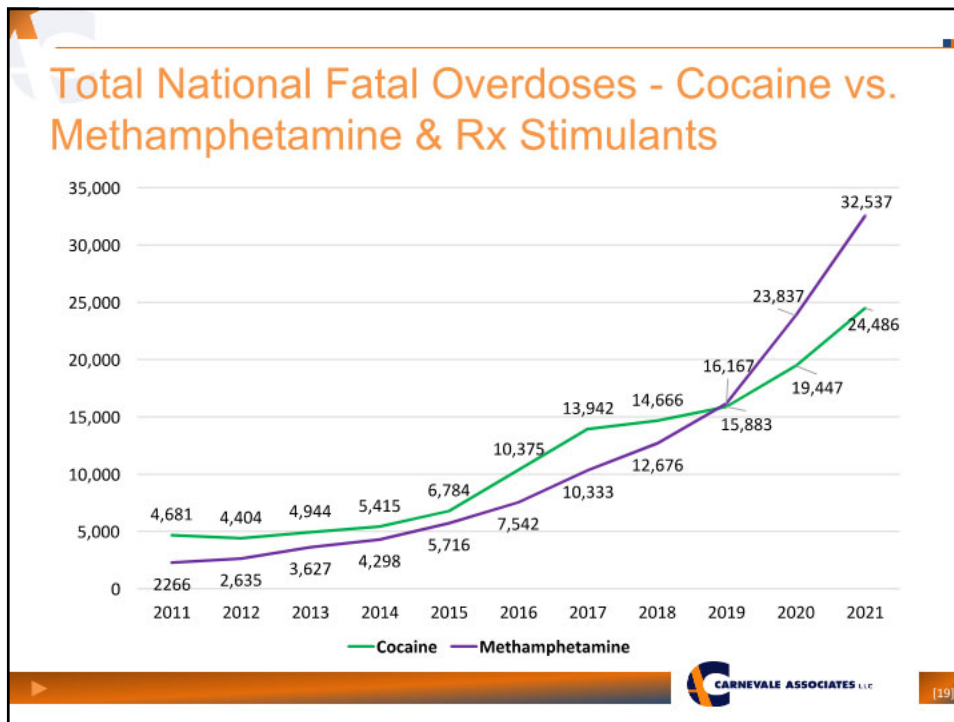




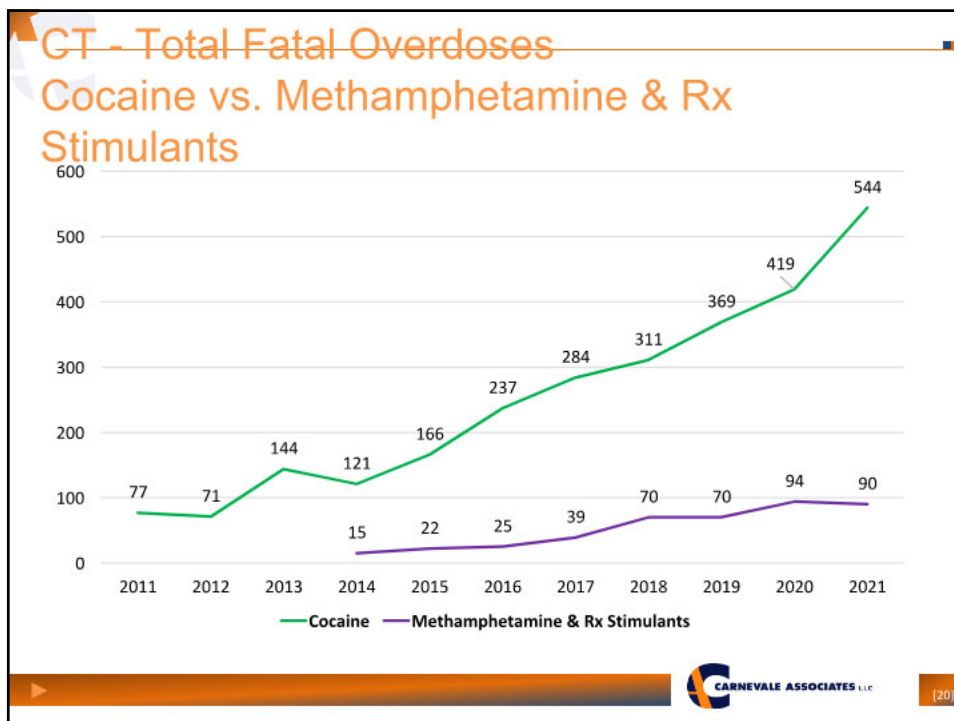
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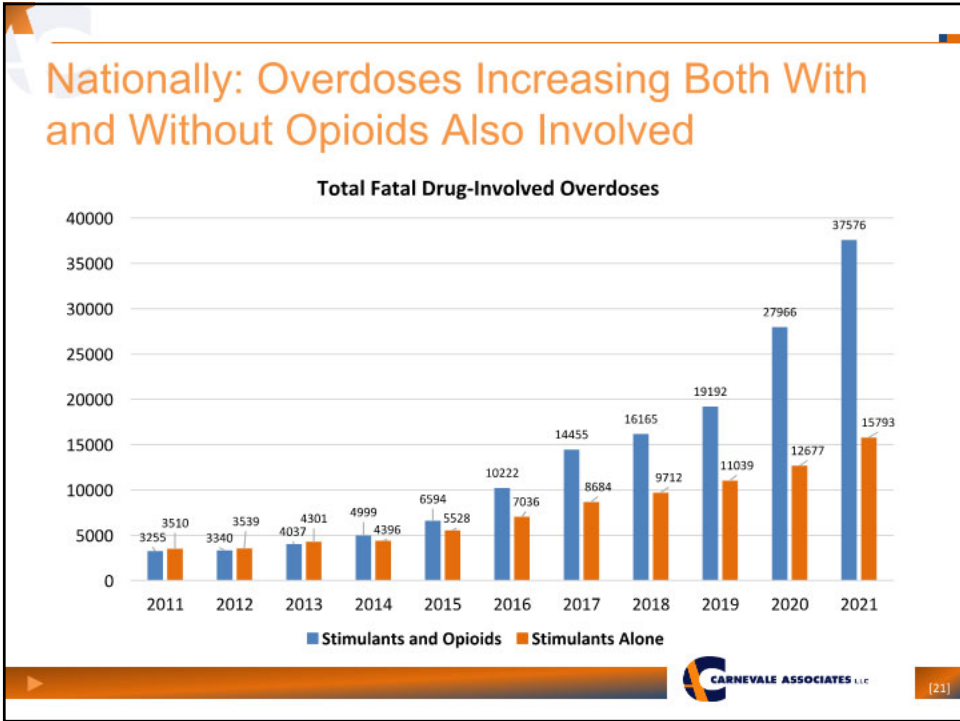
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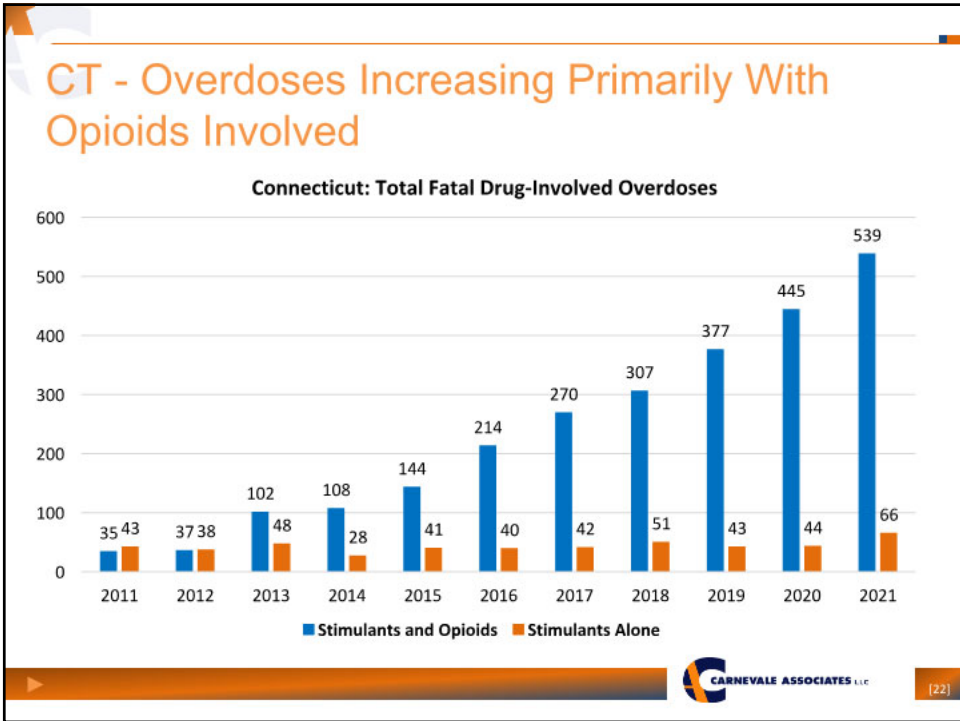
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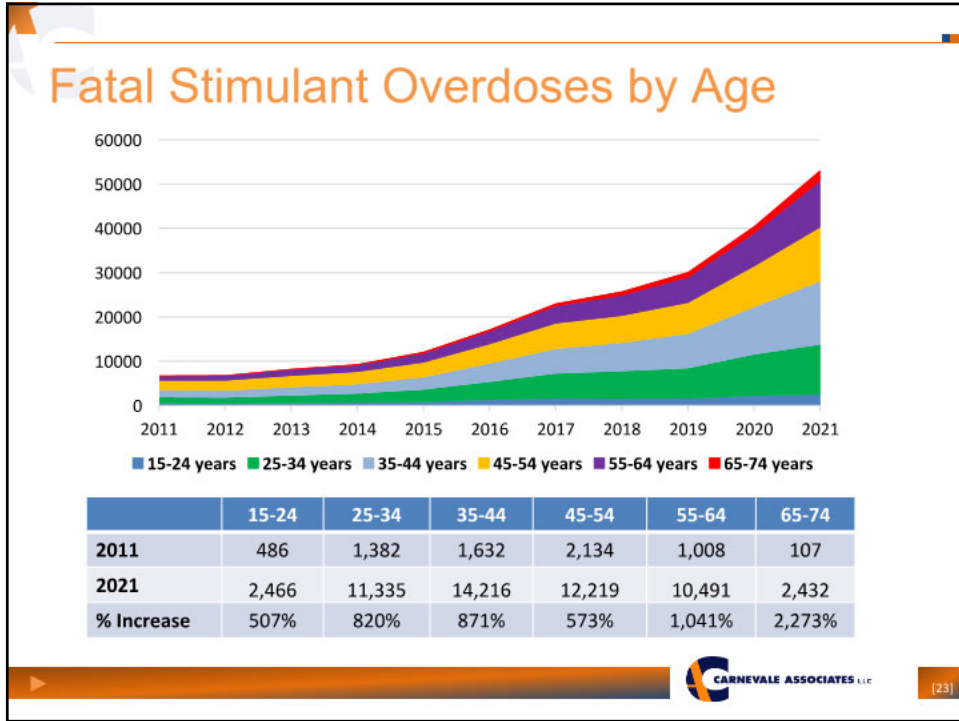
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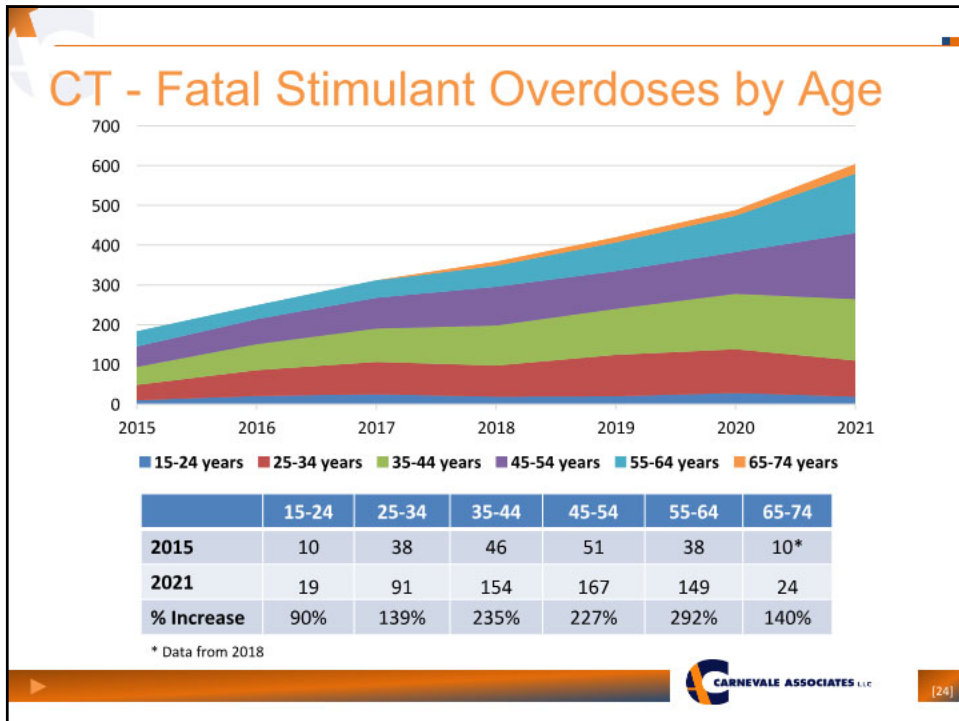
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## Stimulant Trends – Key Takeaways

- Differences in Connecticut & National stimulant use trends
  - Cocaine use in CT vs. Methamphetamine use nationally
- Overdoses in CT primarily driven by opioids (e.g., fentanyl) vs. nationally where stimulant-only overdoses are drastically increasing
- Trends are different from past waves of use, particularly with methamphetamines



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## Similarities and Differences from Past Waves of Use

- Risk Patterns
- Overdose Rates
- Supply Sources



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## Risk Patterns

- Stimulant overdose risk higher than expected
  - African Americans have disproportionately high risk
- Methamphetamine use now more concentrated among middle-aged adults
- Cocaine and Methamphetamine initiations have increased among females
- Prescription stimulant misuse primarily occurring among young adults

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## Overdose Rates

- Overdose rates relative to use rates are much higher than in the past, and have increased more significantly
- Here's 4 theories why; each is likely a contributing cause
  1. Use rates may be significantly higher than previous waves of use
  2. Stimulants may be much stronger than in the past
  3. Stimulants more likely to be taken in combination with other overdose-inducing substances
  4. Overdoses may have been mis-classified in the past

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## Supply Sources (DEA)

- Methamphetamine
  - Shift from domestic labs to transnational criminal organizations
  - Domestic lab incidents declined from 23,703 in 2004 to 890 in 2019
- Cocaine
  - Primary source remains Colombia
- Prescription Stimulants
  - Retail sales of amphetamine drugs more than doubled since 2009

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## Risk Factors and Protective Factors




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## Likelihood of Use

Environmental factors &  
Social Determinants of  
Health



Broader individual and  
interpersonal risk and  
protective factors



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## Cocaine Risk Factors

- Traumatic experiences, coping with homelessness, concurrent opioid use
- Lack of other recent research, but older studies have found:
  - Impulsivity personality traits
  - Experience of adverse childhood events
  - Negative emotionality/mood disturbances
  - Lack of coping skills to deal with stress, alienation, or aggression

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## Methamphetamine Risk Factors

- Past substance use
- Current heroin use
- Serious mental illness or co-occurring disorder
- Experience of adverse childhood events
- Family history of substance use, alcohol use disorder, or criminal behavior
- Criminal justice involvement
- Lower educational attainment
- Lower annual income
- Living in non-metro or small metro communities



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## Prescription Risk Factors

- Current use of other substances
- Co-occurring mental health disorder
- Substance availability
- Experience of adverse childhood events
- Positive expectations regarding use
- Difficulties with academic performance



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## Polysubstance Risk Factors

- Unintentional
  - Frequently related to fentanyl
- Intentional
  - High tolerance from current substance use
  - Co-occurring behavioral disorders
  - Childhood factors
  - Social environment factors
  - Social determinants of health

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## Overdose Risk Factors

- Supply, availability, and use
- Polysubstance use
- Stimulant contamination
- Purity and potency

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## Gaps in Stimulant Research and Barriers Facing Practitioners



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## Gaps in Stimulant Prevention Research

- EBPs to target middle-aged adults
- Confirmation of whether risk and protective factors are the same as in previous waves of use
- Overdose prevention EBPs
- Understanding why overdoses have increased



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## Stimulant Prevention Research

- Few U.S. studies have identified EBPs for preventing stimulant misuse or addiction
- Youth prevention programming with a focus on overall substance use are more commonly used
- However, there are some (if limited) evidence-based programs and practices for stimulant misuse



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## Evidence-Based Programs and Practices



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## Cocaine Prevention Programs

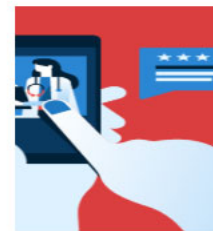
- Health promotion and primary prevention strategies that address a range of illicit substance use
- Implement targeted strategies focused specifically on cocaine use
  - Public education
  - Social marketing
  - Media advocacy
  - Media literacy
- Environmental change strategies that address risk and protective factors



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## Methamphetamine Prevention Programs

- Methamphetamine prevention approaches historically focused on law enforcement
- Support for use of media campaigns
- Some prevention programs have reduced methamphetamine use, but few programs target methamphetamines specifically



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## Methamphetamine Prevention Programs

- Substance Abuse and Suicide Prevention (SASP) Program
  - Evidence-based prevention program that provides methamphetamine-specific content developed for & implemented among AI/AN communities
- Strengthening Families Program (SFP)
- The Life Skills Training program + the SFP for Parents and Youth aged 10-14
- PROSPER
- Other Practices
  - Healthcare provider case study training



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## Prescription Stimulants Prevention Programs

- Prescription Drug Monitoring Program (PDMP)
- Prescriber education
- Access and the supply chain
- Utilizing best practices from the opioid epidemic prevention efforts
- Preliminary university programs
  - Miami University workshop
  - Syracuse University motivational interviewing



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## SDOH and Stimulant Use

- Need to consider the full picture of social and environmental factors that contribute to the formation and persistence of substance use
- SDOH have been implicated in SUD formation (risk and protective factors) as well as treatment access and completion
- Some SDOH are not easily modifiable, but simply understanding that such factors are present can help guide better approaches to SUD prevention and care



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## Improving Polysubstance Use Prevention

- Universal and Selective Prevention
  - Prevention campaigns are most effective when focusing on a single substance
  - Skills-based prevention
  - Addressing social determinants of health
  - Supply reduction
- Indicated Prevention
  - Screenings
  - Educational information
  - Focus on risks

### Preventing Polysubstance Use in Primary Care Settings

Published on June 1, 2021



Polysubstance use is the concurrent use of multiple legal substances, legal substances, or prescription drugs in a manner other than as prescribed. Using a single substance significantly increases the risk of using additional substances, and evidence suggests that most people who have substance use disorders are polysubstance users. Polysubstance use can alter brain circuitry between cues or stimuli, thereby increasing the risk of relapse or overdose.

**WHY WE NEED TO ADDRESS POLYSUBSTANCE USE**

- 1 Polysubstance users face significantly higher risks of co-occurring mental disorders, cognitive deficits, and physical health problems.
- 2 Polysubstance use is more common among minority populations. For example, Black men are 2.5 times more likely to use multiple substances.
- 3 Preventing polysubstance use can improve health outcomes and reduce healthcare costs.

**PREVALENCE OF POLYSUBSTANCE USE**

Polysubstance use prevalence is high in substance use treatment admissions.

However, over 80% of people in need of substance use treatment do not receive it.



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## Stimulant Misuse Treatment Practices

- Evidence-based treatment services revolve around behavioral therapy
  - Contingency Management
  - Cognitive Behavioral Therapy
  - The Matrix Model
  - Motivational Interviewing
  - Community Reinforcement
- Medication Assisted Treatment (MAT) for stimulant misuse

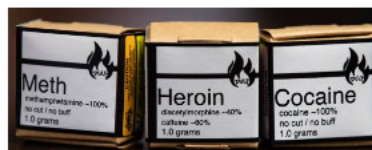


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## Harm Reduction Strategies

- Fentanyl Test Strips
- Naloxone Distribution
- Safe Injection Sites
- Safer Supply



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## Barriers to Providing Stimulant Services

### A Complicated System to Treat SUD

- Consists of individual group counseling, inpatient and outpatient treatment, case management, medication. This can lead to delays in treatment esp. when shortage of providers are present

### Limited resources and personnel

- Means fewer providers overall, and—for existing training providers;—lack of resources, educational material and continuing training

### Transportation barriers

- Means fewer providers that are accessible to communities

### Motivational Change

- Many individuals face difficulties with initiating and maintaining behavior change. Lack of motivation could play a role. Individuals may feel they are unready or refuse to engage in service

### Stigma & Confidentiality Concern

- Stigma is a barrier to recovery and affects whether individuals with SUD seek treatment and social support services
- Fear of legal penalties for drug use may impact whether individuals are willing to openly discuss their SUD and seek treatment
- Stigma surrounding SUD may be exacerbated for rural residents seeking treatment for SUD because of a lack of anonymity in small communities where there are few mental health providers

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## Conclusion

- Stimulant and polysubstance use have become an important public health challenge
- There are several key differences in stimulant use in CT vs Nationally, however stimulant use and its associated consequences remain a growing concern for both
- Need to learn more about the contributing factors to stimulant use, but steps that prevention can take exist
- There are some EBPs available to address stimulant and polysubstance use directly
- Broader interventions (e.g., addressing SDOH) may also have an impact on use

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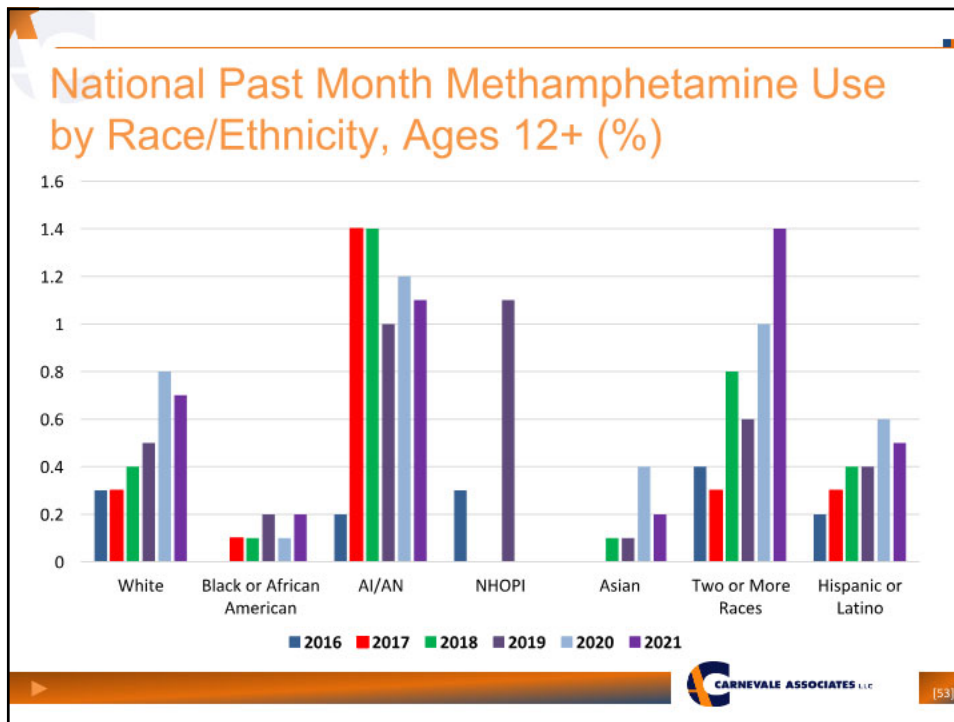
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## Appendix A. Additional Data Tables

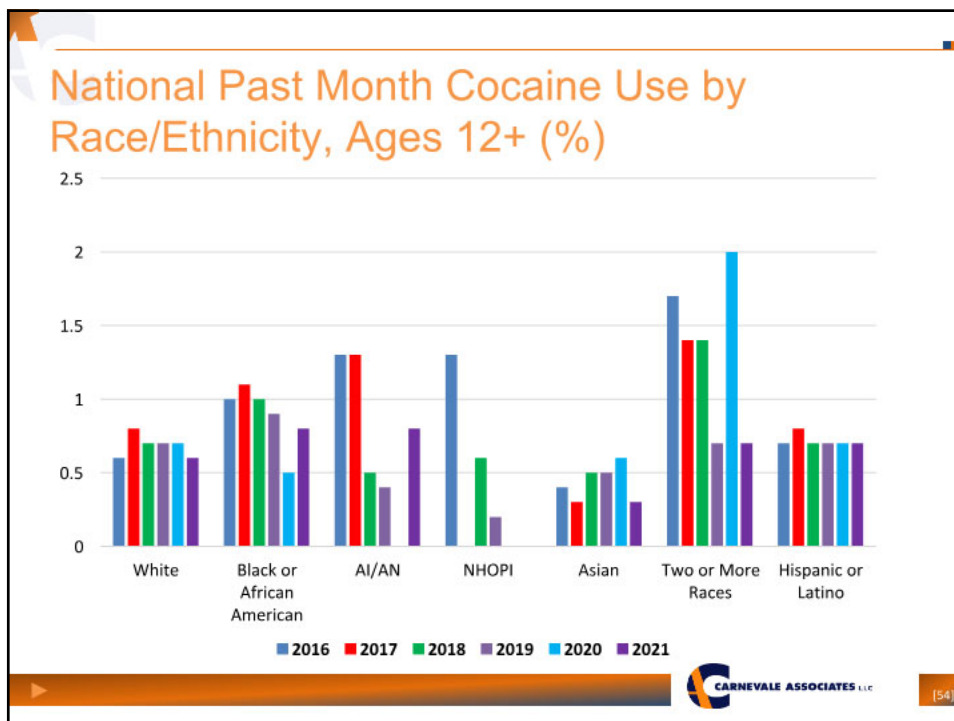


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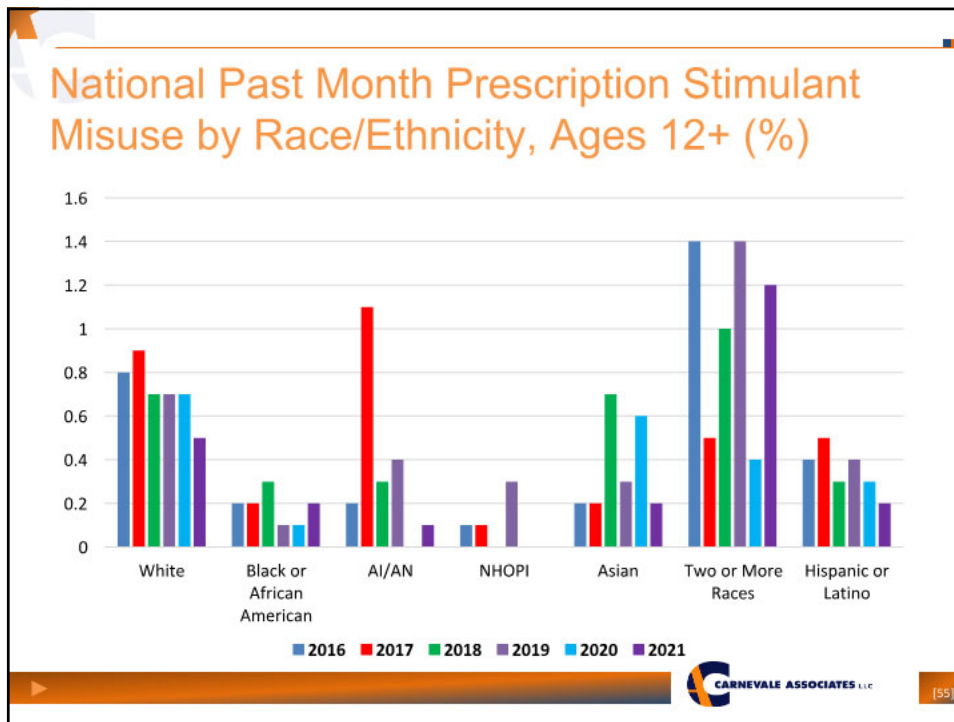
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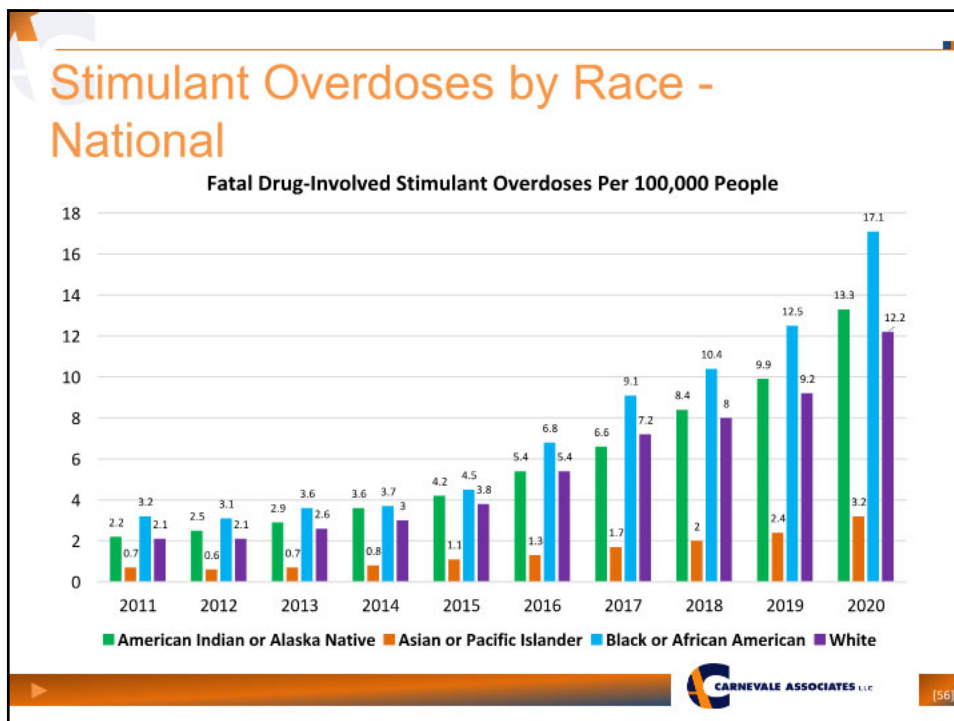
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