Statewide Epidemiological Outcomes Workgroup:

Quarterly Meeting
02/28/2022

Supported by SAMHSA PFS Grant
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Today's Agenda

- Welcome/Introductions/SEOW Mission (A. Oliveto)
- Collegiate Survey Findings (Dr. D. Slagle)
- SAMHSA Advisory: Prescription Stimulant Misuse (A. Oliveto)
- Me over Meth Campaign Updates (L. Dickerson/J.Simpson)
- Suicidality-Related ED Data and Prevention Interventions (A. Oliveto/M. Bollinger)
- Tx Admission Trends by Race and Primary Substance (J. Thostenson)
- Identifying Hispanic Communities for Prevention Partnerships (S. Blackwell)
- Survey Response Rates, Data Gaps and New Data Sources (M. Bollinger)
- SAMHSA Marijuana Use Prevention Guide (A. Oliveto)
- Alcohol/Cannabis Prevention – CLIMATE Schools Program (A. Oliveto)
- General Discussion/Action Plan/Wrap-Up/Next Meeting

SEOW Mission

SEOW's mission is to guide successful prevention efforts in the state of Arkansas by:

- Analyzing, monitoring and sharing data trends in substance use and other environmental, behavioral, and health-related factors
- Informing data-driven policy and practice decision-making regarding prevention priorities at local and state levels
- Disseminating evidence-based education and prevention materials to the larger public

Arkansas Collegiate Survey Findings

Dr. Derrick Slagle
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Assistant Professor of Public Administration
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School of Public Affairs

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SAMHSA Advisory: Prescription Stimulant Misuse

A. Oliveto
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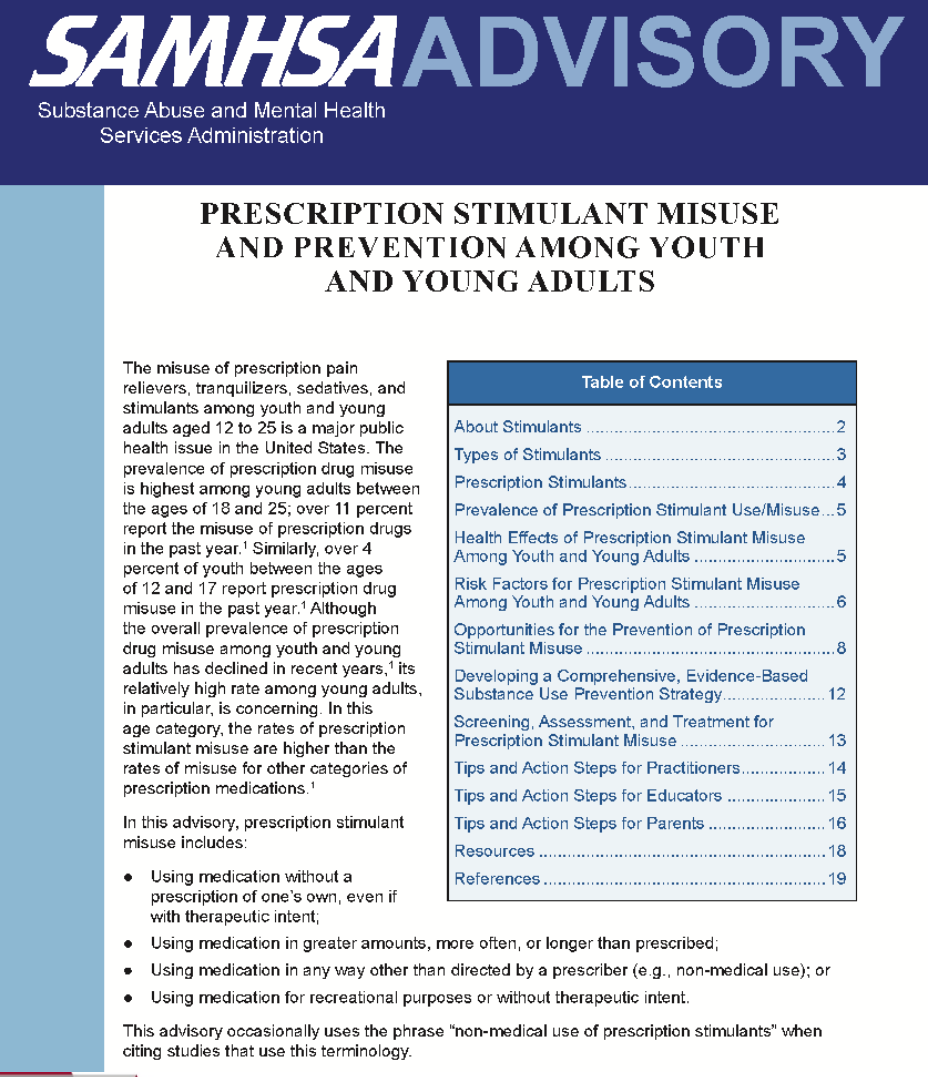

Reviews evidence on prescription stimulant misuse among youth and young adults

- Establishes prescription stimulant misuse as a public health problem
- Identifies associated risk and protective factors
- Provides programs and action steps for stakeholders to prevent misuse

Publication ID
PEP21-06-01-003
Publication Date
November 2021

https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP21-06-01-003.pdf

- The misuse of prescription stimulants among youth and young adults in the United States is a major public health concern.
- Misuse of prescription stimulants typically entails taking them without a prescription or in a way other than how they were prescribed.
- When taken at greater than therapeutic doses, prescription stimulants may have serious health consequences, which can include a dangerous increase in body temperature, seizures, and/or adverse cardiac events.
- Diverted medications significantly contribute to the misuse of prescription stimulants. As many as one half of youth with valid prescriptions for these medications are approached by peers to sell or give away their medication.
- The risk and protective factors for prescription stimulant misuse are similar to those for other types of substance use, including prescription drug misuse, but can vary by demographic and other factors.
- Evidence-based prevention programs for prescription stimulant misuse are limited. However, several institutions of higher education have developed their own programs.
- Communities have successfully implemented environmental strategies to reduce or prevent stimulant misuse.
- General substance use prevention programs that target risk factors for substance use in general may be effective with youth and young adults at risk for prescription stimulant misuse.

Prescription Stimulant Misuse Among Youth and Young Adults

Prescription Stimulant Use/Misuse Among Youth Ages 12 to 17

In 2019...

7.5% of youth reported the use of prescription stimulants in the past year.

1.7% of youth reported the misuse of prescription stimulants in the past year.

0.3% of youth had a prescription stimulant use disorder in the past year.

- 23.4 percent of youth who used any prescription stimulants in the past year misused them.
- Amphetamine-type stimulants as a class were the most commonly reported stimulant used among 8th, 10th, and 12th graders.

Prescription Stimulant Use/Misuse Among Young Adults Ages 18 to 25

In 2019...

12.8% of young adults reported the use of prescription stimulants in the past year.

5.8% of young adults reported the misuse of prescription stimulants in the past year.

0.6% of young adults had a prescription stimulant use disorder in the past year.

- 45.2 percent of young adults who used any prescription stimulants in the past year misused them.
- Young adults who attend college are more likely to misuse prescription stimulants when compared to their non-college attending peers.

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Specific Prevention Interventions

- **Generation Rx:** Educates on importance of using medications safely and preventing misuse.
  - delivered to youth in a classroom setting, after school programming, youth organization meetings, or any venue where youth congregate.
  - delivered to young adults during college student orientation, in residence halls, during sporting events, or as part of any activity or in any venue where young adults get together.
  - although geared toward general prescription drug misuse, there is a module for young adults that focuses specifically on prescription stimulant misuse, but is yet to be evaluated.
- **Expectancy Challenge:** Challenges college students' beliefs about prescription stimulants with the goal of reducing misuse.
  - Students receive a 30-minute expectancy challenge that involves a lecture and discussion of expectancy effects and potential negative health, legal, and psychological consequences of prescription stimulant misuse, during which they are told that prescription stimulants do not significantly enhance academic performance.
    - significant reduction in their expectations related to cognitive enhancement of prescription stimulant use immediately after participating in the challenge compared to those who did not participate in the challenge, although this effect was not long-lasting.
    - participants who more strongly believed prescription stimulant misuse would have negative effects were less likely to misuse prescription stimulants later.

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Specific Prevention Interventions

- **Prescription Stimulant Misuse Prevention Program at Miami University in Ohio**. (Not yet evaluated) Provides a 90-minute workshop for students who visit the campus medical center to be prescribed stimulants.
  - students are given tips on how to improve their study skills, time management, and sleep.
  - students receive a planner and goal completion worksheet they must complete to demonstrate they have adopted the skills presented during the workshop.
  - After completing worksheet, a decision is made whether to pursue medication. Students prescribed stimulant meds through campus medical center attend another 60-minute workshop educating them on keeping medications safe and preventing diversion and misuse.
- **Prescription Stimulant Misuse Prevention Program at Syracuse University**. Peer-led program delivered during first-year orientation.
  - delivered by upper class students trained in motivational interviewing techniques and includes a web-based intervention delivered through social media platforms.
  - includes an academic skills component
  - RCT showed program associated with lower levels of prescription stimulant misuse and had a greater impact on reducing positive expectations of stimulant use

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Specific Prevention Interventions: Youth

- Home Environmental Strategy to Reduce Access to Harmful Legal Products (geared toward parents of 5th to 7th graders)
- Think Smart (for 5th and 6th graders)
- Strengthening Families Program (for 6th and 7th grade students and their parents)
- Communities That Care (a coalition-based program for selecting evidence-based programs to address local needs and priorities)

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Nonprogrammatic Strategies

- Reduce diversion
  - Drug take-back initiatives
  - Change provider prescribing practices
  - Educate youth, young adults and anyone prescribed medication about negative consequences, proper storage and administration, and dispel myths
  - Regularly screen patients prescribed meds for SUDs
- Overamping Prevention
  - Educate patients about these dangers when prescribing stimulants, including signs of overdose
  - Individuals prescribed stimulants should have regular PCP visits to monitor side effects and contraindications
  - PCP should regularly monitor cardiac function

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ADHD and Prescription Stimulant Therapy

- Risk of developing SUD 6.2 times greater among those with untreated ADHD (Katusic, 2005)
- Prescription stimulants protect against SUD and cigarette smoking among ADHD patients (Wilens 2008)
  - Lower odds of substance use and related problems among ADHD youth who initiated medical use of stimulant medications earlier relative to later (McCabe et al, 2016)
  - Higher odds of substance use and related problems among ADHD youth who initiated nonmedical use of stimulant medications earlier relative to later (McCabe et al, 2016)
- Individuals with psychotic disorders previously exposed to prescription stimulants will have an earlier age of onset of psychosis (Moran 2015)

Discussion

Me over Meth Campaign: Updates

Lynetta Dickerson
DAABHS
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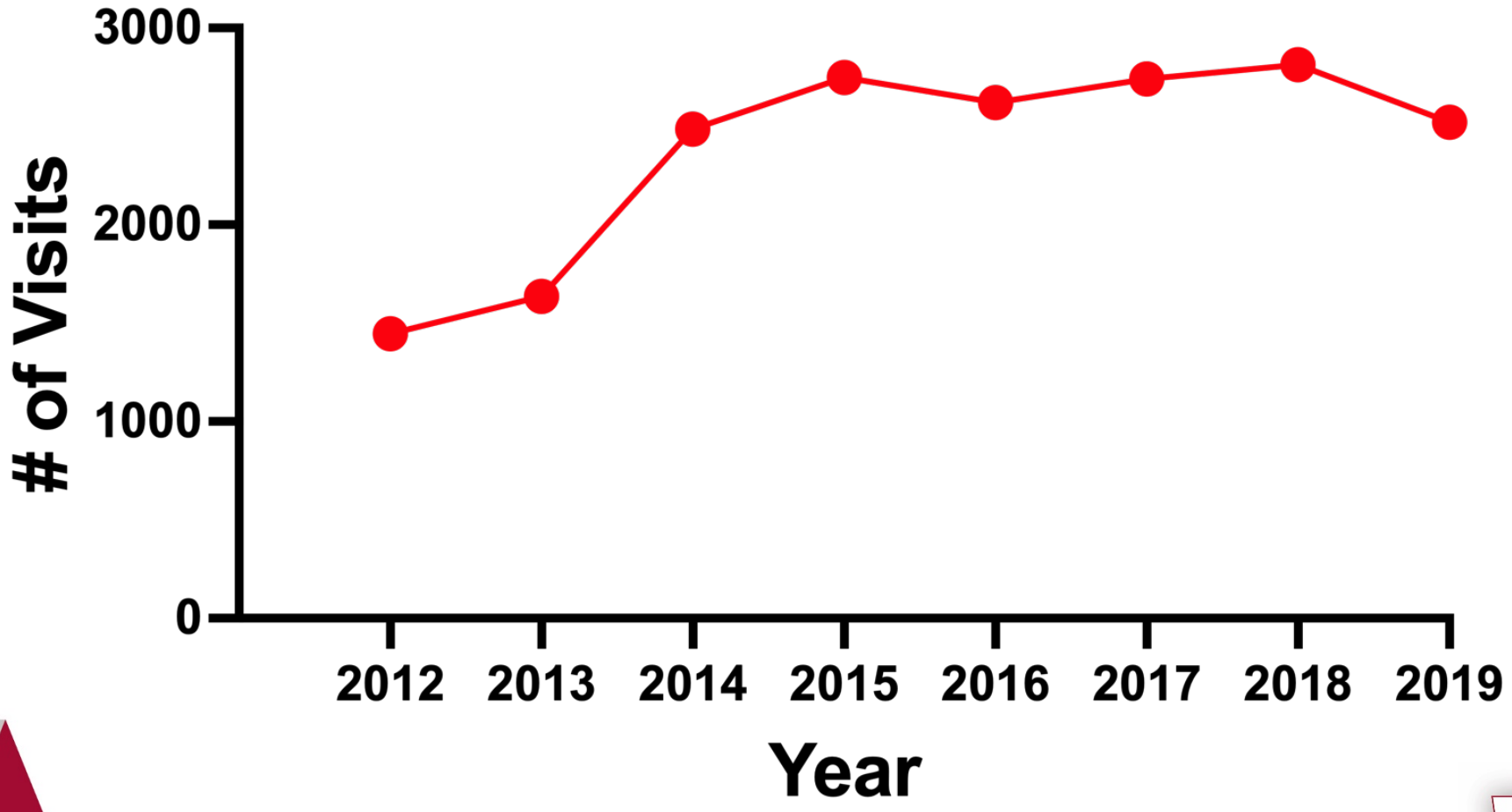
MidSOUTH

Suicidality-Related ED Data and Suicide Prevention Interventions

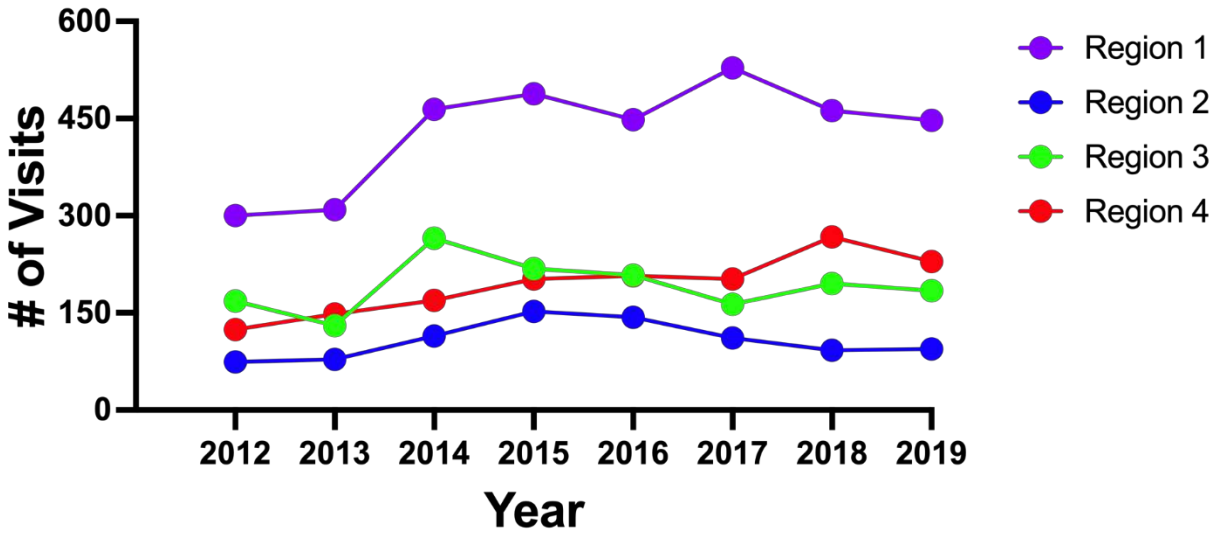
Alison Oliveto and Mary Bollinger
SEOW Staff
UAMS

ED Visits for Suicidality: AR State Totals

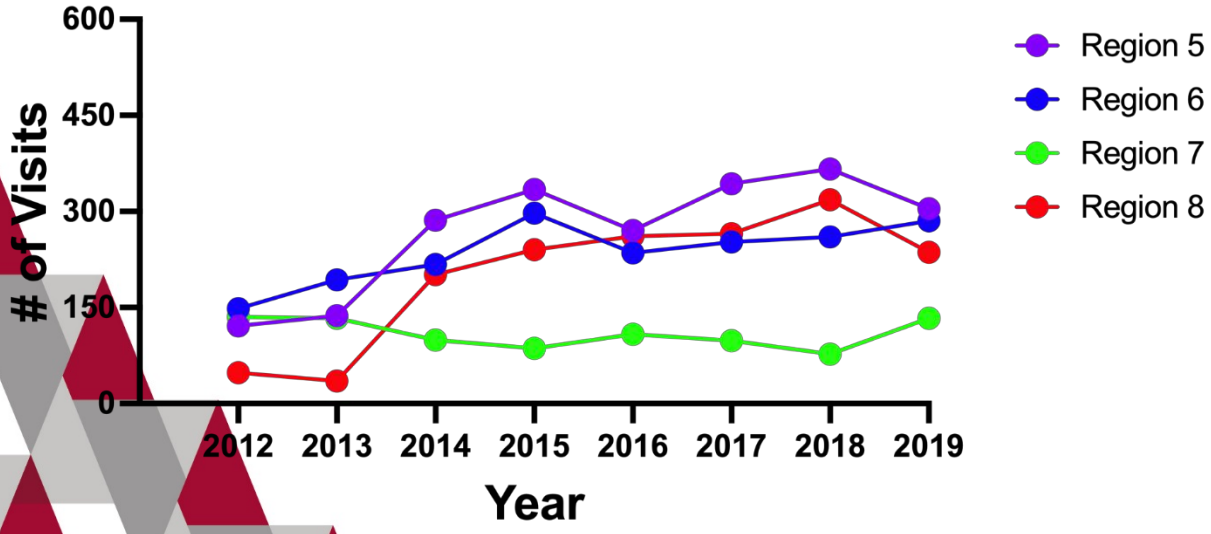


From: Arkansas Department of Health

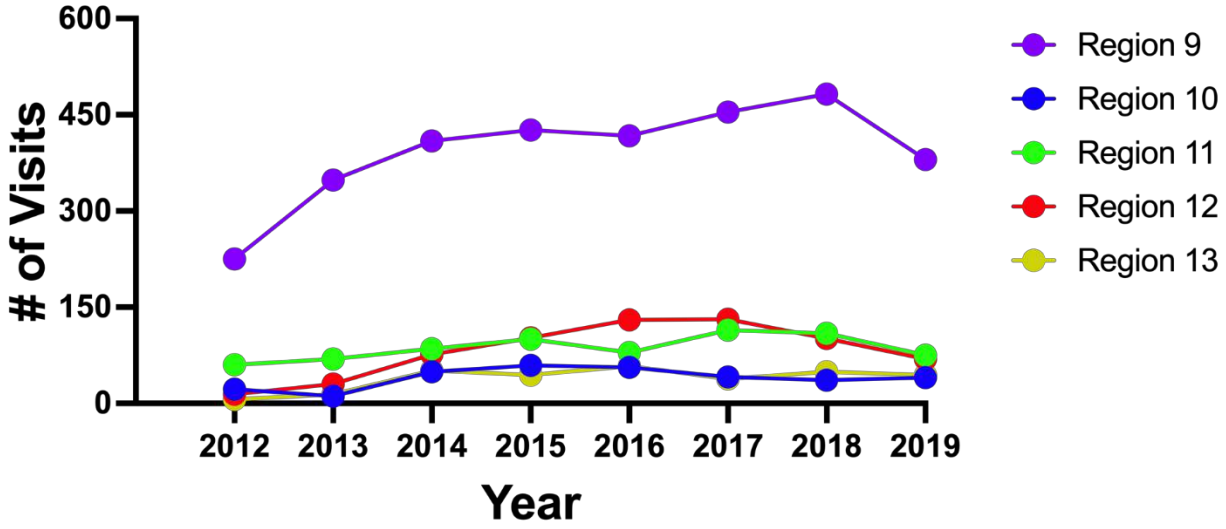
ED Visits for Suicidality in Regions 1-4



ED Visits for Suicidality in Regions 5-8



ED Visits for Suicidality in Regions 9-13



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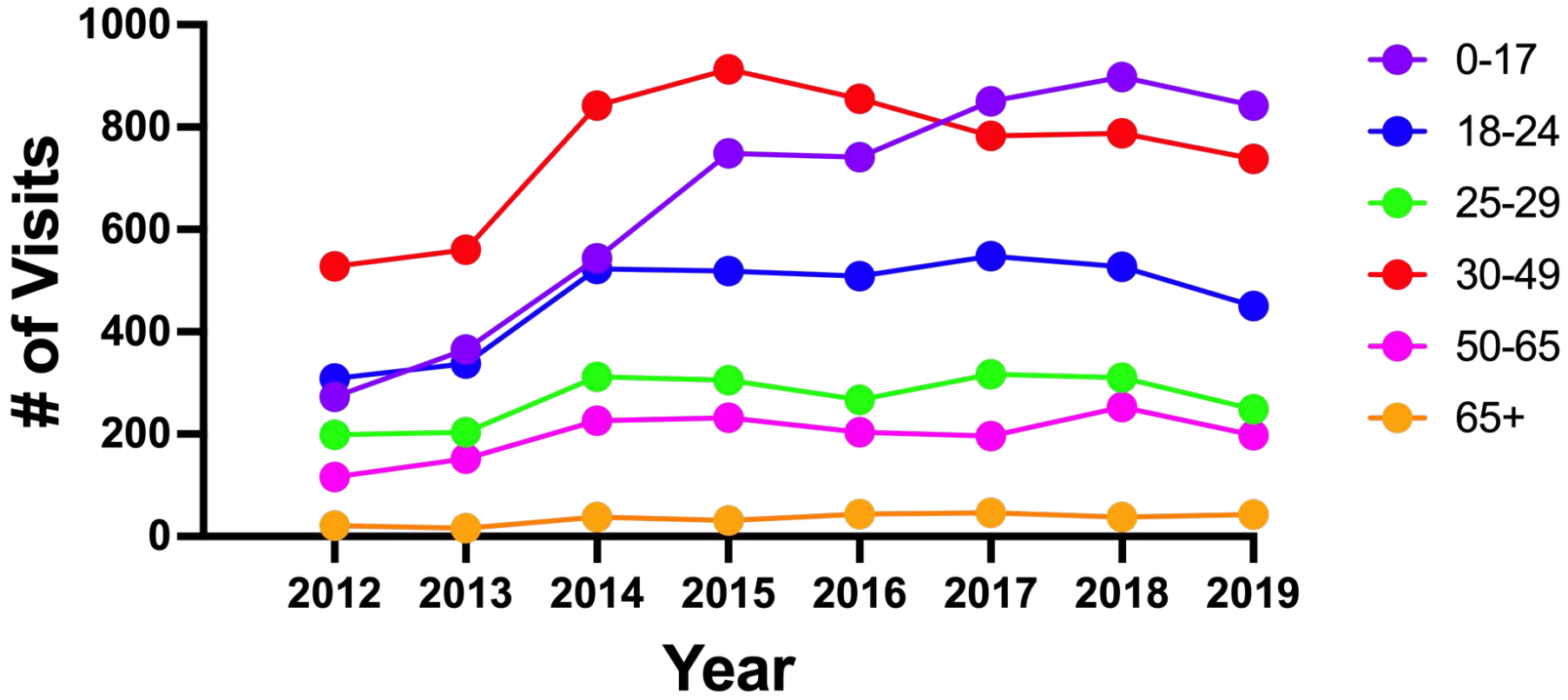
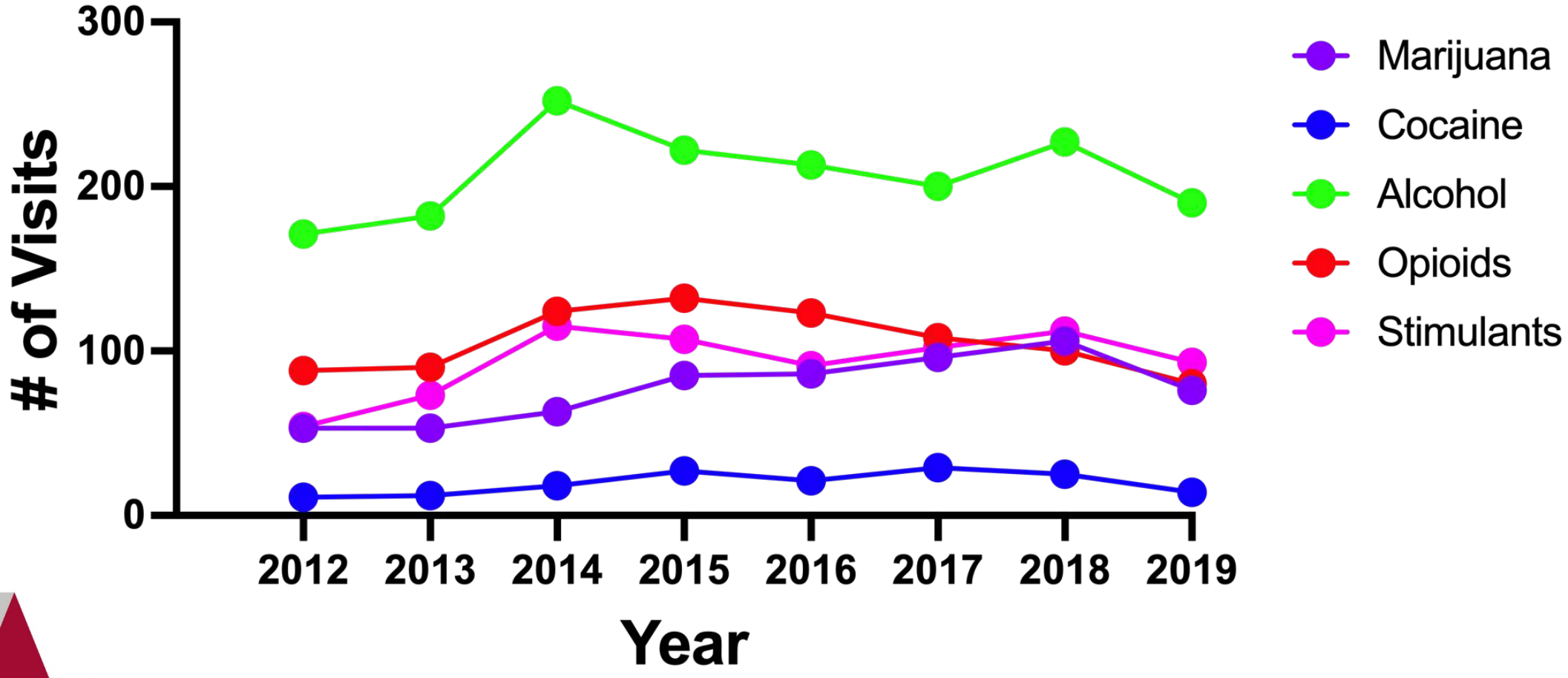
ED visits by Age: Suicidal Behaviors



From: Arkansas Department of Health

ED Visits: Suicidal and Drug Used



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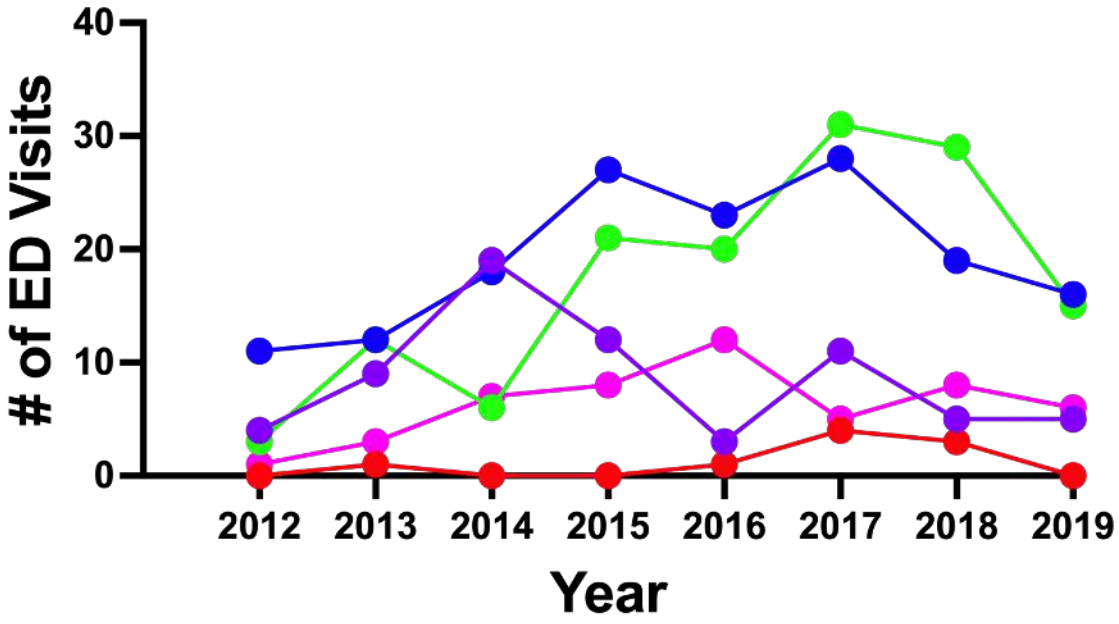
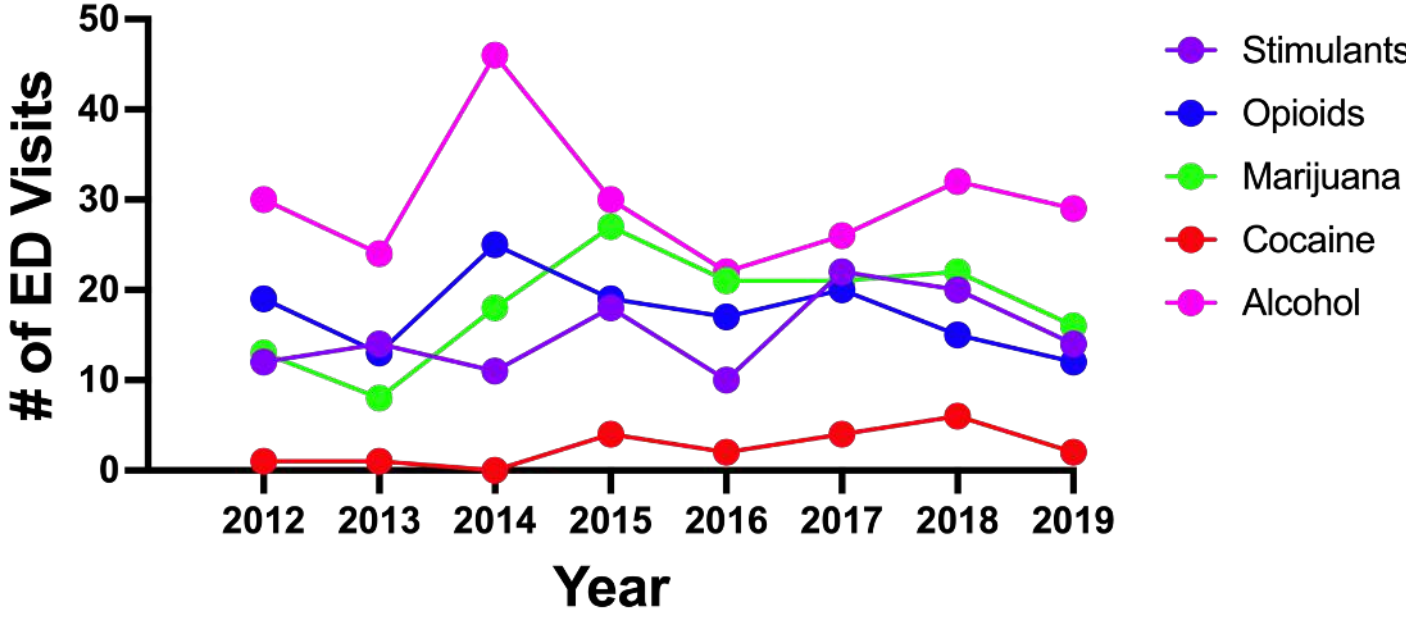
Suicidality and Substance: 0-17 Years



Suicidality and Substance: 18-24 Years



From: Arkansas Department of Health

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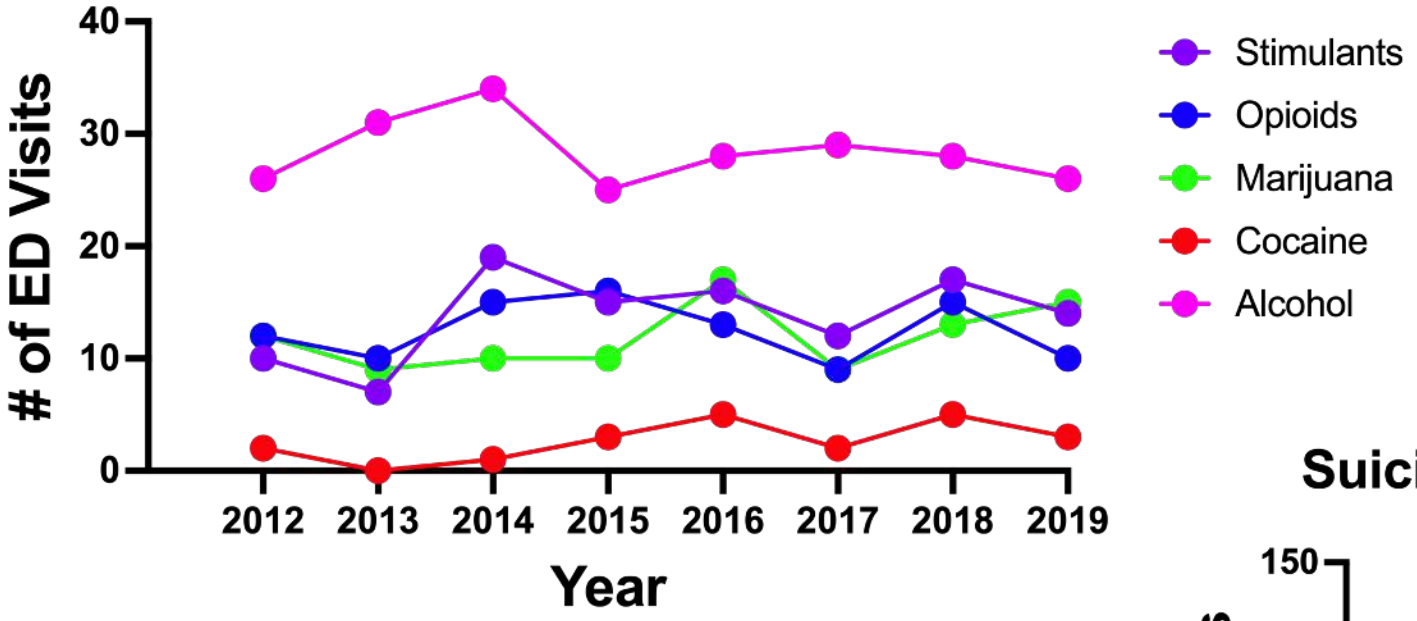
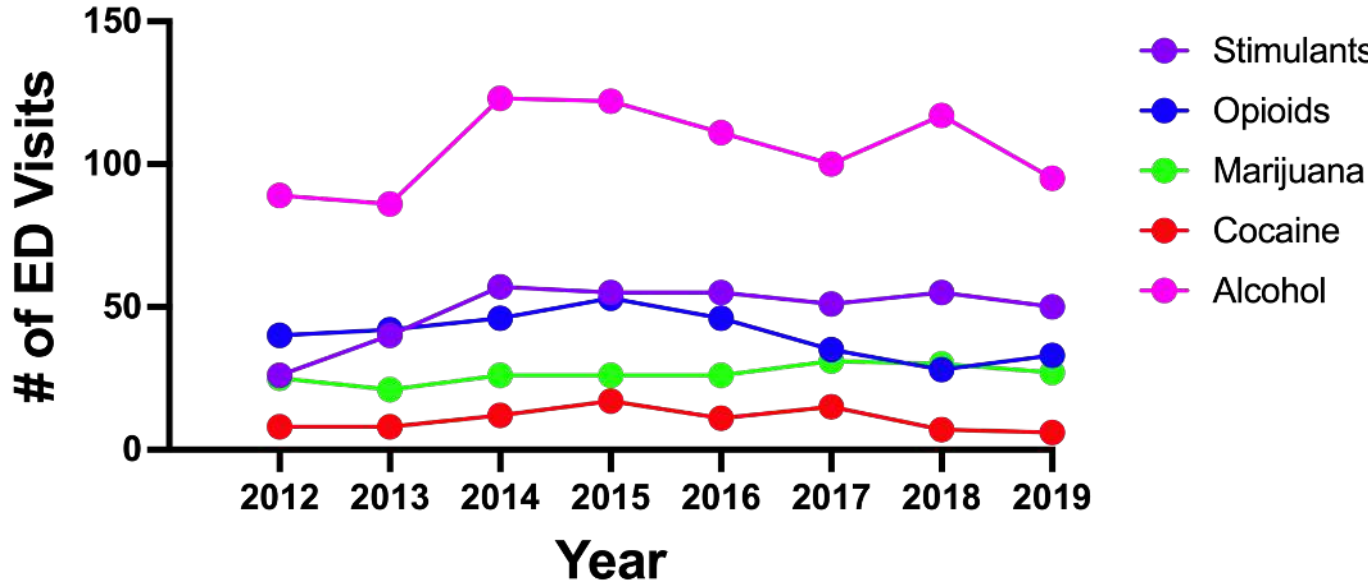
Suicidality and Substance: 25-29 Years



Suicidality and Substance: 30-49 Years



From: Arkansas Department of Health

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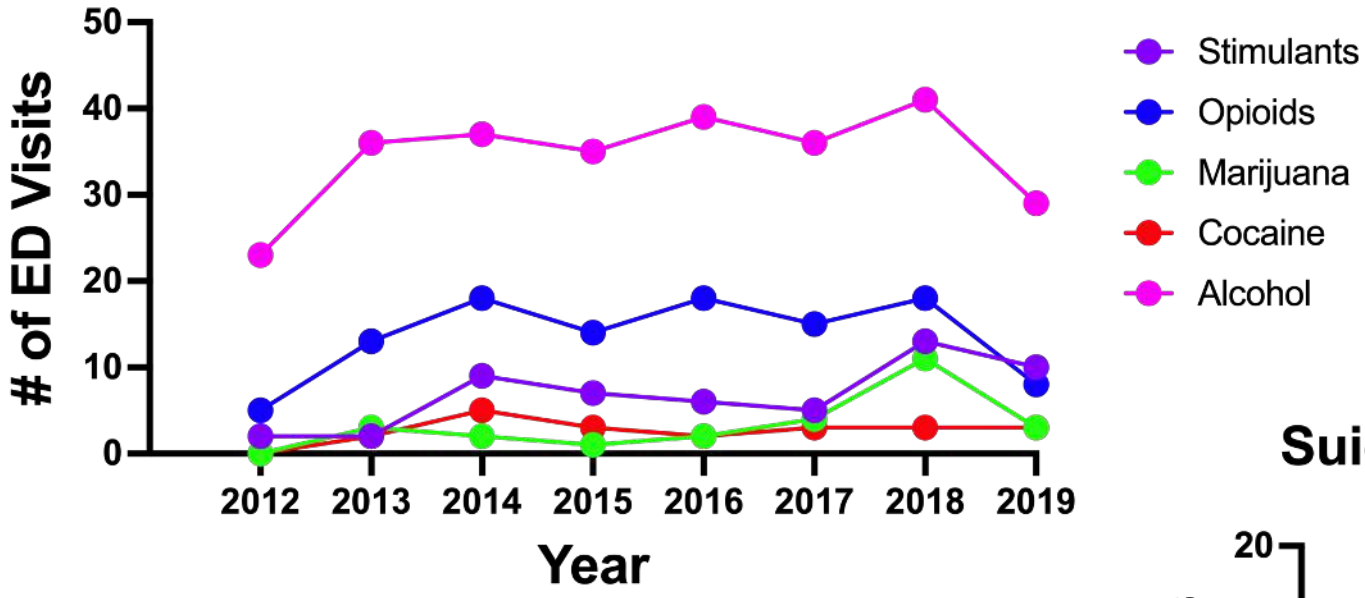
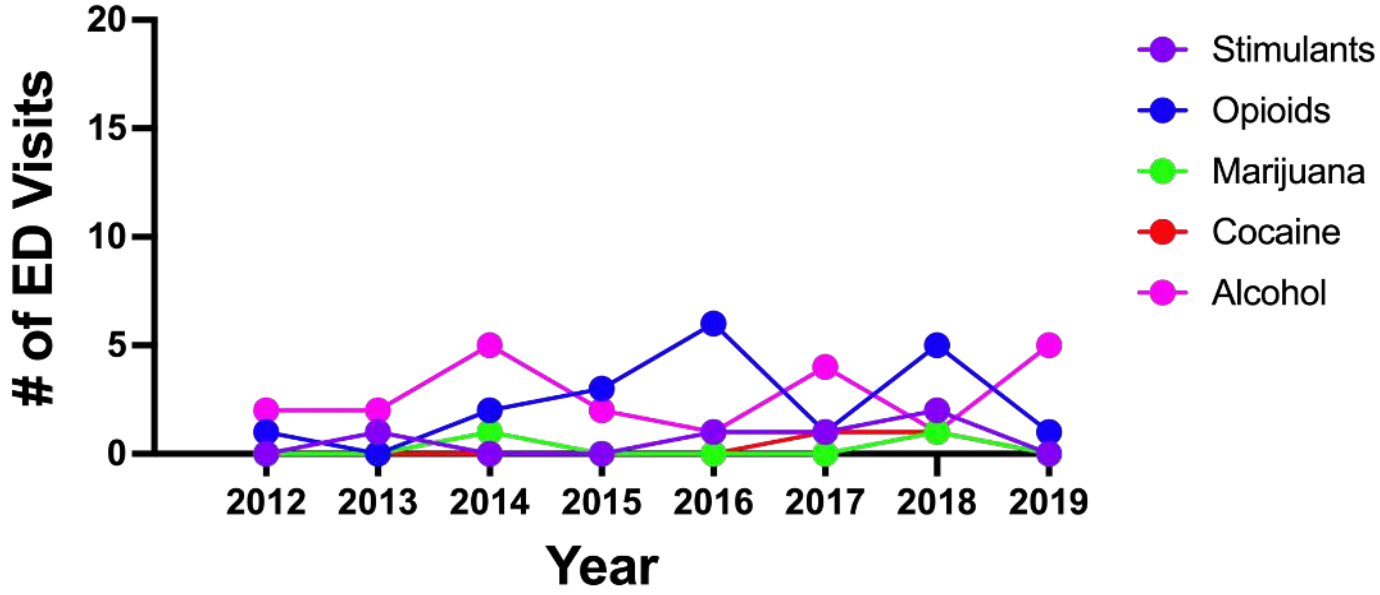
Suicidality and Substance: 50-65 Years



Suicidality and Substance: >65 Years



From: Arkansas Department of Health

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Summary of ED Visit Data

- ED visits for suicidal behaviors increased sharply from 2012 to 2014 then remained level thru 2019
- Trends in these ED visits over time varied by region
- Most age groups showed an increase in ED visits for suicidality from 2012 to 2014 that leveled over or declined thereafter; however, ED visits continued to increase in youth
- ED visits for suicidality in which a particular substance was detected were relatively stable over time, except for a slight increasing trend for visits involving marijuana

From: Arkansas Department of Health

Summary of ED Visit Data

- Youth ED visits for suicidality involving marijuana, stimulants, opioids, and to a lesser extent alcohol, increased over time and then showed some decreases
- Young adult ED visits for suicidality showed relatively flat trends involving a substance: alcohol>opioids=marijuana=stimulants>cocaine
- Adults aged 30-49: ED visits for suicidality showed relatively flat trends involving a substance: alcohol>opioids=marijuana>stimulants>cocaine
- Adults aged 50-65: ED visits for suicidality showed relatively flat trends involving a substance: alcohol>opioids>simulants>marijuana=cocaine
- Adults aged >65: ED visits for suicidality were minimal and alcohol or opioids were typically those substances detected

These results show age-related differences in trends and type of substance detected during ED visits for suicidality

From: Arkansas Department of Health

Caveats

- Raw numbers only
- Didn’t account for age-related population base
- Detection of a particular drug doesn’t necessarily mean there was a causal relationship between suicidality and drug
- Detection of a particular drug doesn’t necessarily mean it was the only drug detected
- Changes in reporting treatment facilities?

Discussion

Suicide Prevention Interventions

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Treatment Admission Trends: Race and Primary Drug Problem

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Identifying Hispanic Communities for Prevention Partnerships

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Survey Response Rates, Data Gaps and New Data Sources

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Marijuana Prevention Guide

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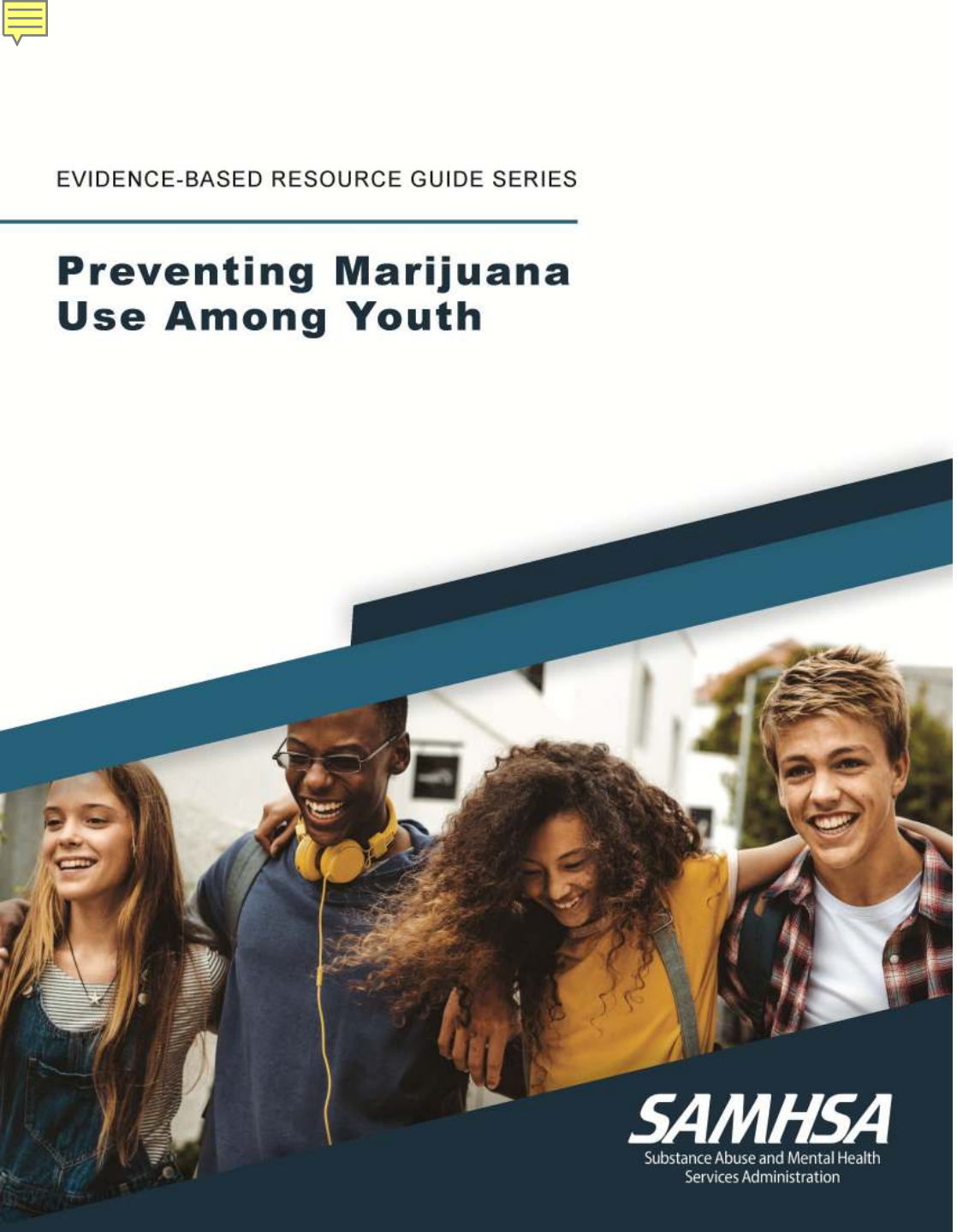

Prevention Resource Guides

Substance Abuse and Mental Health Services Administration (SAMHSA). Preventing Marijuana Use Among Youth. SAMHSA Publication No. PEP21-06-01-001. Rockville, MD: National Mental Health and Substance Use Policy Laboratory. Substance Abuse and Mental Health Services Administration, 2021.

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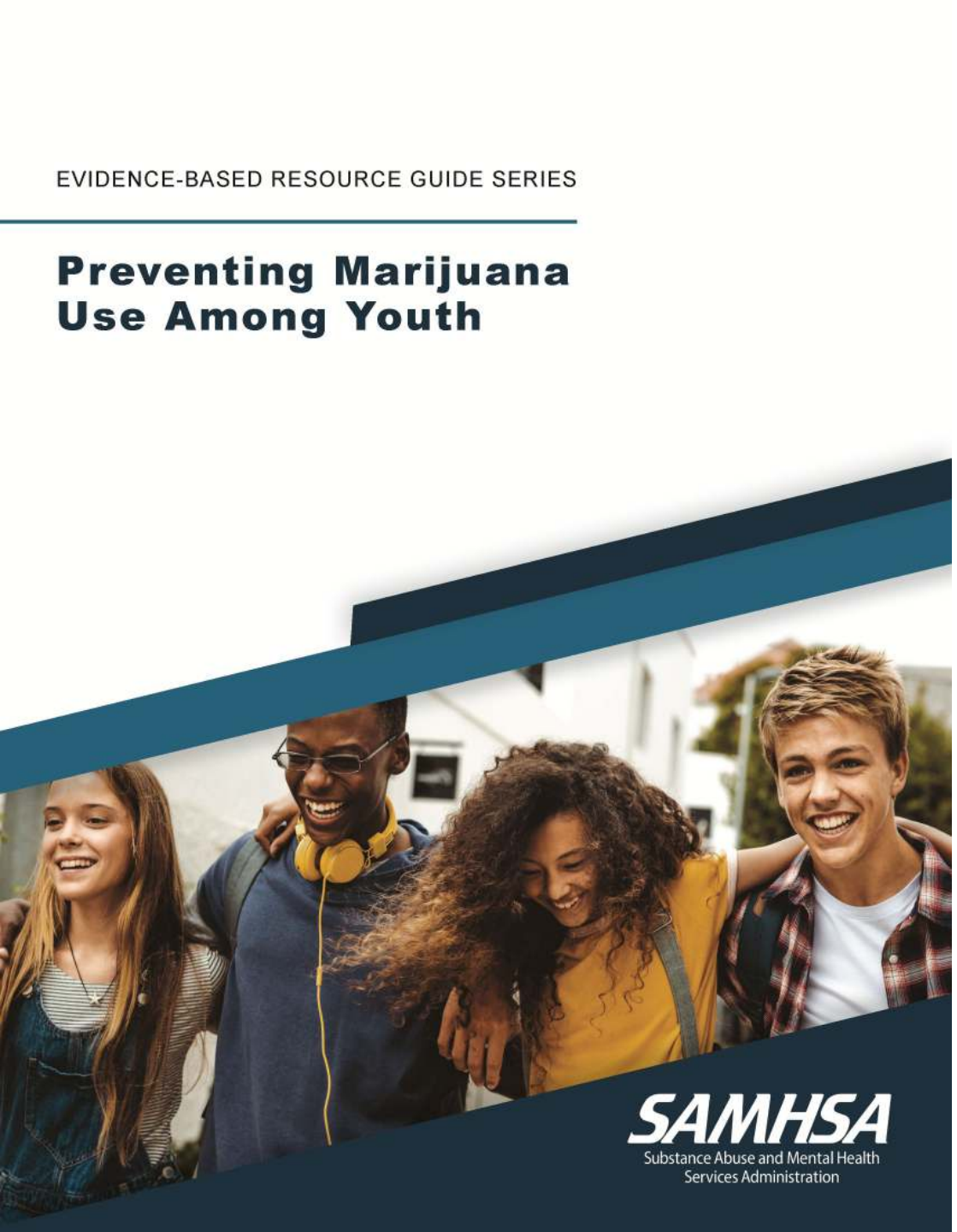

Covers programs/policies to prevent marijuana use among youth aged 12 to 17:

- Environmental strategies (e.g., regulating marijuana product pricing, location of stores, the products themselves, and promotion and advertising)
- School- and community-based substance use prevention programs

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Promising Marijuana Use Prevention Interventions	Description	Primary Age and/ or Grades	Expected Outcomes
Teen Marijuana Check-Up	A brief motivational enhancement intervention publicized as a non-pressured and confidential opportunity for the teen marijuana smoker to "take stock" of his/her use. The intervention is designed for in-school implementation and intended to elicit the teen's voluntary participation. Cost: It is estimated that the program costs approximately $100 per participant.	Grades 9 to 12	Reductions in quantity and frequency of marijuana use.[4]
Cannabis/Marijuana Awareness and Prevention Toolkit	A theory-based and evidence-informed curriculum designed to be implemented by educators, parents, and/or community-based organizations. The curriculum is aimed at preventing middle and high school students from using marijuana. Cost: This program is available for free.	Middle and High School Students	Prevention of marijuana use (studies currently in progress).
SPORT	A single-session screening and brief intervention designed to promote positive healthy behaviors, such as engaging in physical exercise, while also preventing substance use. The creators of SPORT recently developed a new program "Marijuana Prevention Plus Wellness." This program is adopted from the original evidence-based SPORT program and is designed specifically to prevent marijuana use.[5] Cost: The module costs $499 per program (separate programs for high school, middle school, adolescent).	Ages 8 to 18; Elementary, Middle, and High School Students[5]	Prevention of marijuana use and promotion of healthy behaviors, such as engaging in physical activity.[5]

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Environmental Strategies for Substance Use Prevention

Community-level environmental strategies attempt to change social norms and attitudes, systems, and economic conditions to influence behavior and reduce substance, e.g., marijuana use.

Examples: Laws, policies, and ordinances

States considering legalizing marijuana:

Establish a minimum purchasing and use age of at least 21

Evidence on the impact of these environmental strategies to prevent youth marijuana use is limited

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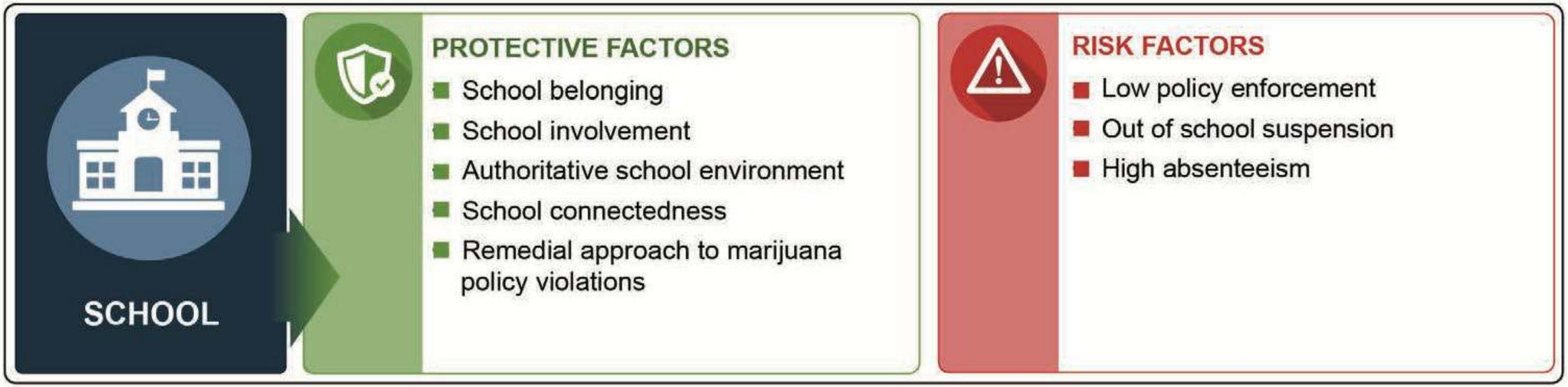
Environmental Strategies for Substance Use Prevention



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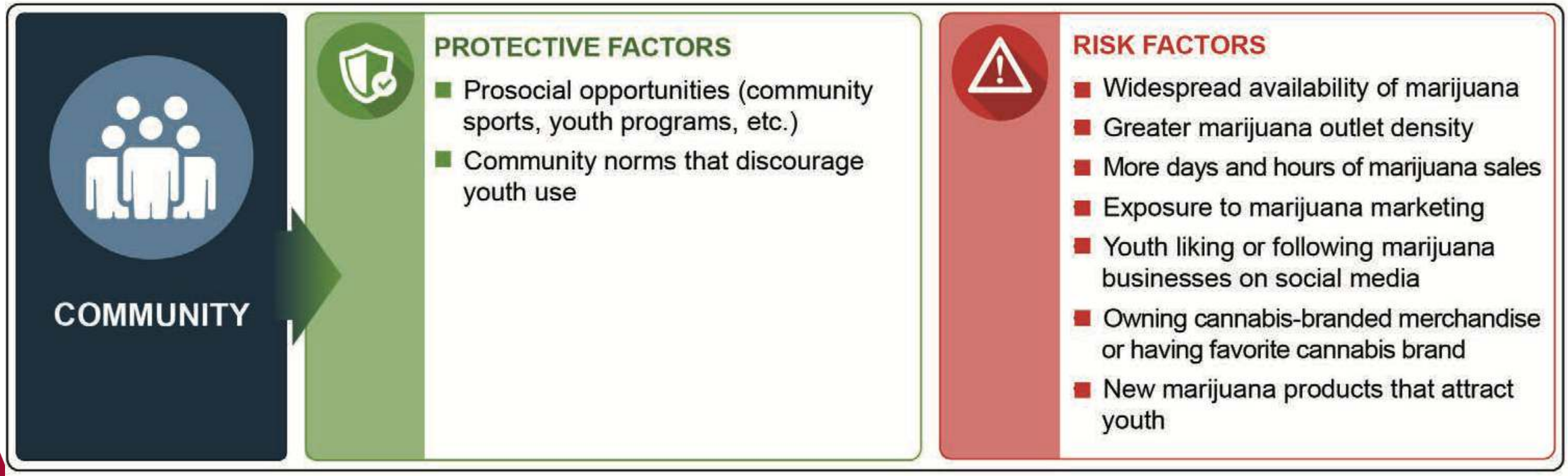
Environmental Strategies for Substance Use Prevention



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Strategy	Characteristics	Expected Outcomes
Regulation of the price of marijuana	• Increasing taxes (either by weight, THC content, or price). • Banning price promotions (such as coupons, two for one deals, and happy hours).	• Decrease in youth marijuana use. • Decrease in use of high potency marijuana products.[19] This study uses administrative records from the Washington State Liquor and Cannabis Board.[19]
Regulation of marijuana retail outlets	• Limiting number and locations of retailers through licensing or zoning. • Limiting hours/days of sale. • Banning those under the age of 21 in dispensaries. • Regulating where marijuana and related products can be sold.	• Decrease in youth marijuana use, as reported in a study that includes data from a cross-section of 6th, 8th, and 11th graders in 35 Oregon counties.[20]
Regulation of marijuana product manufacturing and packaging	• Banning marijuana products with added synthetic flavors and odors. • Banning THC-infused edibles likely to attract children and youth, such as candies, cookies, and beverages. • Banning THC-infused alcohol and tobacco products. • Requiring plain product packaging. • Requiring transparency on product labels, including THC and CBD content and ingredients. • Require prominent graphic marijuana warning labels with varied and rotating messaging.	• Reduction in youth marijuana initiation. • Reduction in youth marijuana use and use disorder. • Reduction in use of flavored edibles. • Increased health knowledge. • Increased motivation to quit. • Reduced brand awareness and identification. • Reduction in product appeal. • Increase in understanding of the risks of marijuana.[21-23]
Limitations on marijuana advertising and marketing	• Banning marijuana advertising on television, radio, billboards, and social media. • If not banned, limiting advertising with youth audiences. • Removing marketing, promotion, and advertising dollars from admissible business expenses for state income tax calculations. • Funding public health media campaigns. • Prohibiting health and therapeutic claims.	• Increase in understanding the risks of marijuana. • Reduction in positive perceptions of marijuana use. • Decrease in youth marijuana use. • Reduction in advertising by marijuana retailers.[24-25] The Davis study uses data from 6th through 12th graders in seven communities.[25]

Arkansas Policies and Practices:

- $395 - $560 per ounce
- Up to 2.5 oz per 14 days
- Only 40 licenses for dispensaries
- Use restricted to own home in the absence of children under 14 or pregnant persons
- Criminal checks for caregivers
- No vending machines
- Restrictions on edibles and packaging
- No foods likely to appeal to minors
- Advertising restrictions

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Discussion

- Do we have a comprehensive understanding of school policies across the state?
- If not, how to we get this info?
- How can we facilitate having evidence-based policies implemented consistently across counties/school districts?

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Youth Alcohol/Cannabis Prevention

CLIMATE Schools Program

Alison Oliveto
SEOW Staff
UAMS

Climate Schools Prevention Program

- Innovative and engaging
- Focuses on health and wellbeing
- Delivered via Internet
- Curriculum-consistent health education courses
  - proven to reduce harm and improve student well-being.
  - User-friendly evidence-based program

NREPP SAMHSA's National Registry of Evidence-based Programs and Practices

The Centre of Research Excellence in Mental Health and Substance Use received the Rotary Health Australia Knowledge Dissemination Award in 2015 from the Society for Mental Health Research. Climate Schools is listed in the National Registry of Evidence-based Programs and Practices (NREPP).

https://www.climateschools.com

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Climate Schools

Climate Schools modules aimed at students in Grades 8-10 (approximate ages 13-16 years) for the following topics:

- Alcohol Education (Grade 8)
- Alcohol & Cannabis Education (Grade 8 or 9)
- Psychostimulant & Cannabis Education (Grade 10)

Each module addresses a particular topic and has been developed to address health and personal development syllabus outcomes.

Designed to be easily implemented across one school term and are made up of 6 core lessons. (40-minutes each):

- **Part 1: Online cartoon scenarios (20 mins)** – Each student complete over the internet. Students also given a student summary for each lesson.
- **Part 2: Activities (20 mins)** – Teachers can choose to deliver additional activities designed to reinforce info in the cartoons and allow interactive communication between students. These activities and lesson summaries are available to teachers online, or if requested, can be delivered in hard-copy to registered schools. Teachers also given lesson outlines and links to the syllabus, implementation guidelines and teacher and student lesson summaries.

https://www.climateschools.com

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Professor Teesson, A/Prof Newton, Dr. Vogl, Dr. Champion and Professor Andrews
University of New South Wales and University of Sydney

Evidence for:

- Reducing alcohol consumption and possibly cannabis use
- Reducing binge drinking
- Reducing ecstasy use
- Reducing harms related to the use of alcohol and ecstasy
- Reducing intentions to use ecstasy and psychostimulants
- Increasing knowledge about alcohol and cannabis
- Improving attitudes towards alcohol
- Reducing truancy, psychological distress and moral disengagement

Feedback has shown:

- 93% of students found cartoon stories enjoyable and interesting way to learn
- 93% of students thought the info was easy to understand, learn and remember
- 95% of teachers rated the educational quality of the program highly
- 88% of teachers rated the program as better than other drug and alcohol education programs

https://www.climateschools.com

Discussion

Wrap-Up/Discussion/Action Items

We CAN make a difference!

Thank you!