



PREVENTION MAKES CENTS

A Business Case for Increased Focus on Substance Misuse Prevention Efforts

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ABOUT THIS DOCUMENT

Background

Prevention Makes Cents was initially conceived during a February 2024 planning meeting of the Chicago Strategic Action Council - a collective impact initiative that works to address systemic barriers for pursuing prevention within the Chicago area. During that meeting, a number of collaborators recognized the need for a prevention “business case” while also recognizing the challenges that come with ONLY considering prevention from a business or “profit/loss” perspective. Prevention Makes Cents is the result of careful research, planning, and writing to ensure that the work of prevention is recognized outside of a purely profit/loss framework, while also highlighting the many net benefits this work brings to our communities.

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EXECUTIVE SUMMARY

Prevention Makes Cents highlights the urgent need for increased investment in substance misuse prevention, emphasizing the economic and societal benefits of addressing Adverse Childhood Experiences (ACEs) alongside Substance Use Disorder (SUD). The prevalence of ACEs and SUD is substantial, significantly impacting public health, safety, and economic stability in Illinois. Every dollar invested in evidence-based prevention programs can save an estimated \$18 in future costs associated with substance misuse, as effective programs address risk factors for ACEs and SUD simultaneously.

Substance misuse imposes heavy economic burdens through healthcare costs, workplace productivity losses, and criminal justice expenditures. In Illinois, these costs are considerable, with the opioid crisis alone consuming nearly 4% of the state's GDP in 2017. Additionally, ACEs contribute to increased risks of chronic illnesses, mental health disorders, and premature death—thereby costing the healthcare system billions annually.

Our policy recommendations prioritize investing targeted prevention programs to reduce the long-term impact of ACEs and SUD. Implementing these prevention measures will enhance public health, reduce substance misuse among youth, and contribute to safer communities. This strategy not only addresses the root causes of substance misuse, but also positions Illinois to save substantially on healthcare, legal, and social services expenditures.



POLICY MEMO

Overview

This memo outlines the critical need for Illinois to expand its focus on substance misuse prevention, with targeted interventions that also address Adverse Childhood Experiences (ACEs). Research highlights that effective prevention programs yield significant cost savings, improve public health outcomes, and strengthen communities by reducing the risk factors associated with both ACEs and Substance Use Disorder (SUD).

Background

In Illinois, high rates of substance misuse among youth and substantial costs associated with healthcare, legal interventions, and lost productivity underscore the urgency for prevention of ACEs. Abuse, neglect, and family dysfunction directly increase the risk of substance misuse, with further repercussions on mental health and socioeconomic outcomes. ACEs and SUD, when unaddressed, lead to sustained public costs and long-term negative impacts on individual lives and community stability.

Recommendation

We recommend allocating additional resources to expand proven prevention programs, including Screening, Brief Intervention, and Referral to Treatment (SBIRT), which reduces healthcare usage and improves mental health. Prioritizing prevention enables the Illinois Department of Human Services to take a proactive approach in addressing Adverse Childhood Experiences (ACEs) and Substance Use Disorders (SUD), ultimately breaking the intergenerational cycle of trauma and addiction.

Conclusion

Enhanced funding for prevention is a cost-effective, proactive step to reduce Illinois' societal and economic burdens associated with ACEs and substance misuse. Investing in these initiatives will safeguard the health of future generations, support high need populations, and promote long-term community resilience across the state.

BACKGROUND

What are Substance Use Disorder and Co-Occurring Mental Health Disorders?

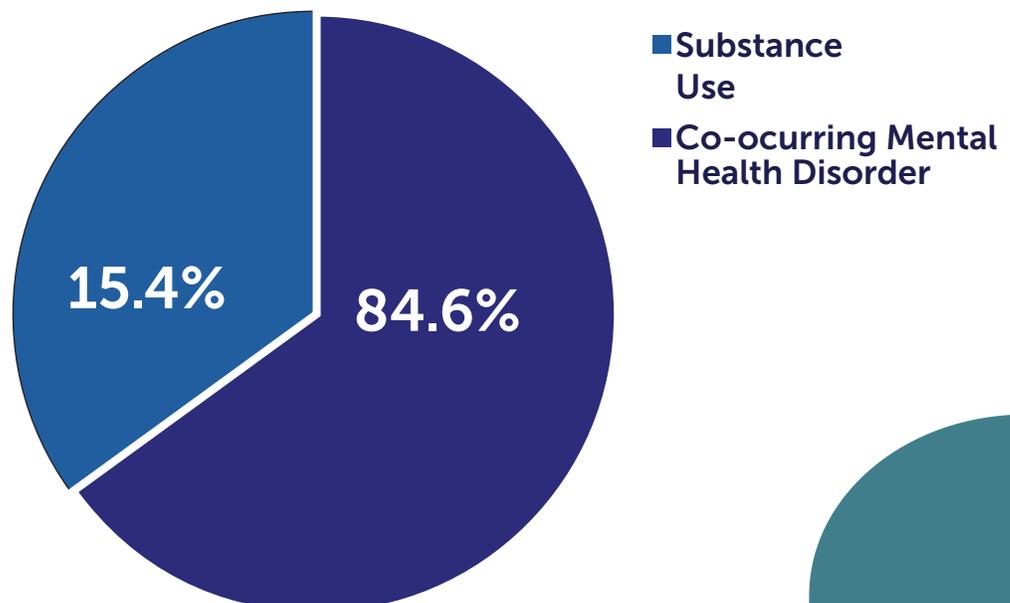
Substance use disorder is a complex condition marked by the persistent use of alcohol, drugs, or other substances, even in the face of serious substance-related problems and adverse outcomes, affecting physical and mental well-being.

This disorder is identified by a collection of cognitive, behavioral, and physiological symptoms that show an individual's continued substance use despite significant issues (American Psychiatric Association, 2013).

Substance use disorder can lead to significant impairments in daily functioning and health, including the risk of overdose and chronic diseases, such as HIV and hepatitis C, Infection of the heart, and skin infection (National Institute on Drug Abuse [NIDA], 2020).

In the United States alone, 77 million people live with co-occurring substance use and mental health disorders. However, most of those who need treatment for these disorders do not receive it (Graph 1).

Graph 1: Substance Use and Co-Occurring Mental Health Disorders



What are Adverse Childhood Experiences (ACES)?

Adverse Childhood Experiences

ACES are events occurring during childhood (0-17 years) that may have potentially traumatic outcomes (CDC, 2024). ACES are known to fall into three distinct but related categories: household, community, and environment. Repeated exposure to ACES can disrupt brain development and increase the risk of long-term health and behavioral issues.

Household ACEs include, but are not limited to: physical, sexual, and/or emotional abuse; living with someone who has gone to prison or has a substance use or other mental health disorder; exposure to domestic violence; losing a loved one through divorce, abandonment, neglect, or death; and others (Manchester, nd).

Community-level ACES involve discrimination, lack of social capital, mobility, food scarcity, substandard schools and wages, poor housing quality, and affordability, among others. Environmental ACES consist of record storms and heat levels, tornadoes and hurricanes, earthquakes, exposure to pandemics, to name a few (Kitsap County Department of Human Services, 2021).

Some children experience multiple ACES at once, and the more ACES experienced by an individual child, the more likely they are to experience negative outcomes. Furthermore, epigenetic research shows that the trauma experienced with ACES is passed down through generations (Wright and Schwartz, 2021).



"ACEs are associated with a wide range of health problems that can persist throughout a person's lifespan, including an increased risk of substance misuse, serious emotional disturbances, and mental health disorders."

(Strategic Prevention Technical Assistance Center)

Are ACEs and Substance Use Related?

Approximately 61% of adults have experienced at least one adverse childhood event, while 16% have experienced four (4) or more ACEs (CDC, 2021a). A systematic review by Schäfer et al (2022) found that childhood trauma, particularly emotional abuse and neglect, was associated with an increased risk of developing substance use disorders, with a stronger association for cannabis and alcohol use disorders compared to other substances.

Childhood trauma significantly correlates with adolescent substance misuse, with over 83% of treated adolescents reporting trauma exposure, leading to higher rates of externalized symptoms, such as problematic substance use, which may “put adolescents at risk for recurrent trauma” (Darnell et al, 2020).

What is Prevention?

During a 2024 meeting of Illinois Regional Substance Use Prevention Integration Centers (RSUPICs) grantees, the question was asked: How would you describe what prevention means to you? Here is what they said:

- “Creating awareness and knowledge and tools about issues to create a healthier future.”
- “Prevention means creating the conditions where all people have the best opportunity to live a healthy life.”
- “Taking steps to create awareness to avoid problems or negative outcomes before they occur.”
- “Prevention activities work to educate and support individuals and communities to prevent the use and misuse of drugs and the

The grantees highlighted some pivotal aspects to prevention, leading us to learn that substance misuse prevention involves proactive strategies that empower individuals, families, and communities; instill hope; and promote well-being to effectively prevent, delay, and reduce the risky use of alcohol, tobacco, and other substances.



UNDERSTANDING THE PROBLEM

Substance Misuse and the Adolescent Brain

Substance misuse during adolescence can have severe consequences on brain development, as this period is marked by ongoing structural and functional changes, especially in regions responsible for decision-making and impulse control (Sawyer et al, 2018). Research indicates that early exposure to substances like alcohol and drugs can disrupt this developmental process, leading to long-term cognitive deficits and increased vulnerability to mental health disorders (Spear, 2018). These changes are associated with declines in academic performance, social difficulties, and mental health issues later in life (Johnston et al, 2022).

Rates of Substance Use Among Illinois Youth

The Center for Prevention Research and Development [CPRD], 2020 highlights the grade participation through the Illinois youth survey of Illinois students in 8th, 10th and 12th grades. The IYS has two goals:

- 1) to gauge the health behaviors of Illinois youth and
- 2) to provide individual schools and districts with data to improve the health and wellbeing of their students

The IYS is used by public health researchers, education professionals, key stakeholders, and policymakers to create a healthier Illinois.

The 2024 IYS data reveals significant patterns in youth substance use, reflecting both ongoing trends and emerging concerns. While alcohol use among adolescents continues to decline, other substances remain prevalent. In the past year, 18% of 8th graders, 26% of 10th graders, and 37% of 12th graders reported alcohol use. E-cigarette use also remains an issue, with 5% of 8th graders, 9% of 10th graders, and 12% of 12th graders having used an e-cigarette or vaping product in the last year. Marijuana use was reported by 3% of 8th graders, 9% of 10th graders, and 18% of 12th graders, highlighting the need for continued intervention.

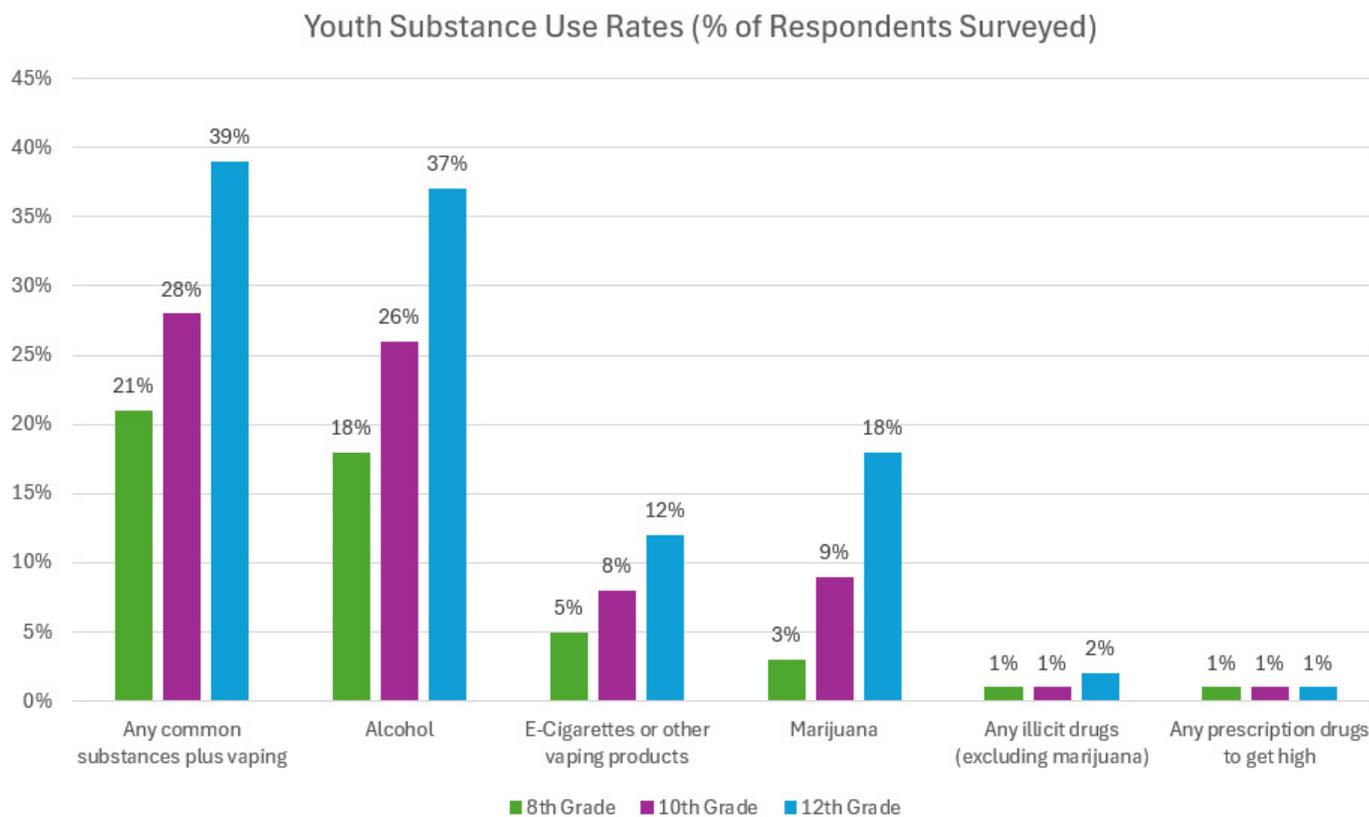
Even though some of these percentages may appear small, the real number of students they represent is alarming. Among students who reported using illicit substances (excluding marijuana) in the past year, 1% of 8th graders, 3% of 10th graders, and 6% of 12th graders admitted to use.

With approximately 150,000 students per grade level in Illinois, these statistics translate into 1,500 eighth graders, 4,500 tenth graders, and 9,000 twelfth graders engaging in illicit substance use.



This data underscores the importance of continued investment in prevention efforts, school-based education, and community interventions to mitigate substance use among Illinois youth.

Graph 2: Substance Use as Percentage of Students, Illinois Youth Survey 2024



During the past year in the Illinois, nearly 20,000 students ages 13-18 used an illicit substance (marijuana excluded). More than 7% of 12-17 year olds in the United States need treatment for a substance use disorder. Only 3.5% receive such treatment, leaving thousands of children without the assistance, resources, support, and care they need (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023b).

Illinois Adolescent Alcohol and Marijuana Trends

Adolescent substance use in Illinois mirrors national trends, highlighting a pressing need for intervention. According to the Youth Risk Behavior Survey (YRBS), 13% of Illinois high school students consumed alcohol before age 13, slightly below the national average of 15% (Centers for Disease Control and Prevention [CDC], 2024). Additionally, 22% of Illinois students currently drink alcohol, matching the national rate of 22.7%, with 11% engaging in binge drinking compared to the national average of 10.5%. Marijuana use also remains significant, with 27.5% of Illinois students reporting lifetime use, closely aligned with the national figure of 27.8%.

Current marijuana use stands at 15% in Illinois, comparable to the national average of 15.8%. These statistics underscore the urgent need for targeted prevention programs to address early substance use and promote healthier behaviors among adolescents. Regarding specific ACEs the CDC, 2024 the found the following:

- 34.4% reported experiencing emotional abuse
- 26.7% reported household substance misuse
- 24.6% reported parental separation
- 17.0% reported domestic violence
- 16.9% reported physical abuse
- 16.3% reported mental illness
- 11.0% reported sexual abuse
- 7.6% reported parental incarceration

These statistics paint a sobering picture of the challenges many individuals face in their formative years. With over a third of people reporting experiences of emotional abuse and significant portions affected by household substance misuse, parental separation, and other adverse experiences, it is clear trauma is a widespread reality.

Rates of ACEs

Many people report experiencing ACEs. In fact, data from all 50 states and Washington, DC show that 64% of people experienced at least once adverse childhood experience, while 17% experienced four (4) or more ACEs (CDC, 2021b).

Furthermore, “ACEs were highest among women, persons aged 25-34 years, non-Hispanic American Indian or Alaska Native adults, non-Hispanic multiracial adults, adults with less than a high school education, and adults who were unemployed or unable to work” (Swedo et al, 2023).

Ports et al (2020) highlighted the intergenerational impact of ACEs, as children of parents with high ACE scores were more likely to experience ACEs themselves, perpetuating the cycle of trauma and increasing the risk of substance use disorders across generations.

Using data from the 2017 Illinois Behavioral Risk Factor Surveillance System, Zounffa, Howland, and Siani (2023) found that in Illinois, 58.5% of adults reported experiencing one or more ACEs.



Economic Impact of Substance Misuse and ACES

Substance misuse and adverse childhood experiences (ACES) exact a heavy toll on society, far beyond their immediate personal effects. In 2017, studies of US hospitals found that costs for treating substance use disorders in emergency and inpatient settings surpassed \$13 billion. For instance, expenses for inhalant-related conditions were around \$4 million, while costs for alcohol-related disorders exceeded \$75 billion (Peterson et al, 2021).

The economic impact of ACES adds another layer to this burden. Research estimates that ACES cost around \$581 billion annually in Europe and \$748 billion in North America (Bellis et al, 2019). A report by the California Surgeon General indicates that ACEs account for 375 Million. (Bhushan et al, 2020) Preventive measures not only improve individual and community well-being but also reduce the long-term financial strain on healthcare, social services, and the economy.

Beyond direct healthcare and social costs, ACES also have long-term economic effects by limiting educational attainment and workforce participation. Individuals who experience ACES are more likely to struggle with academic achievement, leading to lower lifetime earnings and decreased economic mobility.

In addition to these direct healthcare expenses, substance misuse contributes to substantial indirect costs. Many individuals affected by substance misuse miss work due to hangovers, withdrawal, or the need to seek drugs, which leads to reduced productivity. When present, their performance may be impaired, forcing employers to incur extra expenses related to recruitment, training, and replacing staff. Loss of productivity extends beyond the workplace, affecting overall economic output and placing additional strain on social support systems.

In the United States, the cost of childhood trauma alone is estimated at about \$428 billion per year, driven by increased healthcare needs, reduced productivity, and a greater strain on the criminal justice system. Those who experience ACES are also more likely to develop chronic health issues. These figures—from billions in medical treatment and lost productivity to the deep economic impacts of ACEs—underscore the critical need for effective prevention and early intervention strategies. Addressing childhood trauma is not only a moral imperative but also a sound economic investment.

Addressing these issues can help alleviate the heavy financial and social burdens, ultimately leading to healthier, more resilient communities. By implementing comprehensive support systems, including educational programs and community based interventions, we can mitigate these negative effects.



Actual Impacts of Expenses Related to Juvenile Delinquency and Crimes

The economic impact of juvenile delinquency and associated crimes is significant, encompassing direct costs such as law enforcement, legal proceedings, and incarceration, as well as indirect costs including lost productivity and long-term societal impacts. For instance, the Justice Policy Institute (2014) reported that the United States spends approximately \$8 billion annually on juvenile corrections alone.

Furthermore, juveniles who engage in criminal activities often face disrupted education and diminished employment prospects, perpetuating a cycle of economic disadvantage. Longitudinal studies have demonstrated that individuals with a history of juvenile delinquency are more likely to engage in adult criminal behavior, further burdening the criminal justice system and society (National Institute of Justice, 2017).

Investing in prevention programs can mitigate these costs by reducing the incidence of juvenile delinquency and its long-term repercussions, ultimately fostering safer communities and more productive citizens. These programs—ranging from early childhood education and family support services to mentorship initiatives and mental health interventions—play a crucial role in addressing risk factors before they escalate into criminal behavior. By providing high-need youth with positive role models, academic support, and access to mental health resources, we can help them develop essential life skills, emotional resilience, and a sense of belonging.



WHAT CAN WE DO?

1. Increase Investment in Prevention of SUD and ACEs

Greater investment in prevention programs targeting Substance Use Disorder (SUD) and Adverse Childhood Experiences (ACEs) can address the root causes of substance misuse. Evidence-based strategies such as early intervention, trauma-informed care, and school-based prevention programs, not only reduce substance use among youth but also mitigate the long-term health and societal impacts of ACEs. Enhanced funding ensures comprehensive support, including mental health services, family education, and community outreach, creates healthier and more resilient populations.

2. Do Nothing: Maintain Status Quo

Choosing to maintain the current focus on prevention would likely perpetuate existing trends in substance misuse and the long-term consequences of ACEs. Without increased resources, the system will continue to face challenges in addressing the growing needs of vulnerable populations. This approach risks higher healthcare costs, diminished productivity, and enduring cycles of trauma and substance use, placing an unnecessary burden on individuals, families, and public systems. Maintaining the status quo also overlooks the opportunity to implement proven interventions that could transform outcomes for at-risk youth.



PREVENTION DOES MAKE CENTS

This policy brief advocates for prioritizing substance use prevention, particularly addressing Adverse Childhood Experiences (ACEs) and Substance Use Disorder. It highlights the complex nature of Substance Use Disorder and the significant impact of ACEs on the development of substance use. The prevalence of ACEs is substantial, with many experiencing multiple traumatic events, leading to long-term negative outcomes including mental health issues and chronic diseases. The economic burden of ACEs and Substance Use Disorder is immense, with billions spent annually on healthcare, lost productivity, and criminal justice costs. Investing in prevention programs can result in significant cost savings and improve public health. Effective prevention requires addressing both ACEs and Substance Use Disorder simultaneously due to their interrelated nature.

Policy recommendations include increasing investment in prevention programs targeting both issues and developing comprehensive strategies that integrate efforts across healthcare, education, and community services. Prevention efforts are cost-effective, producing a return on investment (WSIPP, 2023). Further, prevention efforts can work to prevent both adverse childhood experiences (ACEs) and substance misuse among youth.

Conclusion

Conclusively, this policy brief makes a compelling argument for the increased focus on substance use prevention by addressing the root causes. By investing in prevention efforts, we can not only reduce the prevalence of substance misuse among youth, but also mitigate the long-term economic and social costs associated with these issues. The dual approach of targeting both ACEs and substance misuse can lead to healthier communities and substantial financial savings, making it a sound investment for policymakers and stakeholders.

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