

# INCORPORATING THE SOCIAL DETERMINANTS OF HEALTH INTO SUBSTANCE USE PREVENTION

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## INTRODUCTION

Evidence-based substance misuse prevention starts with a clear understanding of the risk and protective factors driving substance misuse and related behavioral health problems present in communities. Many factors affect people's risk of misusing substances. Among these, the social determinants of health (SDOH) are some of the most important.

This tool is designed to educate prevention professionals about the SDOH, including what SDOH are and how they impact the risk of substance use.

The content is organized according to the five core domains of the SDOH. For each domain, we present a brief description, followed by an exploration of the specific SDOH associated with substance misuse-related outcomes, including risk of misuse, misuse rates, substance use disorder (SUD) rates, risk of overdose, and many others.

This tool includes the following sections:

- What Are the Social Determinants of Health? Economic Stability
- Neighborhood and Built Environment
- Social and Community Context
- Education Access and Quality
- Health Care Access and Quality
- Methodology

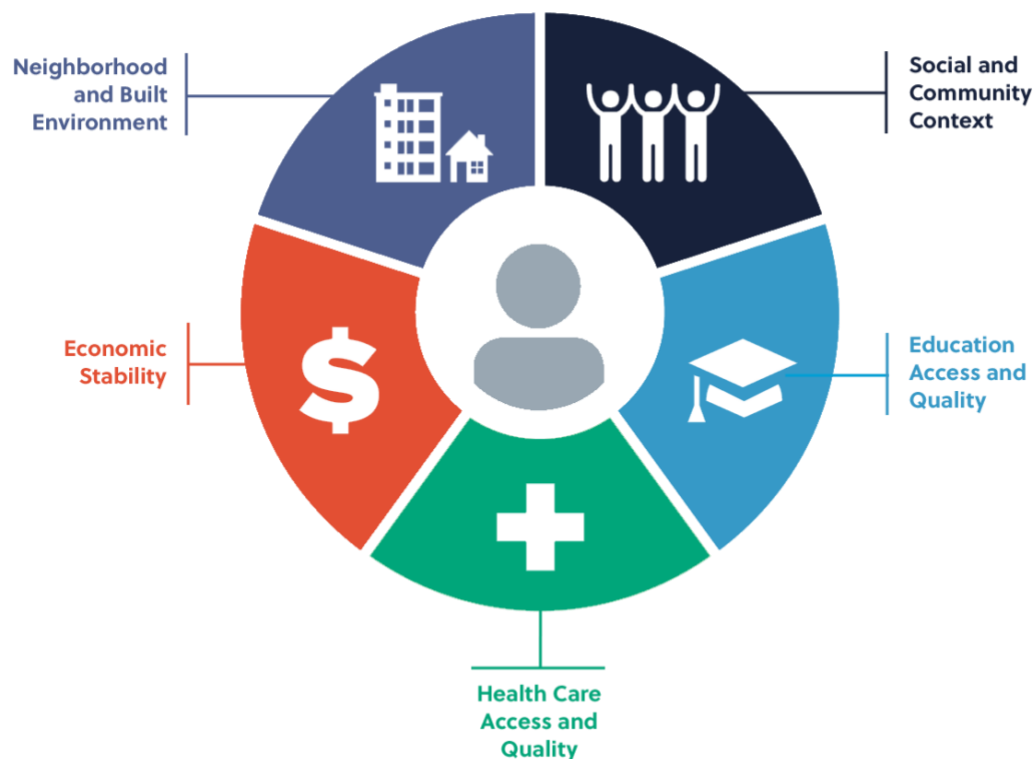
## WHAT ARE THE SOCIAL DETERMINANTS OF HEALTH?

SDOH are “big picture” factors that can impact risk of substance misuse—and the likelihood of many other health outcomes—across entire communities. The U.S. Department of Health and Human Services (HHS) defines SDOH as:

*“The conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”*

In other words, they are the environmental aspects around us that are potentially influencing all aspects of our day-to-day lives and health.

There are myriad ways to think about and organize SDOH. HHS uses a system of five core domains: economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context. Within each domain are many different yet related SDOH. For instance, a few of the many SDOH within health care access and quality are rates of insurance coverage, the percent of health care providers who offer tele-health services, and access to prenatal care for pregnant women.



## **Social and Community Context**

This domain considers people's interpersonal connections, including with family members, friends, co-workers, and other community members. It emphasizes the health-related benefits of social support within relationships as well as engagement opportunities and social cohesion within the broader community. It also emphasizes the health-related challenges of violence within relationships and stigma and discrimination within relationships and the broader community.

## **Education Access and Quality**

This domain considers access to opportunities that support learning and development during early childhood, K-12 education, vocational training, and higher and continuing education. It also considers the quality of all available educational opportunities, including how well they support academic and other educational goals as well as the physical, social, and emotional well-being of those involved.

## **Health Care Access and Quality**

This domain considers multiple aspects of health care access, including affordability, how easy it is for people to physically reach a provider or service, whether a provider or service has available resources (e.g., personnel, technology) and can adapt (e.g., appointment times, communication strategies) to meet people's needs and preferences, and how comfortable people feel with the provider or service. It also considers such elements of health care quality as the degree to which it is safe, effective, and person-centered.

## **Economic Stability**

This domain considers the balance between the financial resources available to people and what they must spend to live healthy and well. Financial resources include income, benefits, savings, home ownership and equity, and other elements of wealth. Such resources influence the degree to which people can access health-promoting resources and services. People who struggle with economic stability also face many life stressors that can further influence their health and well-being.

## **Neighborhood and Built Environment**

This domain focuses on the connections between where people live and their health and well-being. It considers characteristics of the many different physical and natural environments in which people spend time—for example, lead, mold, or other hazardous conditions in homes, schools, and workplaces; access to healthy and culturally-relevant foods, parks, and

transportation; air and water quality; and neighborhood and community safety.

The following sections explore each of these domains and their relationship to substance misuse in greater detail.

## ECONOMIC STABILITY

### About the Domain

**Economic Stability** considers the balance between the financial resources available to people and what they must spend to live healthy and well. Financial resources include income, benefits, savings, home ownership and equity, and other elements of wealth. Such resources influence the degree to which people can access health-promoting resources and services. People who struggle with economic stability also face many life stressors that can further influence their health and well-being.

### Related Determinants

Within this domain, the SDOH associated with substance misuse-related outcomes include:

1. Employment Status
2. Household Income
3. Housing Status
4. Job Skills Training

### Employment Status

Increasing rates of employment is vital to ensuring economic stability for people. Employment and underemployment are associated with reduced risk of physical and mental health conditions, including experiencing stress-related illnesses. Underemployment is the state of having a job with insufficient work (e.g., having a part-time job but wanting a full-time job).

People who are unemployed or underemployed are at greater risk of experiencing heart disease, strokes, arthritis, depression, and other issues. They are also less likely to receive preventative health services of all kinds. There are numerous programs to increase employment rates and improve job quality, including job skills training programs, workplace safety regulations, and employee benefit requirements.

Findings from 22 studies show that employment is associated with reduced likelihood of substance misuse, greater likelihood of accessing and completing treatment programs if substance misuse occurs, and reduced likelihood of experiencing recovery-related discrimination or relapse.

Employment is also associated with reduced risk of overdose, greater access to the opioid overdose reversal medication, naloxone, and reduced likelihood of HIV infection. One study also found that workplaces with less racial discrimination are associated with reduced rates of substance misuse.

However, findings were not uniformly positive.

Some studies found employment associated with greater risk of contracting a sexually transmitted infection related to substance misuse, greater use of novel psychoactive substances, and greater risk of smokeless tobacco use. Another study found that employment while attending college is associated with greater risk of substance use and other negative physical and mental health outcomes.

Overall, employment appears to be associated with positive substance misuse-related outcomes, as well as improved healthcare outcomes overall. Continued efforts to increase employment rates may bring further positive results.

### **Household Income**

Improving the household income of people with insufficient financial resources is vital to ensuring their economic stability. In 2023, the federal poverty level was set at an annual income below \$14,548 for a household of one or below \$30,000 for a family of four. More than 37.9 million people— 11.6% of the U.S. population—lived below the federal poverty level in 2021. Living in or near poverty is associated with a wide range of negative health outcomes.

People living in or near poverty face reduced access to a wide range of positive health supports, such as education or employment opportunities. They also face an increased likelihood of experiencing negative health risk factors, such as unstable housing and institutional discrimination. As a result, poverty and low household income are associated with increased risk of morbidity and mortality from numerous health conditions. Poor health is also associated with reduced income, creating a “health-poverty trap.”

Findings from 21 studies show that lower household income is associated with increased risk of substance misuse, higher rates of fatal overdoses, and increased likelihood of experiencing other consequences—such as contracting HIV from injection drug use. Lower household income is also associated with reduced likelihood of being screened for substance misuse, receiving treatment services for substance misuse or HIV, or remaining in remission after receiving treatment. However, findings around alcohol misuse were mixed. One study found

lower household income associated with greater risk of binge drinking among men and a lower risk among women. Another study found that households that lost income during the Great Recession (2007 to 2009) decreased their overall alcohol consumption—though they also saw an increase in depression. Lastly, one study found that access to prevention services declined the least in neighborhoods that lost the most total household income during the Great Recession.

Overall, higher household income appears to be associated with positive substance use-related outcomes, as well as improved healthcare outcomes overall. Continued efforts to increase household income may bring further positive results.

### **Housing Status**

To ensure that housing reinforces economic stability, it needs to exist, be stable, and be affordable. People who experience homelessness, move frequently, or spend a major portion of their income on housing are significantly more likely to experience a wide range of physical and mental health conditions. Stable and affordable housing is housing that someone can afford and that they are certain they can maintain.

Having housing provides shelter against numerous traumas associated with homelessness—such as violence or extreme temperatures. Estimates of lifetime rates of experiencing homelessness vary, but two estimates are 4.2% or 7.4%. Stable housing can protect against anxieties and other mental health conditions associated with frequent moves. Affordable housing in the United States is generally defined as costing less than 30% of family income.

In 2021, 35% of U.S. families spent more than that amount on housing. When housing is unaffordable, it can reduce the ability of people to afford other costs that can improve health.

Findings from seven studies suggest that experiencing homelessness may be associated with substance misuse risk. Four studies found that experiencing homelessness is associated with increased risk of substance misuse.

Homelessness is also associated with reduced likelihood of completing substance use treatment programs and achieving substance use disorder remission. One study looking specifically at tobacco smoking found no association between smoking rates and experiencing homelessness. Another study found that people experiencing homelessness are more likely to possess naloxone—which the authors posit to be the result of the rapid expansion of naloxone access programs to serve this high-risk population.



Overall, having affordable, stable housing appears to be associated with decreased risk of substance use disorders (SUD) and improved likelihood of positive outcomes if SUD occurs. Efforts to reduce homelessness and expand access to affordable, stable housing may yield positive results.

### **Job Skills Training**

Jobs skills training programs—also known as employment training, workforce training, career skills training, or vocational training—teach people relevant skills for specific professions. Providing relevant and useful job skills training is vital to ensuring people’s economic stability.

A wide variety of job skills training programs have shown effectiveness at reducing unemployment, which is associated with greater risk of physical and mental health conditions, including experiencing stress-related illnesses.

They are offered by a wide variety of organizations, including schools, nonprofits, employers, and trade associations. Some programs are specifically tailored for people with low income or without a high school diploma.

While there is much evidence to support the connection between SUD recovery and job skills training, there is insufficient research on the connections between job skills training programs and substance use initiation and misuse to draw conclusions. Findings from one study suggest that the positive impacts of job skills training programs could extend to substance misuse risk, specifically that participation is associated with decreased rates of illicit substance use (except marijuana) and binge drinking.

### **Diving Deeper: Research Article Summaries**

[Download the PDF](#) to dive deeper into the articles related to these four SDOH and their impact on substance misuse-related outcomes. Each summary offers insights into the articles' key findings, conclusions, study demographics, methodologies, and citations. To learn more about our comprehensive literature review process, please see the Methodology section.

## NEIGHBORHOOD AND BUILT ENVIRONMENT

### About the Domain

**Neighborhood and Built Environment** focuses on the connections between where people live and their health and well-being. It considers characteristics of the many different physical and natural environments in which people spend time—for example, lead, mold, or other hazardous conditions in homes, schools, and workplaces; access to healthy and culturally-relevant foods, parks, and transportation; air and water quality; and neighborhood and community safety.

### Related Determinants

Within this domain, the SDOH associated with substance misuse-related outcomes include:

1. Geographic and Building Characteristics
2. Neighborhood Environmental Stress

### Geographic and Building Characteristics

The physical characteristics of the environment (e.g., the level of urbanization, density of legal substance retail outlets, availability of safe drinking water) are vital components of the neighborhood and built environment. These characteristics can be natural or man-made and have many associations with health and well-being.

Research is still identifying all of the physical characteristics of the environment that are associated with health, but some examples include water quality, air quality, noise pollution, proximity to hazardous waste sites, frequency/intensity of severe weather events, structural quality of homes, and density of healthy food retailers. Some of these characteristics are also associated with rates of stress, anxiety, and other mental health conditions.

There is insufficient research available on the associations between geographic and building characteristics and substance misuse to draw conclusions. Findings from 15 studies add to the research base, but they examine a wide variety of distinct issues and sometimes present inconsistent results. Many studies examine the associations between rural or urban density and risk of substance misuse. Studies differed on whether more urban or rural communities have a greater likelihood of substance misuse risk, overdose risk, or obtaining services, depending on the population, substance, and other variables examined. Two studies found that a higher density of substance use disorder treatment providers is associated with greater likelihood of

people with SUD considering treatment. One study found an association with drinking Tetrachloroethylene (PCE)-contaminated water as a child and a greater likelihood of having a substance use disorder as an adult.

### **Neighborhood Environmental Stress**

Neighborhood environmental stress includes stress stemming from high crime rates, physical deterioration of buildings, poorly maintained streets, and perceptions of risks. Preventing and reducing this stress is vital to ensuring a positive neighborhood and built environment.

People living in neighborhoods with high or daily stress are more likely to experience a variety of physical and mental health conditions. Neighborhood environmental stress is associated with elevated cortisol levels, which makes people more vulnerable to disease. It is also associated with anxiety, reduced rates of physical activity, and greater likelihood of long-term, chronic health conditions.

There is insufficient research on the connections between neighborhood environmental stress and substance misuse to draw conclusions. Findings from two studies show that higher rates of neighborhood environmental stress may be associated with increased likelihood of substance misuse. Specific stressors identified by the studies included high homicide rates, poverty rates, population density, community distrust, visible substance misuse, and visible immigration and border control.

### **Diving Deeper: Research Article Summaries**

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## SOCIAL AND COMMUNITY CONTEXT

### About the Domain

**Social and Community Context** considers people's interpersonal connections, including with family members, friends, co-workers, and other community members. It emphasizes the health-related benefits of social support within relationships as well as engagement opportunities and social cohesion within the broader community. It also emphasizes the health-related challenges of violence within relationships and stigma and discrimination within relationships and the broader community.

### Related Determinants

Within this domain, the SDOH associated with substance misuse-related outcomes include:

1. Acculturation Stress
2. Adverse Childhood Experiences
3. Criminal Justice Involvement
4. Historical Trauma
5. Stigma and Discrimination
6. Social Relationships
7. State Medical Marijuana Legalization

### Acculturation Stress

Acculturation stress is the stress that immigrants experience adapting to U.S. culture. Addressing it is vital to ensuring a healthy social and community context. Acculturation stress is associated with increased risk of mental health disorders and negative physical health conditions.

From 2010 to 2021, more than 12 million new immigrants obtained lawful permanent status in the United States, and more than 600,000 people obtained refuge or asylum status. Immigrants can experience acculturation stress from many sources, including discrimination, economic hardships, language barriers, lack of access to healthcare services, changes in family dynamics and social relationships, and trauma. Chronic exposure to all kinds of stress is associated with

negative physiological responses and a greater likelihood of adopting negative coping behaviors, both of which can lead to negative health outcomes.

There is insufficient research available on the associations between acculturation stress and substance misuse to draw conclusions. Findings from four new studies add to the growing research field. Three of the studies found that higher rates of acculturation stress among Hispanic/Latino immigrant communities are associated with greater risk of substance use. However, the fourth study—of African- and Caribbean-born Black immigrants—found that immigration status appeared to convey a protective factor against substance use, regardless of acculturation stress.

### **Adverse Childhood Experiences**

Adverse childhood experiences (ACEs) are stressful or traumatic events that occur between the ages of 0 and 17. Preventing and reducing the impact of ACEs is vital to ensuring a healthy social and community context. ACEs can take many forms and can have physical and mental health effects that persist for years.

ACEs range from forms of abuse and neglect to household dysfunction and negative community experiences. The more ACEs a person experiences, the greater the cumulative negative impact on overall well-being and numerous health outcomes. In a 2018 federal study, more than 61% of adults reported having at least one ACE and 16% had four or more. ACEs are associated with greater likelihood of experiencing economic roadblocks (e.g., reduced educational attainment and difficulty obtaining employment), engaging in antisocial behaviors, having mental health disorders, and having chronic physical health conditions.

Findings from 11 studies show that ACEs are associated with greater likelihood of substance use, generally, and alcohol misuse, specifically. Some studies found the association of ACEs with substance use greater among women than men, with one study finding no relationship with male substance use. Another study found that ACEs were only associated with substance use and not alcohol misuse.

Overall, ACEs appear to be associated with negative substance use-related outcomes, as well as poor healthcare outcomes overall. Efforts to prevent or mitigate the effects of ACEs may yield improved outcomes.

### **Criminal Justice Involvement**

Criminal justice (CJ) involvement encompasses numerous phases, from initial law enforcement

encounters to pre-trial detention to incarceration and community supervision. Current or prior involvement with the CJ system can have a distinct and lasting impact on the social and community contexts of people. People with current CJ involvement often have significant healthcare needs and lack of access to services, particularly incarcerated people. Meanwhile, people with prior CJ involvement often face intense discrimination. This discrimination can significantly impact other health indicators, such as reduced likelihood of obtaining employment or stable housing, which can lead to increased risk of negative health outcomes.

Findings from 11 studies show that prior CJ involvement is associated with greater risk of SUD, overdoses, and relapse. One study found prior CJ involvement associated with reduced likelihood of employment, another risk factor for substance misuse. However, another study found that prior involvement among adolescents is associated with increased likelihood of completing treatment programs. A study of incarcerated people found that 43% had a substance use disorder diagnosis in the year prior to incarceration.

Overall, CJ involvement appears to be associated with higher odds of negative substance use-related outcomes, as well as poor healthcare outcomes overall. Efforts to address the impacts of CJ involvement—such as stigma—and expand treatment diversion programs may yield improved outcomes.

### **Historical Trauma**

Historical trauma refers to the “cumulative, multigenerational, collective experience of emotional and psychological injury in communities and in descendants.” Historical trauma and its effects on descendants is a growing field of research that may be an important part of the social and community context of people.

Historical trauma can vary dramatically across populations. Research has not yet codified how to measure historical trauma or developed a standard body of knowledge on the health effects of historical trauma or its implications for service providers. However, most studies have found some degree of association between higher rates of historical trauma and adverse health outcomes.

There is insufficient research to draw conclusions about any associations between historical trauma and substance misuse. One study measured historical trauma among indigenous populations by how frequently the study participants thought about losses related to the trauma. It found mixed results on the association that historical trauma had with substance misuse risk, depending on whether thoughts of trauma led to increased depression or increased

sense of resiliency.

### **Stigma and Discrimination**

Stigma and discrimination are two distinct—but interrelated—concepts that can increase risk for substance misuse and other negative health outcomes. Stigma refers to a wide range of negative attitudes, values, and beliefs that manifest in prejudice and discrimination. Discrimination refers to unfair and unjust actions that can stem from stigma and target and harm people and communities. Addressing stigma and discrimination in all their various forms is vital to ensuring a healthy social and community context for people to live in.

Stigma takes three primary forms: public (stigma caused by other people), self (stigma from within ourselves), and institutional (stigma from ingrained, systematic rules and regulations). Discrimination takes two primary forms: structural—evident in macro-environmental conditions like segregated housing—and individual—found in daily experiences such as harassment by community members. Discrimination and stigma can adversely impact health through three pathways that can lead to direct physical harm as well as long-term, negative mental health impacts:

1. Limiting access to resources that can improve health
2. Producing stress that can harm health
3. Exposing people to violence

Findings from 24 studies show that experiencing stigma or discrimination is associated with increased risk of substance misuse, substance use disorder, earlier initiation of substance misuse, and reduced likelihood of telling others about substance misuse or about being in recovery from substance misuse. Stigma and fears of stigma are also associated with reduced access to service among people with SUD, especially among pregnant women with SUD and sexual and gender minority populations with SUD. By comparison, societal reductions in structural discrimination are associated with increased access to substance misuse treatment services among sexual and gender minority populations. One study found that discriminatory policies against pregnant women with SUD—designed to coerce treatment utilization—are not associated with increased treatment admissions or reduced rates of neonatal abstinence syndrome.

Overall, stigma and discrimination appear to be associated with negative substance misuse-related outcomes, as well as reduced healthcare outcomes overall. Continued efforts to reduce

stigma and discrimination may bring further positive results.

### **Social Relationships**

The relationships people have with those around them and the supports they receive through those relationships are core to their social and community context. Having healthy, positive relationships can mitigate the negative associations of other social determinants of health and is associated with positive mental health outcomes.

Relationships exist at the interpersonal and community/societal levels. Interpersonal relationships are those that people have with people in their daily lives, such as friends, family, peers, and coworkers. They are represented in the “Relationship” level of the socio-ecological model of prevention. Community/societal relationships are the collective social cohesion and social trust that people have with their broader community.

Research has identified numerous associations between positive relationships and higher levels of social cohesion with improved health outcomes.

Findings from 11 studies show that having a greater number of positive social relationships is associated with reduced risk of substance use disorder, overdose, or experiencing SUD recovery-related discrimination. One study also found positive social relationships are associated with a greater likelihood of completing SUD treatment.

Studies found that negative social relationships—including experiencing harassment, suffering from discrimination, or having a partner with a substance use disorder—are associated with greater risk of substance misuse. However, one study found that positive social relationships are not a protective factor against substance misuse among people living with HIV.

Overall, having positive social relationships appears to be associated with positive substance use-related outcomes, as well as improved healthcare outcomes overall. Continued efforts to build and support positive relationships may bring further positive results.

### **State Medical Marijuana Legalization**

Marijuana is the third most used substance, after alcohol and tobacco. Many states have legalized medical marijuana use, or even all adult marijuana use, which increases access and availability for purchase. A potential area of concern is whether this increased access for adults also affects youth, despite continued bans on youth use. The legal status of medical marijuana use in a state is a key component of the social and community context.



In 2021, 13% of people in the United States (ages 12 and older) used marijuana regularly (past-30-day), and 5.8% had a marijuana use disorder. Marijuana use can present important health risks, depending on the dose and method of ingestion. Although more research is needed, these risks can include elevated risk of heart disease, impaired brain development among youth, lung damage, and impaired driving.

There is insufficient research on the associations between state medical marijuana legalization and marijuana use to draw conclusions. Findings from three studies suggest that state medical marijuana legalization may have a positive association with non-medical marijuana use. Two studies found that both medical and non-medical use rates are higher in states with legalized medical use than states without it. A third study found that marijuana-related treatment admissions declined more in states with legalized medical use than in states without it, but the study authors note that the decline was minimal and that legalization was likely not responsible for the decline.

### **Diving Deeper: Research Article Summaries**

[Download the PDF](#) to dive deeper into the articles related to these seven SDOH and their impact on substance misuse-related outcomes. Each summary offers insights into the articles' key findings, conclusions, study demographics, methodologies, and citations. To learn more about our comprehensive literature review process, please see the **Methodology** section.

## EDUCATION ACCESS AND QUALITY

### About the Domain

**Education Access and Quality** considers access to opportunities that support learning and development during early childhood, K-12 education, vocational training, and higher and continuing education. It also considers the quality of all available educational opportunities, including how well they support academic and other educational goals as well as the physical, social, and emotional well-being of those involved.

### Related Determinants

Within this domain, the SDOH associated with substance misuse-related outcomes include:

1. Educational Attainment
2. Educational Environment

### Educational Attainment

Ensuring that people obtain a high-quality education is the core goal of expanding access to education. Increased educational attainment is associated with numerous positive physical and mental healthcare outcomes. On average, each additional “step” of education completed (e.g., less than high school, high school, some college) is associated with living as much as 1.37 additional years.

Increased educational attainment can improve health outcomes through economic, social, and behavioral pathways. Increased educational attainment is associated with improved employment opportunities and household income, which can improve health outcomes. Greater educational attainment is also associated with better implementation of healthy coping strategies and stronger social supports. Greater adherence to healthy behaviors, such as decreased likelihood of tobacco use, is also associated with increased educational attainment. In fact, many studies report causal links between education and health.

Findings from 23 studies show that greater educational attainment is generally associated with reduced likelihood of tobacco, marijuana, or methamphetamine misuse and lower risk to overdose or contract HIV if substance misuse occurs. People with greater educational attainment are also more likely to be screened for substance misuse, linked to care if appropriate, and more likely to recover from substance use disorder.

However, findings are not uniformly positive. Studies also found greater educational attainment associated with increased likelihood of prescription drug misuse, alcohol misuse, LSD use, and the use of novel psychoactive substances among some populations. One study found alcohol and tobacco use disorders are associated with greater educational attainment among people with a history of ACEs—a finding that requires further research.

Overall, greater educational attainment appears to be associated with positive substance use-related outcomes, as well as improved healthcare outcomes overall. However, despite its generally protective nature, educational attainment may also present potential risk factors that must be addressed as well.

### **Educational Environment**

The educational environment refers to numerous components of the circumstances surrounding education, including the quality of teaching or training, the availability and perceptions of learning opportunities, the presence of social supports, and the type and volume of student workload. The educational environment impacts students and learning at all ages, from elementary school to graduate programs.

An educational environment conducive to student learning and academic achievement is vital to ensuring access to high-quality education. Both the educational environments and student perceptions of those environments are associated with student motivations, satisfaction, and educational attainment. Educational attainment is associated with many positive healthcare outcomes.

There is insufficient research on the connections between educational environments and substance misuse to draw conclusions. Two of four studies found that negative educational environment conditions—specifically, experiencing bullying or discrimination and having work-school conflicts—are associated with increased substance misuse. A third study found that students involved in drug transaction experiences are at increased risk of experiencing bullying, physical violence, and other events that can increase risk of substance misuse. The fourth study found that homeschooled students have a lower risk of substance misuse than other students who are at a high risk of dropping out of school, but a higher risk of substance misuse than other students who are at a low risk of dropping out.

### **Diving Deeper: Research Article Summaries**

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findings, conclusions, study demographics, methodologies, and citations. To learn more about our comprehensive literature review process, please see the **Methodology** section.

## HEALTH CARE ACCESS AND QUALITY

### About the Domain

**Health Care Access and Quality** considers multiple aspects of health care access, including affordability, how easy it is for people to physically reach a provider or service, whether a provider or service has available resources (e.g., personnel, technology) and can adapt (e.g., appointment times, communication strategies) to meet people's needs and preferences, and how comfortable people feel with the provider or service. It also considers such elements of health care quality as the degree to which it is safe, effective, and person-centered.

### Related Determinants

Within this domain, the SDOH associated with substance misuse-related outcomes include:

1. The COVID-19 Pandemic
2. Health Care Services
3. Health Insurance Coverage (All)
4. Health Insurance Coverage (Medicaid)
5. Health Insurance Parity
6. Veteran Health Care

### The COVID-19 Pandemic

The COVID-19 pandemic has been extremely disruptive and had a significant effect on the health and well-being of people. The immediate direct health impacts are well-known, including 1.12 million deaths in the United States and many more cases of serious short- and potentially long-term physical harms. But research into the long-term health effects is just beginning.

The COVID-19 pandemic has been associated with increases in rates of stress, anxiety, depression, and domestic violence as well as delays in utilizing healthcare services—all of which are risk factors for negative health outcomes, including substance misuse.

National surveys of substance use—such as the National Survey on Drug Use and Health; and Monitoring the Future—present mixed findings on the changes in substance use rates during

the pandemic. For example, looking at changes in past-30-day youth vaping rates from 2020 and 2021, the National Survey on Drug Use and Health found a slight increase (from 5.1% to 5.2%) while Monitoring the Future found a decline (from 18% to 13.3%). But fatal overdose rates rose dramatically during the pandemic, from 70,630 deaths in 2019 to 107,056 deaths in 2022 (provisional). Rising overdoses suggest worsening effects from substance misuse, even if overall rates of misuse did not change. However, all national survey data from the pandemic must be interpreted with caution due to changes in data collection methodologies.

There is insufficient research available on the associations between the COVID-19 pandemic and substance misuse to draw conclusions. One study found that 17.5% of all adults reported new or increased substance use during the first year of the pandemic, including 38.8% of disabled adults. Overall, 64.1% of disabled adults reported adverse mental health conditions or substance misuse, although no pre-pandemic comparison data were reported.

### **Health Care Services**

Ensuring that people receive high-quality, affordable, and appropriate healthcare services is the core of healthcare access and quality. Accessing high-quality health care in the United States generally requires health insurance coverage, and having coverage is associated with improved health outcomes. But lack of insurance coverage is not the only barrier to service access. Overcoming other barriers to healthcare access is associated with improved health outcomes.

A wide variety of factors can all hinder access to healthcare services, including resources in the community (e.g., workforce shortages), transportation, Internet access, community or provider stigma, work or school flexibility, and cost.

Findings from 17 studies show that barriers to accessing healthcare services— particularly SUD treatment services—are associated with greater risk of substance misuse, SUD, hospital emergency department visits, and overdose. Studies identified stigma, affordability, transportation, lack of referrals, lack of telemedicine use, and lack of a trained workforce as key barriers to SUD treatment. One study found that syringe exchange programs are associated with reduced risk of needle sharing while another found that use of community-based prevention programs is associated with reduced rates of prescription drug misuse.

Overall, expanding access to healthcare services appears to be associated with higher odds of positive substance use-related outcomes, as well as better overall healthcare outcomes. Efforts to further expand access to care may yield further improved outcomes.

## **Health Insurance Coverage (All)**

Health insurance coverage is the primary mechanism for improving the affordability of healthcare services in the United States and is associated with improved health outcomes. As a result, enrollment in health insurance is vital to ensuring access to high-quality healthcare services. People without health insurance are less likely to see a healthcare provider and more likely to have difficulty affording their care.

U.S. health insurance is available through many sources. In 2021, 48.5% of people were enrolled in employer-sponsored coverage, 21.1% in Medicaid, 14.3% in Medicare, 6.1% in individual/nongroup coverage, 1.3% in military coverage, and 8.6% were uninsured. Uninsurance varies significantly by state, from 2.5% to 18%.

Findings from 18 studies show that having health insurance is associated with reduced likelihood of tobacco or methamphetamine use, greater likelihood of receiving a substance misuse screening or being referred to treatment services, and greater access to treatment services. It is also associated with reduced rates of overdoses and reduced likelihood of opioid-related infective endocarditis. One study also found that enrollment reforms, such as the Affordable Care Act (ACA), led to an expansion in coverage among people with SUD and other behavioral health needs. However, these findings are not uniform. Some studies found that insurance coverage is only associated with increased availability of services and not with service utilization. In addition, one study found that people with health insurance are less likely to have access to naloxone than people without insurance.

Overall, health insurance enrollment appears to be associated with positive substance use-related outcomes and improved healthcare outcomes overall. Continued efforts to expand enrollment and coverage may bring further positive results.

## **Health Insurance Coverage (Medicaid)**

Health insurance coverage is the primary mechanism for improving the affordability of healthcare services in the United States and is associated with improved health outcomes. Medicaid is a joint federal—state health insurance program that provides coverage to eligible low-income adults, children, pregnant women, elderly adults, and people with disabilities. Enrollment in health insurance, including Medicaid for those eligible, is vital to ensuring access to high-quality healthcare services. People without health insurance are less likely to see a healthcare provider and more likely to have difficulty affording their care.

Together with the Children’s Health Insurance Program, another joint federal—state program

that is run both within and alongside Medicaid, Medicaid insured 92.3 million individuals in 2022. The federal government sets baseline standards for Medicaid coverage and eligibility, but states have significant leeway in shaping their programs.

Findings from 19 studies show that Medicaid enrollment is associated with increased healthcare utilization, improvements in self-perceived behavioral health, decreased risk of fatal opioid overdose, and increased likelihood of receiving substance misuse treatment or smoking cessation services. Medicaid coverage and enrollment reforms— such as the ACA, and the Mental Health Parity and Addiction Equity Act (MHPAEA)—are associated with increased availability and utilization of substance misuse specialty care providers. However, these findings are not uniform. Some studies found that insurance coverage is only associated with increased availability of services and not with service utilization. In addition, one study found that people with health insurance are less likely to have access to naloxone than people without insurance.

Overall, Medicaid enrollment appears to be associated with positive substance use-related outcomes and improved overall health outcomes. Continued efforts to expand Medicaid enrollment and coverage may bring further positive results.

### **Health Insurance Parity**

“Parity” refers to equal coverage of behavioral and physical health services by health insurance plans. Implementing and enforcing parity is vital to ensuring access to comprehensive, high-quality healthcare services. Historically, lack of parity has been associated with increased costs for behavioral health services compared to physical health services and greater disparities in outcomes.

State and federal law are both involved in mandating behavioral health parity. Federal parity standards have been implemented through a series of legislative acts starting in 1996. Together, the ACA, MHPAEA, and other parity laws require many health insurance plans to cover behavioral health services and ensure that coverage is comparable to physical health coverage. When implemented and enforced, parity laws can significantly improve coverage of behavioral health services. However, ongoing challenges have blunted their impact.

There is insufficient research to draw conclusions on the connections between health insurance parity and substance misuse. Three studies found that parity is associated with increased insurance coverage of SUD treatment, increased rates of SUD treatment facilities accepting Medicaid coverage, and increased adolescent admissions to substance use treatment services. However, a fourth study found no increase in SUD identification, treatment admissions, or



treatment engagement in the first year after implementation of MHPAEA.

## **Veteran Health Care**

Veterans served in active duty in the U.S. Army, Navy, Air Force, Marine Corps, or Coast Guard. They face an increased risk for numerous physical and behavioral health issues that stem from their service history. Veterans are eligible for healthcare services through the U.S. Department of Veterans Affairs (VA). The VA's Veterans Health Administration provides physical and mental health services at 1,298 facilities nationwide. Research shows that VA healthcare providers generally improve health outcomes for veterans.

The United States has roughly 19 million living veterans, who collectively face an increased risk of healthcare issues, including mental health conditions. Veterans with combat experience face an even greater risk. Comprehensive healthcare services for veterans are vital components to ensuring access to high-quality healthcare services.

There is insufficient research on the connections between veteran health care and substance misuse risk to draw conclusions. Findings from four studies add to the growing body of evidence. One study found that increasing VA funding for substance misuse treatment is associated with increased access and quality of services. Another found that veterans who successfully completed treatment are less likely to relapse than veterans who left treatment before completing it. A third study found that two-thirds of veterans with opioid use disorder have not received treatment services, suggesting a need for more services. A fourth study found that a dedicated alcohol use disorder screening program for transgender veterans did not increase access to treatment services.

## **Diving Deeper: Research Article Summaries**

[Download the PDF](#) to dive deeper into the articles related to these six SDOH and their impact on substance misuse-related outcomes. Each summary offers insights into the articles' key findings, conclusions, study demographics, methodologies, and citations. To learn more about our comprehensive literature review process, please see the **Methodology** section.

## METHODOLOGY

This product was informed by a multipronged literature review intended to capture the latest in peer-reviewed academic-published research and government and nonprofit publications and databases. The sequence of steps in this process is detailed below:

### Step 1. Initial Scoping Review

This review began with a scoping search of EBSCO using the following combined free text search terms:

- “social determinants” OR “social determinants of health”
- AND “substance misuse” OR “substance abuse” OR “substance use disorder” OR “drug use” OR “drug abuse”

### Step 2. Identifying Main Review Search Terms

This initial scoping review identified 42 articles, which were reviewed to assess the state of research and identify the search terms for the main review. The resulting identified free text search terms follows:

- “economic security” OR "education\*" OR "unemploy\*" OR “food security” OR “neighborhood safety” OR “housing security” OR “adverse childhood experiences” OR “discrimination” OR “health care access” OR “health care quality” OR “insurance coverage”
- AND “substance misuse” OR “substance abuse” OR “substance use disorder” OR “drug use” OR “drug abuse”

### Step 3. Refining the Research Pool

Results were restricted to peer-reviewed studies or articles published in English from 2013 to 2023, conducted in the United States, and that were not book reviews or dissertations.

This search identified 495 articles that underwent abstract review.

### Step 4. Abstract Review Criteria and Outcomes

Abstracts were assessed for

1. adherence to search parameters,
2. confirmation of quantitative research,
3. examination of social determinants of health (SDOH) indicators in the study design, and
4. reported results relevant to substance misuse outcomes.

This abstract review identified 179 articles as meeting all four criteria.

### **Step 5: Full Text Review and Final Article Selection**

Full texts of 168 articles were obtained. The remaining 11 articles were not able to be obtained. However, another review of their abstracts determined that their findings were likely replicated by other articles among the 168 obtained articles.

The obtained articles had their full texts assessed under the same criteria as the abstract review.

### **Step 6. Extraction and Analysis of Findings**

Information on the findings and results, evaluation conclusions, populations studied, study setting, and study design was extracted from each of the 121 articles.

Article results were examined to identify themes in studied SDOH topics. These themes were further condensed based on their similarities to create 24 categories, or 'indicators,' of the five core SDOH domains organized by the HHS. The articles' findings were also translated into 49 distinct substance misuse-related outcomes. Articles were organized into each indicator relevant to their findings, with many articles appearing in multiple indicators as studies often examined more than one. Each indicator was examined in a detailed and interconnected manner to identify common findings across articles; these are reported on the indicator pages within their respective domain section. Full extraction results of each article, along with citations, are available through the PDFs at the end of each domain section.

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All citations used to develop the content in this tool are outlined below by section.

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## CONCLUSION

You have reached the end of "Incorporating the Social Determinants of Health into Substance Use Prevention."

We invite you to return to the [SPTAC Resource Library](#) to explore additional resources. Our library is constantly expanding with new and innovative tools to assist in your prevention efforts.