Reducing Teen Substance Misuse:
WHAT REALLY WORKS

2015

Trust*for* America's Health

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WHAT REALLY WORKS

Teen substance misuse continues to be a major public health problem in the United States.

A significant number of students try alcohol, tobacco or other drugs as teenagers. More than 65 percent of students have used alcohol, more than 40 percent used illegal drugs and around one-quarter used cigarettes at some point before entering or while in high school.[1, 2, 3] While the number of teens who regularly misuse or develop substance use disorders has been decreasing over time, overall levels are still too high.

Escalation of Drug Use During the Teen Years

% Reporting Past Month Use

Source: SAMHSA, 2014 National Survey on Drug Use and Health (September 2015).

LAST TWO DECADES OF ALCOHOL, CIGARETTE, AND ILLICIT DRUG USE*

*Past 30 day use.

Alcohol	Cigarettes	Illicit drugs

2014

37.4% OF 12TH GRADERS	13.6% OF 12TH GRADERS	23.7% OF 12TH GRADERS
23.5% OF 10TH GRADERS	7.2% OF 10TH GRADERS	18.5% OF 10TH GRADERS
9.0% OF 8TH GRADERS	4.0% OF 8TH GRADERS	8.3% OF 8TH GRADERS

Source: NIH, Monitoring the Future, 2014.

PRESCRIPTION/OVER-THE-COUNTER VS. ILLICIT DRUGS*

*The percentage of 12th graders who have used these drugs in the past year.

Drug	Percentage
Adderall	6.8%
Vicodin	4.8%
Tranquilizers	4.7%
Cold Medicines	4.1%
OxyContin	3.3%
Ritalin	1.8%
Marijuana	35.1%
K2/Spice ("synthetic marijuana")	5.8%
MDMA/Ecstasy	3.6%
Cocaine	2.6%
LSD	2.5%

After marijuana, prescription and over-the-counter medications account for most of the top drugs abused by 12th graders in the past year.

⬤ PRESCRIPTION   ⬤ ILLICIT DRUGS

Source: NIH, Monitoring the Future, 2014.

More than 90 percent of adults who develop a substance use disorder began using before they were 18-years-old.[4]

Substance misuse can have long-term adverse effects on physical and mental health, academic and career attainment, relationships with family and friends and establishing and being a connected part of a community.

For decades, substance misuse strategies focused on individual willpower to "just say no" or intervening once a person already has a serious problem.

But, the evidence shows that if the country is going to maintain a continued downward trend in substance use — it will require a greater emphasis on: 1) preventing use in the first place; 2) intervening and providing support earlier after use has started; and 3) viewing treatment and recovery as a sustained and long-term commitment.

More than 40 years of research exists from the National Institutes of Health (NIH) and other experts that supports this approach, but there has been a disconnect in implementing the science into real-world practice.[5, 6]

A prevention-oriented approach — building positive protective factors and reducing risk factors — can decrease the chances of tweens and teens initiating, regularly using or developing an addiction to alcohol and/or drugs. This approach not only lowers the chances for substance misuse, but also has a bigger impact, since similar underlying root causes have also been shown to contribute to increased likelihood of poor academic performance, bullying, depression, violence, suicide, unsafe sexual behaviors and other problems that can emerge during teenage years.

Risk Factors	Protective Factors
Aggressive behavior in childhood	Good self-control
Lack of parental supervision	Parental monitoring and support
Poor social skills	Positive relationships
Drug experimentation	Academic competence
Availability of drugs at school	School anti-drug policies
Community poverty	Neighborhood pride

In this report, the Trust for America's Health (TFAH) examines how to help move towards a strong prevention-oriented, continuum-of-care approach to substance misuse — looking at policies and programs that have a high impact for improving the well-being of America's youth.

Section 1 reviews 10 examples of important policy indicators or programs that states may have in place that can have an impact on the well-being of children and youth and/or have been connected with preventing and reducing youth substance misuse. The indicators reflect a range of types of policies that support a prevention-intervention-treatment approach — from supporting healthier schools and communities to limiting access to substances to providing positive support and treatment. While it is not a comprehensive evaluation, taken collectively, the indicators help show trends of progress and gaps in youth policy development.

Section 2 features recommendations for modernizing the nation's strategy for addressing youth substance misuse by implementing a research-based public health approach. Some key elements include:

● The most effective approach to reducing substance misuse is by preventing it before it starts. To fill the gap between research on evidence-based programs and their implementation there needs to be increased focus on:

  ● Starting programs when children are younger — including programs focused on early childhood development — which yields a bigger payoff for later prevention. Programs often start too late to have the desired impact. Continuing support must also be sustained throughout the tween, teen and young adult years, particularly during transition times such as starting middle and high school or college, leaving home for the first time or starting in the workforce.

● Building community-wide efforts — where school-based and community programs are part of a coalition to implement comprehensive prevention services that employ a range of interrelated strategies matched to a particular community's needs. Optimal efforts reinforce each other — and work together to leverage all available resources, expertise and support across multiple sectors — and can build on existing strengths in a community rather than reinventing or competing with them. This includes:

  ● Gaining an understanding of the needs, trends and existing resources within a community — and matching the best evidence-based approaches with a community's priorities;

  ● Having access to an expert "backbone" organization that can provide end-to-end support from selection to implementation to evaluation to continuous quality improvement of programs;

  ● Ensuring sufficient and sustained cross-sector funding; and

  ● Engaging youth, youth advocates and parents in the planning, implementation and evaluation of programs and practices.

- A renewed energy is needed to gain support for the adoption and implementation of evidence-based and sustained school-based programs — moving beyond decades of ineffective approaches. It also involves making substance misuse prevention one part of an integrated set of positive youth development goals — including supporting broader academic achievement goals. Effective approaches also require acknowledging that substance misuse is a problem that impacts all communities and that adopting programs should not come with a stigma. By focusing on prevention, it helps reinforce that these programs are to the benefit of all students. Advancing these goals must include:

  - Providing education and reaching out to engage parents, educators, the larger community and policymakers to understand the advances in the most recent research about what works and why;

  - Integrating school-based and community-based programs — schools cannot and should not be expected to solve the problem on their own — and to have the end-to-end support of expert networks; and

  - Improving school climate — through positive behavior initiatives, increasing the number of specialists trained to treat substance use and mental health disorders, and improving the integration and interactive support between healthcare and education — two sectors that routinely help children and teens but are often silo-ed.

- Routine screening and brief intervention are essential as children enter the tween and teen years — to help identify risks and problems and quickly connect individuals to services and support. Evidence supports that earlier intervention is constructive versus denial or waiting until a problem becomes too serious to ignore. This approach is recommended by the American Academy of Pediatrics (AAP) and the National Institute on Alcohol Abuse and Addiction (NIAAA).[7, 8, 9] Screening — via age-appropriate questionnaires developed by health and social service professionals — can help identify teens and youth at risk for substance misuse. Brief interventions — even a few minutes of counseling — have been shown to help reduce alcohol and drug misuse in youth. And these efforts can help identify needs and connect youth and their families with services and support. Early brief interventions that prevent and reduce substance misuse also reduce the number of individuals later needing treatment. This should be part of a regular continuum of childhood screenings that start at birth and help track a child's milestones and development at particular stages — and identify when extra support is needed.

- There is a major treatment gap for substance misuse and dependence in the country — where only an estimated one in 10 individuals who need treatment receive it.[10] It is time to leverage resources and opportunities from the Affordable Care Act (ACA), mental health parity laws (requiring health insurance plans to cover mental health and substance use disorder services at least to the extent that the plans cover other medical services) and federal, state and local support to ensure that all individuals who need treatment receive it — and that treatment standards are brought up-to-date with the latest evidence-based approaches.

Success will require cooperative efforts from a wide range of partners, including parents, families, youth advocates, youth groups, mental health professionals, pediatricians and a range of other healthcare providers, hospitals, insurers, social service providers, schools, colleges, the foster care system, juvenile justice settings, community- and faith-based groups — as well as effective government policies and programs.

This report provides the public, policymakers and a broad and diverse set of partners with an objective, nonpartisan, independent analysis of the status of youth development policies; encourages greater transparency and accountability; and recommends ways to ensure the public health system and partners can work together across boundaries to accomplish the shared objective of preventing and reducing teen substance misuse.

YOUTH AND INCREASED RISK FOR SUBSTANCE MISUSE

There are a variety of reasons why teens may experiment with tobacco, alcohol or other drugs. However, a number of circumstances and influences put some kids at greater risk for substance misuse and addiction.

Research has shown that there are a number of major life transitions in tweens' and teens' lives, which can be "risk periods" for potential alcohol, tobacco and other drug misuse — as well as other risky behaviors. Some potential "triggers" include physical development (such as puberty) or social changes (such as starting middle school, high school or college, moving away from home or entering the workforce). Pre-teen and teen years present new influences — including less adult supervision, interaction with wider groups of peers, development of romantic relationships, exposure to peers who may be misusing substances, increased academic pressure, higher expectations for responsibility and individual caretaking, potential onset of depression and other factors. Family changes, like moving or parents' separation or divorce can also be disruptive.

According to the National Institute on Drug Use (NIDA), some signs of risk for substance misuse can actually be seen throughout childhood. For instance, some personality traits and temperaments are associated with higher likelihood of later substance use. Children who are withdrawn or aggressive often exhibit problems with interpersonal relationships and social interactions — which can then lead to risk for academic performance problems, peer rejection and other concerns that can increase the chance of substance use. Aggressive behavior in boys and learning difficulties in girls are the primary causes of problematic peer relationships. Individuals exhibiting academic or behavior problems at ages 7 to 9 are more likely to misuse substances by age 14 or 15.[11]

The more risks a child or teen is exposed to, the more likely the child will misuse drugs. Some risks — such as parents or friends who use drugs, alcohol or tobacco — may have a bigger influence than others. In addition, community factors — such as the availability of drugs, drug trafficking patterns and beliefs that substance use is not harmful — can influence risk of use.

Positive protective factors — such as strong, stable, supportive relationships — can mitigate against the risks.

In addition, teens' and young adults' brains are still maturing (until around age 24), specifically in the pre-frontal cortex, which allows humans to make rational decisions. Continuing brain development means teens are more likely to be impulsive and take risks. Introducing drugs to the developing brain may cause long-term harmful changes in the brain.[12]

According to NIDA, "the initial decision to take drugs is mostly voluntary. However, when drug addiction takes over, a person's ability to exert self-control can become seriously impaired. Brain imaging studies from drug-addicted individuals show physical changes in areas of the brain that are critical to judgment, decision making, learning and memory, and behavior control. Scientists believe that these changes alter the way the brain works, and may help explain the compulsive and destructive behaviors of addiction."[13] Some researchers also postulate there may be a genetic predisposition in some individuals to substance dependency.[14, 15]

	Some Key Risk Factors	Some Key Protective Factors
REDUCING RISKS AND INCREASING PROTECTIVE FACTORS FOR WHETHER TEENS INITIATE, REGULARLY USE OR BECOME DEPENDENT ON ALCOHOL AND/OR DRUGS[16]		
Family	• Lack of mutual attachment and nurturing by parents or caregivers • Ineffective parenting • A chaotic home environment • Lack of a significant relationship with a caring adult • A caregiver who misuses substances, suffers from mental illness or engages in criminal behavior	• A strong bond between children and their families • Parental involvement in a child's life • Supportive parenting that meets financial, emotional, cognitive and social needs • Setting clear limits and expectations for behavior
Outside the family	• Classroom behavior concerns, such as aggression and impulsivity • Academic failure • Poor social coping skills • Association with peers with problem behaviors, including drug misuse • Misperceptions of the extent and acceptability of drug-abusing behaviors in school, peers and the community	• Age-appropriate monitoring of social behavior, such as curfews, adult supervision, knowing a child's friends, enforcing household rules • Success in academics and involvement in extracurricular activities • Strong bonds with pro-social institutions, such as schools • Acceptance of norms against drug misuse

RISK FACTORS

Biology/Genes ⟷ **Environment**

- Genetics
- Gender
- Mental disorders

- Route of administration
- Effect of drug itself

DRUG

- Early use
- Availability

- Chaotic home and abuse
- Parent's use and attitudes
- Peer influences
- Community attitudes
- Poor school achievement

Brain Mechanisms

Addiction
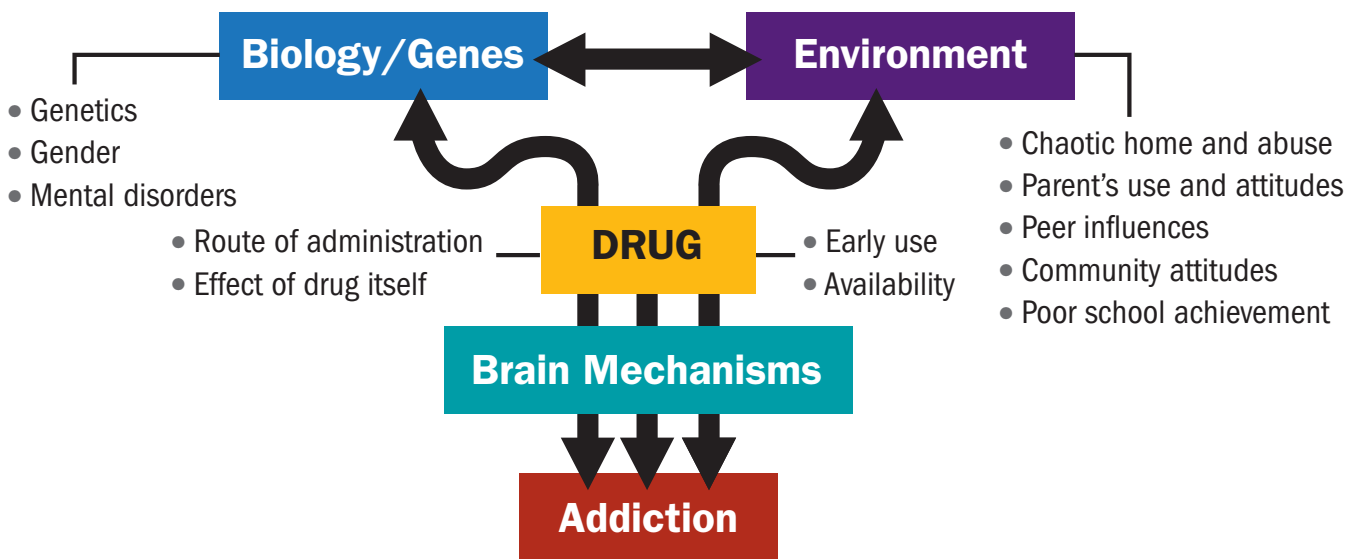
Source: NIDA

UNDERAGE DRINKING

- Among high school students, 35 percent report drinking, 21 percent report binge drinking, 10 percent report driving after drinking and 22 percent rode in a car with a driver who had been drinking in the past 30 days (in 2013).[17] By 12th grade, more than 65 percent of students have tried alcohol.[18]

  - While current numbers are still high, the number of high school students reporting drinking has decreased significantly over the past decade (from a rate of 45 percent in 2003), and binge drinking has also lowered (from a rate of 28 percent in 2003).[19]

  - Underage drinking contributes to more than 4,300 deaths and 189,000 emergency room visits by persons under 21 years of age each year.[20, 21]

  - More than 60 percent of teens (12- to 17-year-olds) do not perceive that there is a significant risk to drinking five or more alcoholic drinks once or twice a week, and 37.5 percent do not perceive significant risk to drinking at that level every day.[22]

- Youth who start drinking before the age of 15 are five times more likely to develop an alcohol addiction later in life than those who begin drinking at or after the age of 21 years.[23]

- Drinking alcohol is related to other risky behaviors, for instance:

  - Nearly one in four fatal car accidents among 15- to 20-year-olds were the result of drinking and driving — of which almost three-quarters were also not wearing a seat belt.[24]

  - Underage drinking plays a significant role in engaging in unprotected, unwanted and unintended sexually activity and sex with multiple partners, increasing the risk of sexually transmitted infections, including HIV, and unplanned pregnancies.[25, 26, 27, 28]

Past-Month Binge Alcohol Use Among Adolescents Aged 12–17, by Gender (2008–2013)
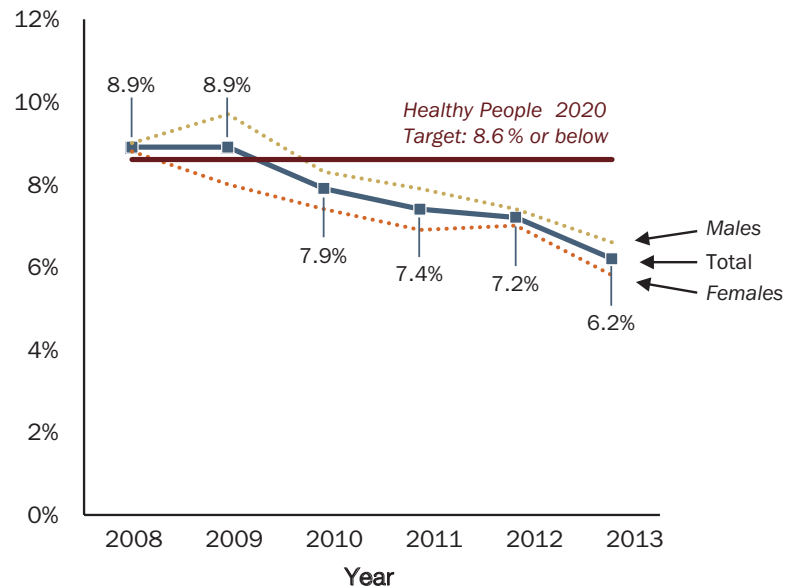
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2008 to 2013.

Past-Month Binge Alcohol Use Among Adolescents Aged 12–17, by Race/Ethnicity (2013)
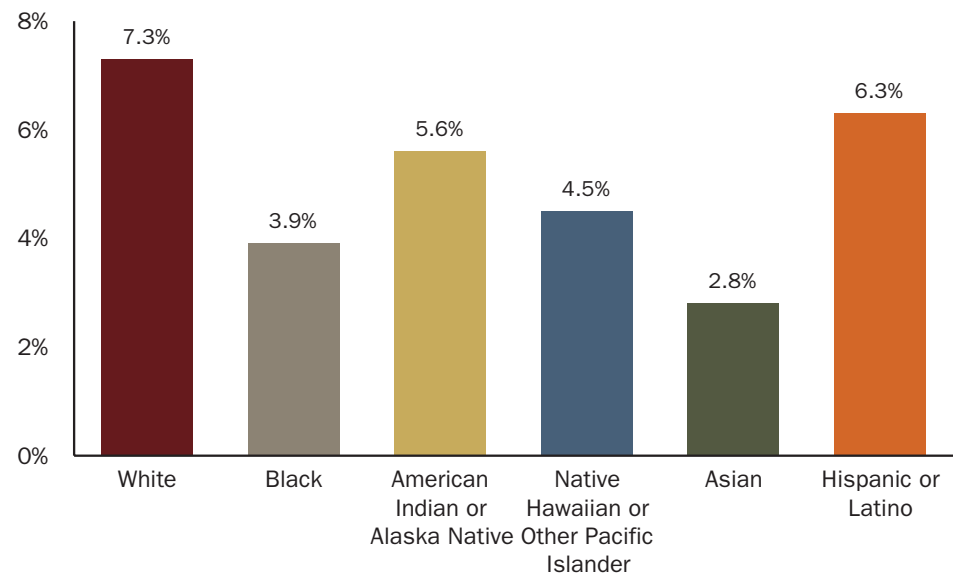
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2013.

Past-Month Illicit Drug Use Among Adolescents Aged 12–17, by Race/Ethnicity (2009–2013)

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

Past-Month Illicit Drug Use Among Adolescents Aged 12–17 (2013)

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2013.

- Overall teen (12- to 17-year-olds) use of illicit drugs has decreased by 13 percent since 2009 — but rates remain high.[29] More than 4 thousand teens and young adults died from drug overdoses in 2013.[30]

- Teens reporting regular marijuana use is one illicit drug with recent reported increases in use — from 6.7 percent in 2008 to 7.1 percent in 2013.[31]

  - Most youth report they do not think occasional marijuana smoking is harmful — neither once a month (75.8 percent) or more frequently (one or twice a week, 60.5 percent).[32]

  - Twenty states and Washington, D.C. have decriminalized or have taken action to soon decriminalize marijuana possession for adults — and 23 states and Washington, D.C. have legalized medical marijuana.[33]

  - Early chronic marijuana use that extends into adulthood is linked to declines in IQ of up to 8 points — and regular marijuana use during youth is associated with higher unemployment and lower income, academic attainment and life satisfaction.[34, 35, 36]

- Among other drugs: inhalant use among 8th graders dropped from a peak of 12.8 percent in 1995 to 5.3 percent in 2014; ecstasy use declined in 10th graders from a peak of 6.2 in 2001 to 2.3 percent in 2014; synthetic cannabinoids (K2/Spice) among 12th graders declined from 11.3 percent in 2012 to 5.8 percent in 2014; hallucinogen salvia use among 12th graders declined from 3.2 percent in 2013 to 1.8 percent in 2014; and synthetic stimulant (bath salts) use by 8th graders dropped from 1 percent in 2012 to 0.5 percent in 2014.[37]

- While heroin rates have remained steady for teens, rates have doubled in the past decade among young adults as they transition from prescription drugs and other illegal drugs as they age.[38, 39]

- Among high school students (as of 2013), around 40 percent report having tried marijuana, 5.5 percent tried cocaine, 7.1 percent tried hallucinogenics (LSD, acid, PCP, angel dust, mescaline or mushrooms), 8.9 percent tried inhalants, 6.6 percent tried ecstasy, 2.2 percent tried heroin, 3.2 percent tried methamphetamines and 3.2 percent tried illegal steroids.[40]

- Around 20 percent of 8th graders report having tried illegal drugs — that number increases to 49 0percent by 12th grade.[41]

- Around 3.5 percent of teens (12- to 17-year-olds) and 7.4 percent of young adults (18- to 25-year-olds) are dependent on or misuse illegal drugs.[42]

Past-Month Marijuana Use Among Adolescents Aged 12–17 (2008–2013)

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use vand Health, 2008 to 2013.

Past-Month Marijuana Use Among Adolescents, by National Survey (2002–2013)
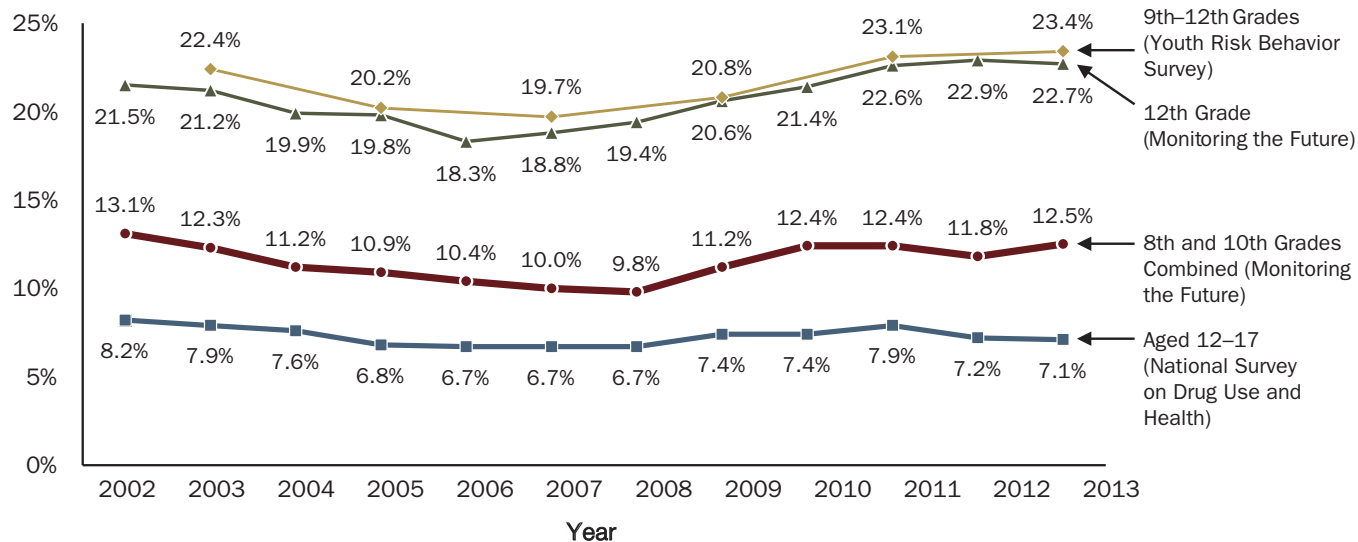
Sources: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2013; National Institute on Drug Abuse, Monitoring the Future Study, University of Michigan, 2002 to 2013; Centers for Disease Control and Prevention, Youth Risk Behavior Survey, 2003, 2005, 2007, 2009, 2011, and 2013.

Past-Year Nonmedical Pain Reliever Use Among Adolescents, by National Survey and Gender (2002–2013)

12th Grade Males (Monitoring the Future)
12th Grade Females (Monitoring the Future)
Aged 12–17, Females (National Survey on Drug Use and Health)
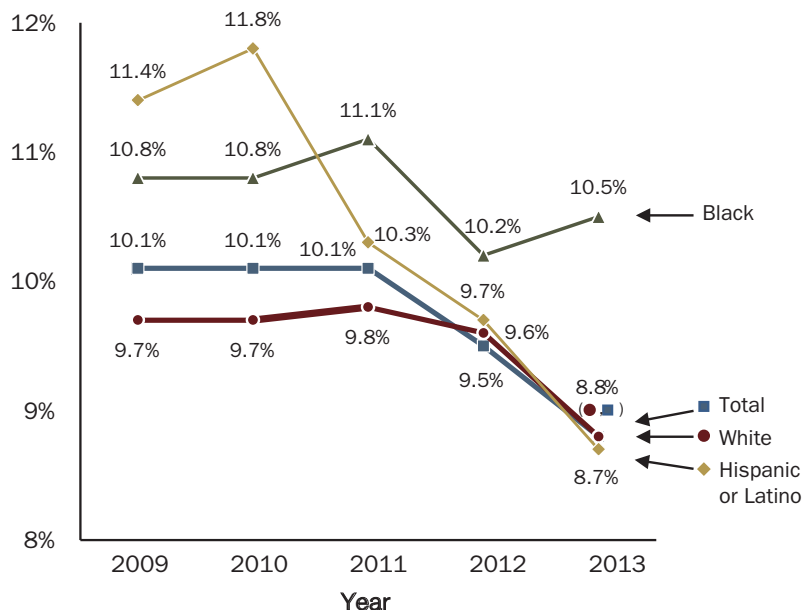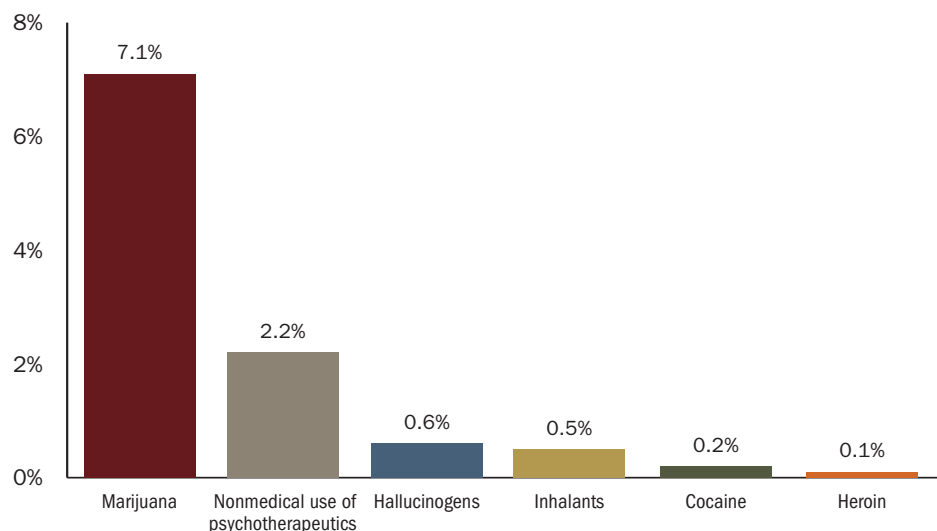Aged 12–17, Males (National Survey on Drug Use and Health)

Sources: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002 to 2013; National Institute on Drug Abuse, Monitoring the Future Study, University of Michigan, 2002 to 2013.

PRESCRIPTION DRUG MISUSE

- Around 4.7 percent of teens (12- to 17-year-olds) report misusing prescription drugs. While this represents a decrease of 36 percent in the past decade (7.3 percent in 2002), rates remain high.[43] Most teens taking these drugs are misusing medicines prescribed to family or friends. Since 1999, the amount of prescription painkillers prescribed and sold in the United States has nearly quadrupled.

- Prescription drug overdoses were responsible for more than half of all drug overdose deaths in 2013 — accounting for 22,700 fatalities.[44]

- High school students report misusing different types of prescription drugs including: 6.8 percent using stimulants (frequently used for Attention Deficit Hyperactivity Disorder (ADHD) or Attention Deficit Disorder (ADD)); 4.8 percent using Vicodin and 3.3 percent using OxyContin (narcotics/opioids used for pain relief); and 4.7 percent using depressants, such as tranquilizers.[45]

Prescription Painkiller Sales and Deaths

Sales (kg per 10,000)[a]
Deaths (per 100,000)[b]
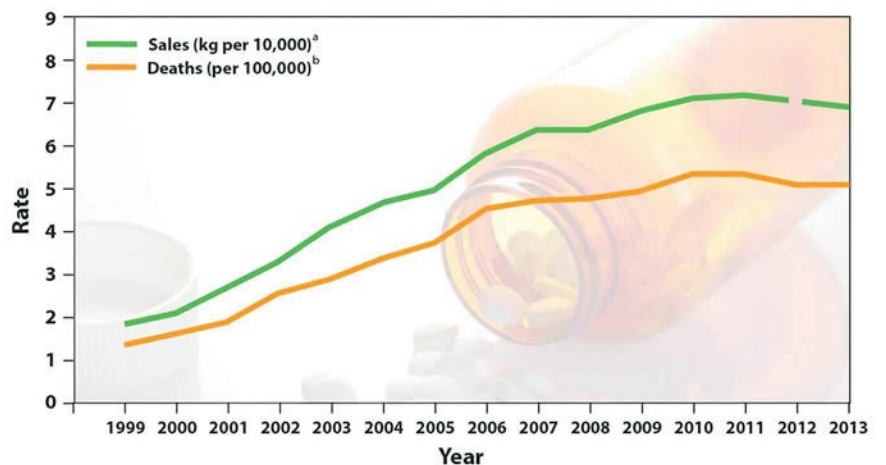
Sources:
[a]Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 2012 data not available.
[b]Centers for Disease Control and Prevention. National Vital Statistics System mortality data. (2015) Available from URL: http://www.cdc.gov/nchs/deaths.htm.

TOBACCO AND ELECTRONIC CIGARETTE (E-CIGARETTE) USE

- Around 24.6 percent of high school students report using any tobacco product — including 9.2 percent smoking cigarettes, 9.4 percent smoking hookahs, 8.2 percent smoking cigars and 13.4 percent using e-cigarettes.[46]

- E-cigarette use among high school students increased exponentially from 1.5 percent in 2011 to 13.4 percent in 2014. Nearly 4 percent of middle schoolers reported using e-cigarettes in 2014.

- If smoking current rates continue at current levels, 5.6 million of current 12- to 24-year-olds will die early from smoking-related illnesses as they age into tobacco-use related illnesses.[47, 48]

- More than one-third (35.7 percent) of teens do not perceive smoking one or more packs of cigarettes per day as risky.[49] Teens perceive e-cigarettes as having lower risk for regular use than any other drug, including alcohol.[50]

Past-Month Cigarette Use Among Adolescents Aged 12–17, by Race/Ethnicity (2009–2013)
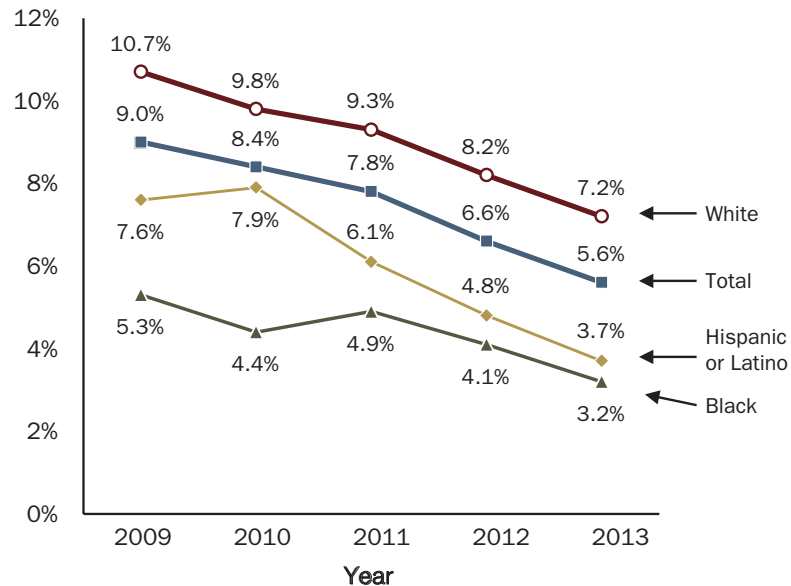
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

Past-Month Cigarette Use Among Adolescents Aged 12–17, by Race/Ethnicity (2013)

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2013.

Past-Year Initiation of Selected Substances Among Adolescents Aged 12–17 (2009–2013)

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.
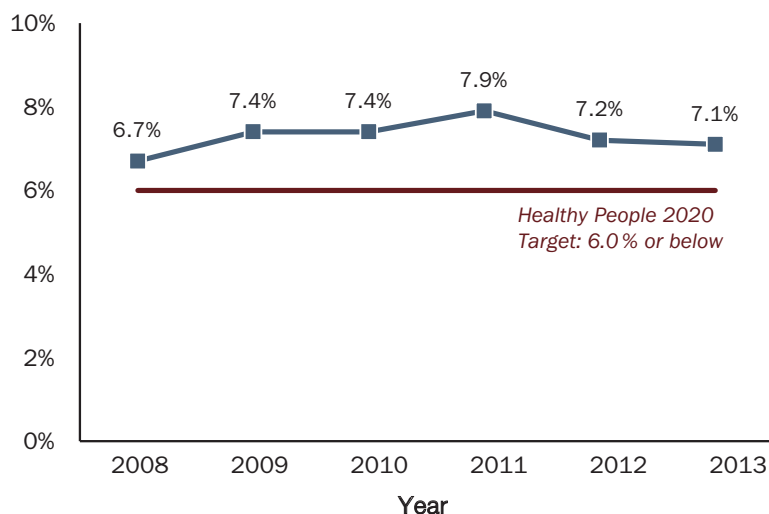
Past-Year Initiation of Selected Substances Among Adolescents Aged 12–17, by Race/Ethnicity (2013)

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2013.

TEEN AND YOUTH PREGNANCY AND SUBSTANCE USE

- There are around 305,000 births to 15- to 19-year-olds annually — and by age 25, nearly half of all U.S. women give birth.[58, 59] Nearly 60 percent of pregnant teens report using one or more substan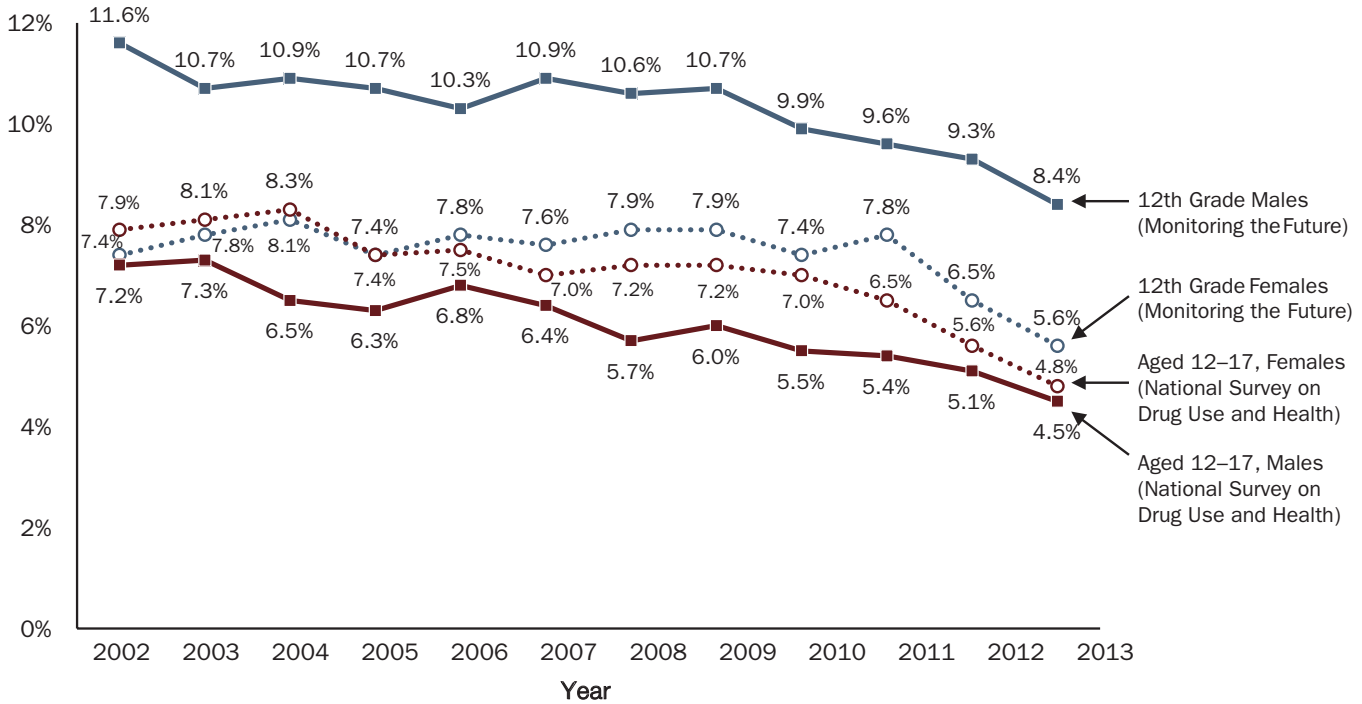ces in the past year, and one-third of pregnant 12- to 14-year-olds report using one or more substances in the past month.[60] Pregnant teens were most likely to use alcohol (16 percent), followed by marijuana (14 percent) and other illicit drugs (5 percent).

  - Around 400,000 babies in the United States are diagnosed with Fetal Alcohol Syndrome Disorder — which is the leading risk of mental retardation and preventable cause of birth defects, and can contribute to low birth weight, prematurity and related lifelong physical and behavioral health complications.[61]

  - Around one in 20 women use illegal drugs during pregnancy and 13,500 babies were born with opioid drug withdrawal syndrome in 2009 (including prescription painkillers) — with eco-

    nomic costs of $53,000 per baby for immediate medical costs for treating a baby diagnosed with opioid withdrawal syndrome (neonatal abstinence syndrome (NAS)).[62, 63, 64, 65] Babies exposed to drug use in utero are at higher risk for prematurity, birth defects, learning disabilities, behavioral disorders and a range of other health problems.

- Approximately 11 percent of pregnant teens (15- to 19-years-old) and more than 13 percent of pregnant 20- to 24-year-olds reported smoking while pregnant.[66] Smoking during pregnancy results in around 1,015 deaths annually as well as increased risk for low birth weight, ADHD and other health risks.[67, 68]

- Alcohol and other drug use can contribute to risky sexual behaviors, which can lead to increased chance of pregnancy or sexually transmitted infections.[69, 70] Teens who regularly smoke or have parents with a substance use disorder are also associated with higher risk of teen pregnancy.

Percentage of Births Which Were to Mothers Who Smoked During Pregnancy, by Age, 2013*

Age	Percent
Under 15 years	2.5
15-19 years	10.6
20-24 years	13.3
25-29 years	8.9
30-34 years	5.7
35-39 years	4.4
40-54 years	4.0
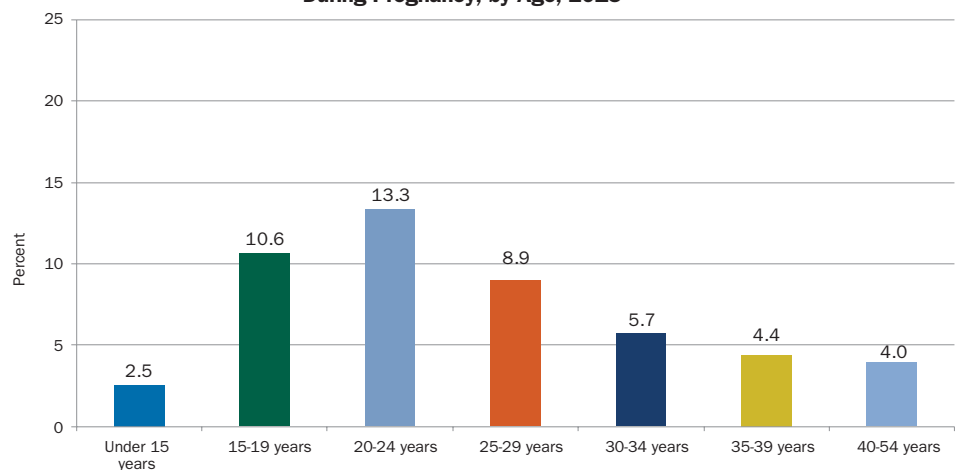
*Data are based on the 41 States using the 2003 revision of the standard birth certificate, representing 87 percent of all births
Source: National Center for Health Statistics, *CDC WONDER* online tool.
http://wonder.cdc.gov/natality-current.html

Child Trends DATABANK

## Adolescents Aged 12–17 Who Perceived No Great Risk From the Use of Selected Substances (2009–2013)
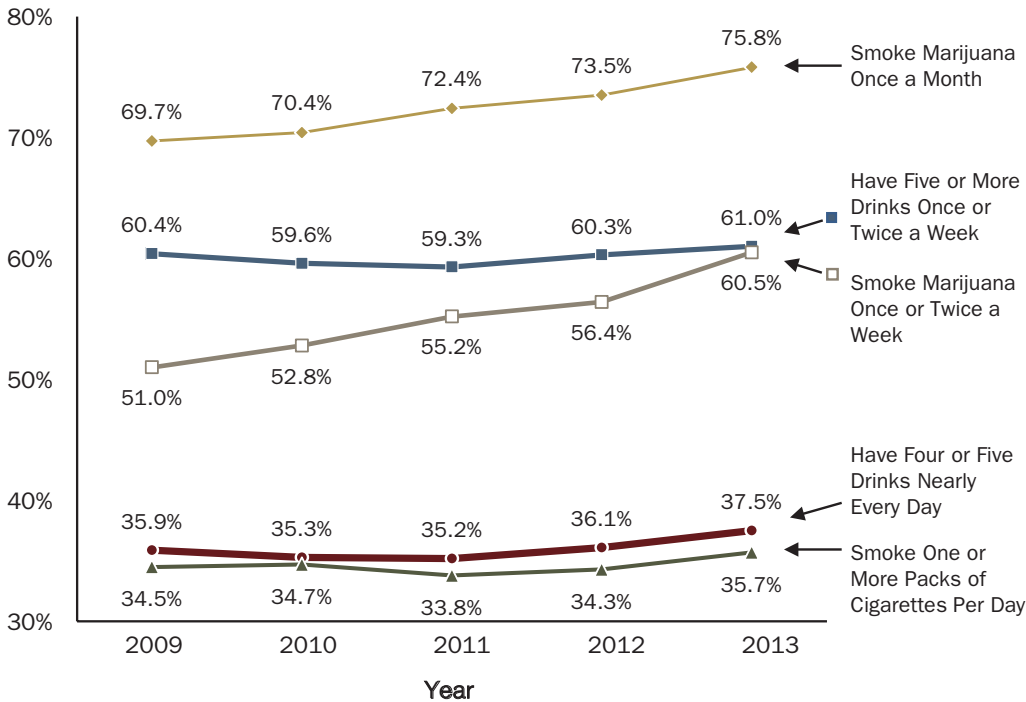
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 to 2013.

Sexual Identity and Substance Misuse Health Risks:[72] Analysis of the Youth Risk Behavior Surveillance (YRBS) Data from 2001-2009 (Note: Mean findings from across 12 states or large cities)			
	Heterosexual	Gay or Lesbian	Bisexual
Current Cigarette Use*	13.6%	30.5%	30.8%
Cigarettes – Tried before age 13	10%	25.7%	24%
Current Alcohol Use*	37.6%	47.5%	55.6%
Alcohol – Drank before age 13	21.3%	34.6%	27.1%
Current Marijuana Use*	21.8%	34.5%	36.8%
Marijuana – Tried before age 13	8.2%	21.4%	21.5%
Current Cocaine Use*	1.8%	16.6%	11%
Ever Used Heroin	1.8%	17.7%	9.6%
Ever Used Methamphetamines	3.4%	21.5%	14.9%
Used Steroids Without Prescription	2.4%	17.1%	10.6%

*Note: *Current is defined as within the 30 days before the survey.*

SEXUAL MINORITIES AND SUBSTANCE USE

- Lesbian, Gay and Bisexual (LGB) adolescents have higher rates of smoking, alcohol use and other drug use compared with heterosexual teens, and they are more likely to begin drinking earlier and have higher levels of risky drinking.[71]

- LGB youth are more than three times as likely to report substance use than their heterosexual peers.

ALCOHOL

2013 Monitoring the Future Survey Results

College Student Group

Non-College Group

BINGE DRINKING

College students had a higher prevalence of occasions of heavy drinking (five or more drinks in a row in the past two weeks).

35%

31%

INTOXICATION

Forty percent of college students report having been drunk in the prior 30 days, compared to 34 percent of the non-college respondents.

40%

34%

The groups did not differ much in their rates of daily drinking, with **3.6** percent of college students and **4.1** percent of their peers reporting such use.

National Institute on Drug Abuse

Source: Monitoring the Future Data, http://www.monitoringthefuture.org

Johnston LD, O'Malley PM, Miech RA, Bachman JG, Schulenberg JE. Monitoring the Future National Results on Drug Use: 1975-2013: Volume 2, College students and adults ages 19-55. Ann Arbor, MI: Institute for Social Research, The University of Michigan; 2014.

MARIJUANA

2013 Monitoring the Future
Survey Results

30%
2006

36%
2013

College Student Group

In 2013, 36 percent of college students said they used marijuana in the past year, compared to 30 percent in 2006.
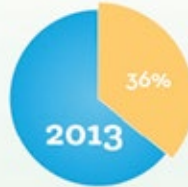
Non-College Group

The rate of daily marijuana use for the non-college group is about twice as high as the rate for the college student group.

DAILY MARIJUANA USE
among college students
is at its highest level in
THREE DECADES

Source: Monitoring the Future Data, http://www.monitoringthefuture.org

Johnston LD, O'Malley PM, Miech RA, Bachman JG, Schulenberg JE. Monitoring the Future National Results on Drug Use: 1975-2013: Volume 2, College students and adults ages 19-55. Ann Arbor, MI: Institute for Social Research, The University of Michigan; 2014.

NIH National Institute on Drug Abuse

STIMULANTS

College Student Group

2013 Monitoring the Future
Survey Results
Past-Year Use

Non-College Group

10.7%

ADDERALL

Use of Adderall without medical supervision was somewhat higher for college students than for non-college respondents in 2013.

6.8%

3.6%

RITALIN

Use of Ritalin was also slightly higher among college students in 2013 than among their non-college peer group.

2.3%

Amphetamine use, such as
ADDERALL & RITALIN
use, nearly doubled between
2008 and 2013

Source: Monitoring the Future Data, http://www.monitoringthefuture.org

Johnston LD, O'Malley PM, Miech RA, Bachman JG, Schulenberg JE. Monitoring the Future National Results on Drug Use: 1975-2013: Volume 2, College students and adults ages 19-55. Ann Arbor, MI: Institute for Social Research, The University of Michigan; 2014.

NIH National Institute on Drug Abuse

HEROIN USE: RISE IN YOUNG ADULTS

Heroin use has more than doubled among 18- to 25-year-olds in the past decade.[73, 74] The rise in prescription painkiller misuse has been a major contributing factor to the increase. A rising number of individuals who have become addicted to prescription painkillers have turned to heroin as an alternative — it is relatively cheap and often easier to access.[75, 76, 77, 78, 79, 80] More than nine in 10 people who use heroin also use at least one other drug. Forty-five percent of people who use heroin are also addicted to prescription painkillers.

- The cost of heroin can often be one-sixth to one-tenth the price in different locations (often around $5 a "bag") compared to prescription painkillers and can be more easily available in some locations.

Individuals who inject heroin via needles are also at increased risk for HIV/AIDS and hepatitis B and C.[81] New acute hepatitis C infections increased by 151.5 percent from 2006-2010 to 2010-2013.[82] According to the U.S. Centers for Disease Control and Prevention (CDC), the increase has predominantly been among young adults (under 30-years-old) who are white, live in non-urban areas, particularly in the East and Midwest, and have a history of injection drug use and have previously used prescription painkillers.[83, 84]

Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least **3** other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and **death** for users.

People who are addicted to...

ALCOHOL	MARIJUANA	COCAINE	Rx OPIOID PAINKILLERS
are	are	are	are
2x	**3x**	**15x**	**40x**

...more likely to be addicted to heroin.
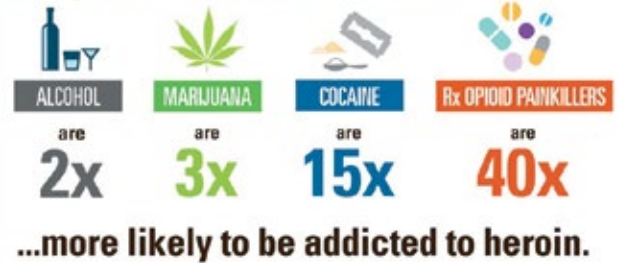
SOURCE: National Survey on Drug Use and Health (NSDUH), 2011-2013.

Heroin Use Has INCREASED Among Most Demographic Groups

	2002-2004*	2011-2013*	% CHANGE
SEX			
Male	2.4	3.6	50%
Female	0.8	1.6	100%
AGE, YEARS			
12-17	1.8	1.6	--
18-25	3.5	7.3	109%
26 or older	1.2	1.9	58%
RACE/ETHNICITY			
Non-Hispanic white	1.4	3	114%
Other	2	1.7	--
ANNUAL HOUSEHOLD INCOME			
Less than $20,000	3.4	5.5	62%
$20,000-$49,999	1.3	2.3	77%
$50,000 or more	1	1.6	60%
HEALTH INSURANCE COVERAGE			
None	4.2	6.7	60%
Medicaid	4.3	4.7	--
Private or other	0.8	1.3	63%

Heroin Addiction and Overdose Deaths are Climbing

Heroin-Related Overdose Deaths (per 100,000 people) — 286% increase

Heroin Addiction (per 1,000 people)
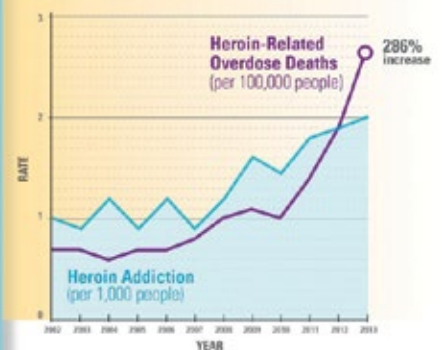
SOURCES: National Survey on Drug Use and Health (NSDUH), 2002-2013. National Vital Statistics System, 2002-2013.

Painkillers And The Heroin Market

A growing number of people are using heroin in recent years, in part because it can be cheaper and easier to find than opioid painkillers purchased on the black market. Most heroin users were first hooked on prescription opioids, which generated $11 billion in 2010 for the pharmaceutical industry.

Substance abuse treatment facilities admissions by primary drug

— Heroin   — Other Opiates and Synthetics
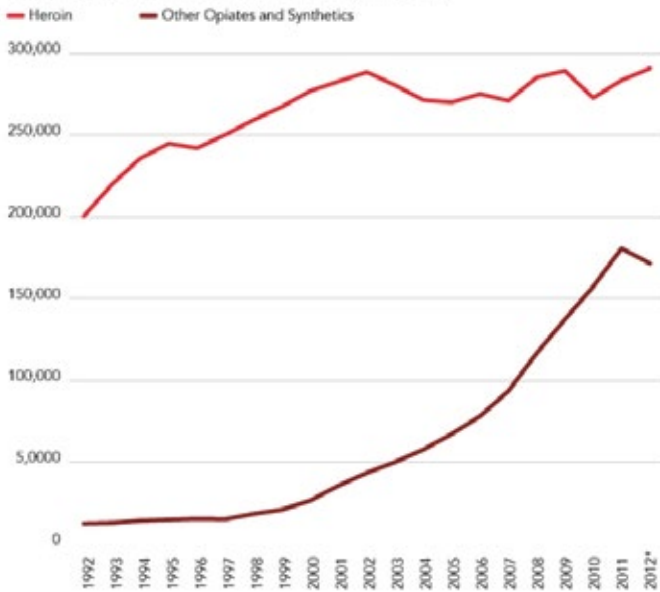
*2012 data for Mississippi, Pennsylvania, and West Virginia are not available.

4 out of 5
new heroin users have abused painkillers.

A Cheaper High
$30 can buy one oxycodone pill on the street in New York...

or six hits of heroin.
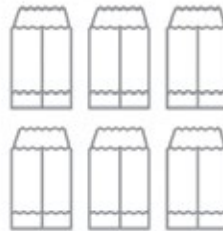
Sources: SAMHSA, Los Angeles Times, Frost & Sullivan

THE HUFFINGTON POST

Responding to the Heroin Epidemic

PREVENT People From Starting Heroin

Reduce prescription opioid painkiller abuse.
Improve opioid painkiller prescribing practices and identify high-risk individuals early.

REDUCE Heroin Addiction

Ensure access to Medication-Assisted Treatment (MAT).
Treat people addicted to heroin or prescription opioid painkillers with MAT which combines the use of medications (methadone, buprenorphine, or naltrexone) with counseling and behavioral therapies.

REVERSE Heroin Overdose

Expand the use of naloxone.
Use naloxone, a life-saving drug that can reverse the effects of an opioid overdose when administered in time.

SOURCE: CDC Vitalsigns, July 2015

YOUTH SUBSTANCE MISUSE DATA

There are three major national surveys that examine alcohol and/or drug use trends among teens and/or youth. They study different segments of the population and are conducted at different times, but all help examine different patterns of risk, use and perceptions to help inform policies and resource allocations.

The National Survey on Drug Use and Health (NSDUH) is an annual nationwide survey that interviews approximately 70,000 randomly selected individuals (a household survey), ages 12 and older, and is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). NSDUH provides national and state-level data on use of tobacco products, alcohol, illicit drugs (including non-medical use of prescription drugs) and mental health in the United States. NSDUH tracks trends and assesses consequences of substance use and identifies high risk groups for substance use and misuse. The age range commonly used for teens is 12- to 19-year-olds, which captures the age span for initiation and use, but since it averages the age span, it does not capture how drug and alcohol use increases significantly at a population level as teens age.

The Youth Risk Behavior Surveillance System (YRBSS) is a national (public and private) school-based survey conducted by CDC every two years of 9th through 12th grade students. YRBSS is used to monitor priority health risk behavior among youth relating to injuries and violence, sexual behaviors, tobacco use, alcohol and other drug use, diet, physical activity, obesity and asthma. The data from YRBSS are available at a state level for participating states.

The Monitoring the Future (MTF) is a national survey conducted every year in the 8th, 10th and 12th grade, and follow-up questionnaires are given to a sample of each graduating cohort for several years. MTF is conducted by the Institute for Social Research at the University of Michigan, and supported by NIH grants.[85] MTF tracks trends over time of youth use, attitudes and values relating to tobacco products (including e-cigarettes and hookah), and alcohol and illicit drug misuse (including non-medical use of prescription drugs). The survey is designed to examine changes that may occur across all age groups and within cohorts and changes in environment or life role. The survey is given to 50,000 students in 420 public and private middle and high schools.

DRUG OVERDOSE DEATHS — TEENS AND YOUNG ADULTS

The number of youth drug overdose deaths has grown dramatically over the last 15 years. In 1999-2001, no states had a drug overdose death rate above 6.1 per 100,000 teens and young adults (12- to 25-year olds). By 2005-2007, 40 states had an increase in drug overdose death rates (compared to 1999-2001), of which 28 states had rates above 6.1 per 100,000 teens and young adults. In 2011-2013 (compared to 2005-2007), rates dropped in five states, but significantly increased in 13 states of which 11 had rates above 6.1 per 100,000 teens and young adults (compared to 2005-2007). By 2011-2013, a total of 33 states had drug overdose death rates above 6.1 per 100,000 teens and young adults. Rates were highest in West Virginia (12.6 per 100,000) and lowest in North Dakota (2.2 per 100,000).

Between 1999-2001 and 2011-2013, the youth (12- to 25-year olds) drug overdose death rates more than doubled in 18 states (Alabama, Arizona, California, Colorado, Connecticut, Georgia, Hawaii, Idaho, Illinois, Kentucky, Nebraska, Nevada, New Jersey, New Mexico, North Carolina, Oregon, South Carolina and Tennessee), more than tripled in 12 states (Arkansas, Delaware, Indiana, Iowa, Michigan, Minnesota, Missouri, New Hampshire, New York, Oklahoma, Utah and West Virginia) and more than quadrupled in five states (Kansas, Montana, Ohio, Wisconsin and Wyoming).

Overdose deaths increase dramatically from teen to young adult years. In 2011-2013, the national young adult (19- to 25-year-olds) overdose death rate (12.7 per 100,000) is more than eight times greater than the national teen (12- to 18-year olds) drug overdose death rate (1.5 per 100,000).

No state had a teen (12- to 18-year olds) drug overdose death rate above 3.1 per 100,000 (2011-2013). For young

Drug Overdose Deaths for Teens and Young Adults, 3-Year Average Mortality Rates, between 1999-2001, 2005-2007 and 2011-2013, in Four States: Arizona, Missouri, New York and Ohio
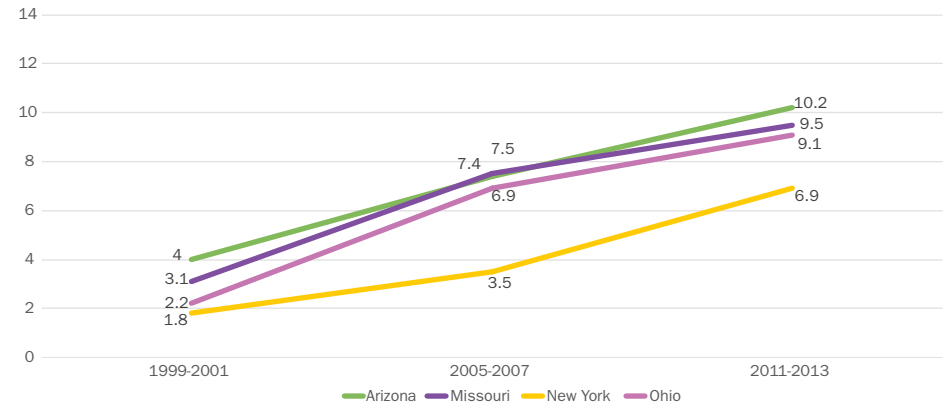
Drug Overdose Deaths for Teens and Young Adults, 3-Year Average Mortality Rates, between 1999-2001, 2005-2007 and 2011-2013, in Four States: Florida, Louisiana, Mississippi and Tennessee
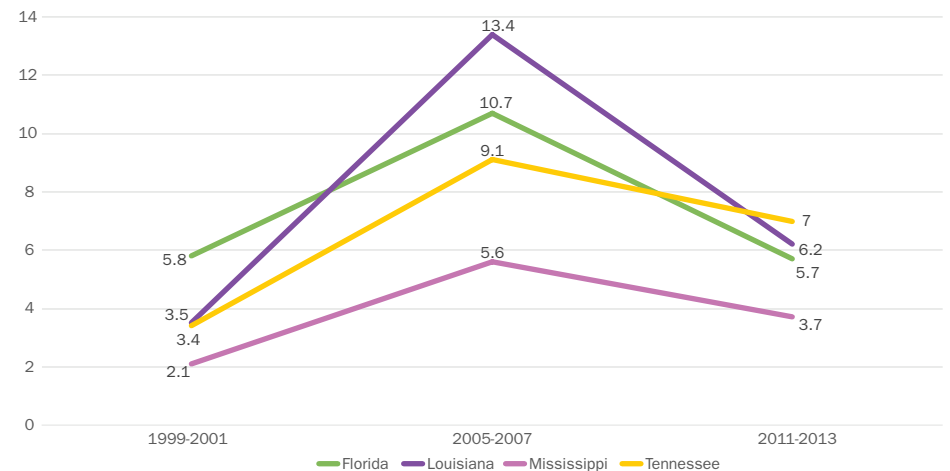
adults (19 to 25 year olds), death rates exceeded 20 per 100,000 in five states: West Virginia (23.0 per 100,000), New Mexico (22.3 per 100,000), Utah (22.1 per 100,000), Pennsylvania (21.0 per 100,000) and Nevada (20.1 per 100,000). Fourteen states had young adult death rates between 15 and 20 per 100,000; 19 states had young adult death rates between 10 and 15 per 100,000; and 11 states had rates below 10 per 100,000.

Data is based on a TFAH analysis from CDC's Web-based Injury Statistics and Query and Reporting (WISQARS) system.[86] For more on the methodology, see Appendix B.

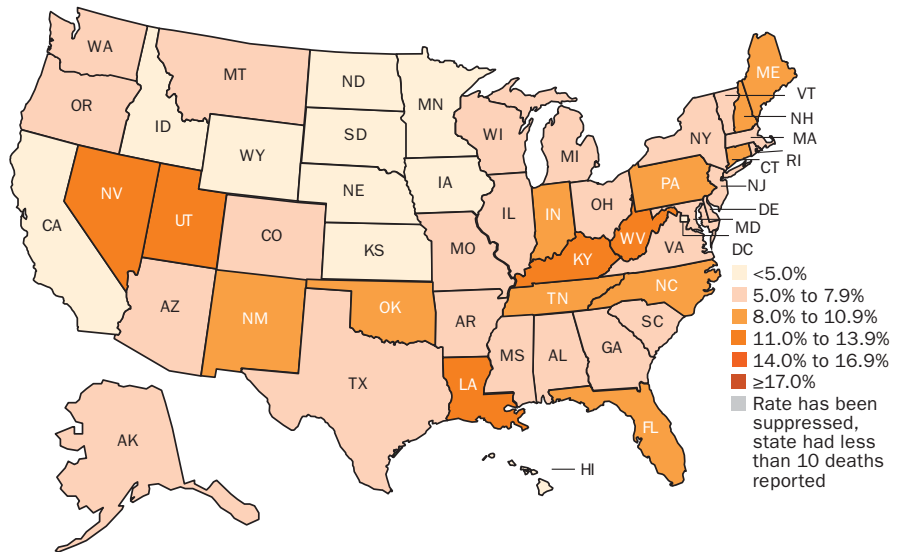| State	DRUG OVERDOSE DEATHS, 1999-2001, AGES 12-25			DRUG OVERDOSE DEATHS, 2005-2007, AGES 12-25			DRUG OVERDOSE DEATHS, 2011-2013, AGES 12-25, CRUDE RATES			
	Total Rates (95% C.I.)	Male Rates	Female Rates	Total Rates (95% C.I.)	Male Rates	Female Rates	Total Rates (95% C.I.)	Ranking	Male Rates	Female Rates
Alabama	2.3 (+/-0.6)	3.2	1.5*	6.9 (+/-1.0)¥	11.1	2.7	6.2 (+/-0.9)	32	8.9	3.4
Alaska	3.8* (+/-1.9)	1.4*	6.3*	7.7 (+/-2.6)	11.2	3.8*	7.2 (+/-2.5)	24	8.5	5.7*
Arizona	4.0 (+/-0.7)	6.1	1.8	7.4 (+/-0.9)¥	10.8	3.8	10.2 (+/-1.0)§	8	14.9	5.2
Arkansas	2.4 (+/-0.8)	2.9	1.9*	7.9 (+/-1.4)¥	12.1	3.6	8.4 (+/-1.4)	19	11.6	5.1
California	1.7 (+/-0.2)	2.4	0.9	3.2 (+/-0.2)¥	4.5	1.8	4.9 (+/-0.3)§	43	7.0	2.6
Colorado	3.5 (+/-0.7)	4.8	2.0	7.3 (+/-1.0)¥	10.2	4.2	10.2 (+/-1.2)§	8	13.6	6.6
Connecticut	4.1 (+/-1.0)	6.7	1.3*	8.3 (+/-1.3)¥	12.5	3.8	8.3 (+/-1.3)	20	12.8	3.6
Delaware	2.7* (+/-1.5)	4.0*	1.3*	5.1 (+/-2.0)	7.4*	2.8*	10.2 (+/-2.7)§	8	12.2	8.1
D.C.	0.9* (+/-1.0)	1.9*	0.0*	1.3* (+/-1.1)	2.3*	0.5*	—		—	—
Florida	5.8 (+/-0.5)	8.5	2.9	10.7 (+/-0.6)¥	15.4	5.6	5.7 (+/-0.5)€	40	7.8	3.5
Georgia	2.3 (+/-0.4)	3.4	1.0	5.5 (+/-0.6)¥	8.5	2.4	5.2 (+/-0.6)	42	6.8	3.5
Hawaii	1.6* (+/-0.9)	1.9*	1.2*	2.9 (+/-1.2)	4.9*	0.6*	4.6 (+/-1.5)	45	6.4	—
Idaho	2.5 (+/-1.1)	3.6*	1.2*	3.3 (+/-1.2)	5.2	1.3*	5.8 (+/-1.5)	38	7.2	4.3*
Illinois	3.9 (+/-0.5)	6.0	1.6	6.2 (+/-0.6)¥	9.1	3.2	8.2 (+/-0.6)§	21	12.2	4.1
Indiana	2.4 (+/-0.5)	3.7*	1.1*	9.7 (+/-1.0)¥	14.3	5.0	9.6 (+/-1.0)	12	14.7	4.3
Iowa	1.4 (+/-0.5)	2.0*	0.8*	3.5 (+/-0.9)¥	5.0	1.9*	4.3 (+/-1.0)	46	6.4	2.1*
Kansas	1.3 (+/-0.5)	1.6*	1.0*	4.1 (+/-1.0)¥	6.1	2.0*	5.9 (+/-1.2)	36	8.5	3.0
Kentucky	4.0 (+/-0.8)	5.7	2.1	11.5 (+/-1.3)¥	16.9	5.8	10.5 (+/-1.3)	7	14.6	6.3
Louisiana	3.5 (+/-0.7)	5.1	1.8	13.4 (+/-1.4)¥	21.8	4.8	6.2 (+/-0.9)€	32	8.1	4.2
Maine	3.6 (+/-1.4)	6.3	0.9*	10.2 (+/-2.3)¥	14.8	5.3*	4.7 (+/-1.6)€	44	6.6	—
Maryland	5.2 (+/-0.8)	7.8	2.5	7.3 (+/-0.9)¥	11.2	3.3	8.5 (+/-1.0)	18	12.0	5.0
Massachusetts	5.2 (+/-0.8)	7.0	3.4	6.8 (+/-0.8)¥	10.1	3.4	7.8 (+/-0.9)	23	11.2	4.3
Michigan	2.1 (+/-0.4)	2.5	1.6	6.6 (+/-0.7)¥	9.5	3.5	8.1 (+/-0.7)§	22	11.0	5.1
Minnesota	1.6 (+/-0.5)	1.9	1.4*	3.0 (+/-0.6)¥	4.4	1.6	5.7 (+/-0.9)§	40	8.5	2.7
Mississippi	2.1 (+/-0.7)	2.6	1.5*	5.6 (+/-1.1)¥	8.2	2.9	3.7 (+/-0.9)€	47	4.8	2.6
Missouri	3.1 (+/-0.6)	4.7	1.4	7.5 (+/-0.9)¥	11.0	3.9	9.5 (+/-1.0)§	13	13.5	5.4
Montana	1.6 (+/-1.0)	1.8*	1.5*	7.5 (+/-2.2)¥	9.0	5.8*	7.0 (+/-2.2)	26	8.3	5.6*
Nebraska	1.4* (+/-0.7)	2.2*	0.6*	2.5 (+/-0.9)	3.0*	1.9*	3.7 (+/-1.1)	47	5.4	1.9*
Nevada	4.4 (+/-1.2)	5.6	3.2*	11.8 (+/-1.8)¥	15.2	8.0	11.6 (+/-1.7)	5	16.5	6.6
New Hampshire	3.0* (+/-1.3)	4.7*	1.2*	10.5 (+/-2.3)¥	15.4	5.4*	9.3 (+/-2.2)	15	12.8	5.6*
New Jersey	4.8 (+/-0.7)	7.2	2.2	6.3 (+/-0.7)¥	9.4	3.0	10.7 (+/-0.9)§	6	15.3	5.7
New Mexico	6.1 (+/-1.4)	9.6	2.5*	9.8 (+/-1.8)¥	13.9	5.4	12.5 (+/-2.0)	2	17.3	7.4
New York	1.8 (+/-0.3)	2.4	1.0	3.5 (+/-0.3)¥	5.3	1.7	6.9 (+/-0.5)§	29	10.4	3.3
North Carolina	3.0 (+/-0.5)	3.8	2.2	8.0 (+/-0.8)¥	11.6	4.3	7.1 (+/-0.7)	25	10.4	3.5
North Dakota	1.2* (+/-1.1)	1.8*	0.5*	3.0* (+/-1.6)	3.9*	1.9*	2.2* (+/-1.4)	50	—	—
Ohio	2.2 (+/-0.4)	3.3	1.1	6.9 (+/-0.6)¥	10.1	3.7	9.1 (+/-0.7)§	16	12.3	5.7
Oklahoma	2.6 (+/-0.7)	4.0	1.2*	9.6 (+/-1.3)¥	14.8	4.1	9.4 (+/-1.3)	14	14.0	4.4
Oregon	2.5 (+/-0.7)	3.6	1.3*	5.3 (+/-1.0)¥	7.7	2.8	6.5 (+/-1.1)	31	9.7	3.3
Pennsylvania	6.1 (+/-0.6)	9.2	2.9	10.5 (+/-0.7)¥	15.6	5.1	11.8 (+/-0.8)	4	17.1	6.3
Rhode Island	3.6 (+/-1.5)	4.6*	2.7*	5.2 (+/-1.7)	8.5	1.9*	6 (+/-1.9)	34	9.4	—
South Carolina	2.7 (+/-0.7)	4.3	1.1	5.3 (+/-0.9)¥	8.2	2.3	5.8 (+/-0.9)	38	8.1	3.5
South Dakota	1.9* (+/-1.2)	2.4*	1.3*	2.2* (+/-1.3)	3.2*	1.3*	3.3* (+/-1.6)	49	5.2	—
Tennessee	3.4 (+/-0.6)	4.9	1.8	9.1 (+/-1.0)¥	12.5	5.6	7.0 (+/-0.9)€	26	10.0	3.9
Texas	3.1 (+/-0.3)	4.5	1.5	5.9 (+/-0.4)¥	8.9	2.8	6.0 (+/-0.4)	34	8.6	3.2
Utah	3.5 (+/-0.9)	5.1	1.8*	12.5 (+/-1.6)¥	17.9	6.9	12.1 (+/-1.5)	3	16.3	7.8
Vermont	4.8* (+/-2.3)	5.5*	4.1*	6.9 (+/-2.7)	9.8*	3.8*	7.0 (+/-2.7)	26	8.1*	5.8*
Virginia	3.4 (+/-0.6)	4.4	2.3	5.3 (+/-0.7)¥	7.4	3.0	5.9 (+/-0.7)	36	7.9	3.8
Washington	3.6 (+/-0.6)	4.6	2.5	6.5 (+/-0.8)¥	9.1	3.7	6.9 (+/-0.8)	29	10.1	3.5
West Virginia	3.8 (+/-1.2)	5.2	2.4*	13.8 (+/-2.3)¥	17.5	9.9	12.6 (+/-2.2)	1	14.6	10.5
Wisconsin	2.0 (+/-0.5)	2.4	1.5	5.8 (+/-0.8)¥	8.6	2.9	8.8 (+/-1.0)§	17	12.7	4.7
Wyoming	1.6* (+/-1.4)	1.2*	2.0*	3.7* (+/-2.1)	5.8*	1.3*	9.8 (+/-3.4)§	11	14.0	—
U.S. Total Rates	3.1	4.4	1.7	6.6	9.7	3.4	7.3		10.4	4.1

NOTE: * Indicates crude rate based on 20 or fewer deaths and may be unstable. --- indicates state-level counts and rates based on fewer than 10 deaths have been suppressed. Confidence intervals (C.I.) have been rounded to one decimal point. All data are 3-year average rates from CDC's Web-based Injury Statisitics Query and Reporting System (WISQARS).

NOTE: * Indicates crude rate based on 20 or fewer deaths and may be unstable. --- indicates state-level counts and rates based on fewer than 10 deaths have been suppressed. Confidence intervals (C.I.) have been rounded to one decimal point. Red and ¥ indicates a statistical increase in rates between years 1999-2001 and 2005-2007. All data are 3-year average rates from CDC's Web-based Injury Statisitics Query and Reporting System (WISQARS).

NOTE: For rankings, 1 = Highest mortality rate and 50 = Lowest mortality rate. * Indicates crude rate based on 20 or fewer deaths and may be unstable. --- indicates state-level counts and rates based on fewer than 10 deaths have been suppressed. Confidence intervals (C.I.) have been rounded to one decimal point. Red and § indicates a statistical increase in rates between years 2005-2007 and 2011-2013. Green and € indicates a statistical decrease in rates between years 2005-2007 and 2011-2013. All data are 3-year average rates from CDC's Web-based Injury Statisitics Query and Reporting System (WISQARS).

**Drug Overdose Deaths, 12- to 25-Year-Olds,
3-Year Average Mortality Rates, 1999 – 2001**

Legend:
- <5.0%
- 5.0% to 7.9%
- 8.0% to 10.9%
- 11.0% to 13.9%
- 14.0% to 16.9%
- ≥17.0%
- Rate has been suppressed, state had less than 10 deaths reported
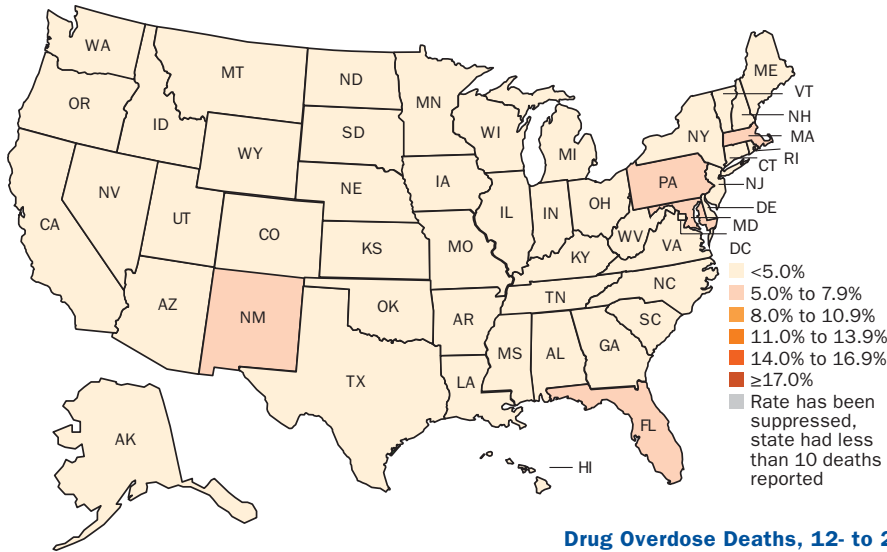
**Drug Overdose Deaths, 12- to 25-Year-Olds,
3-Year Average Mortality Rates, 2005 – 2007**

Legend:
- <5.0%
- 5.0% to 7.9%
- 8.0% to 10.9%
- 11.0% to 13.9%
- 14.0% to 16.9%
- ≥17.0%
- Rate has been suppressed, state had less than 10 deaths reported

**Drug Overdose Deaths, 12- to 25-Year-Olds,
3-Year Average Mortality Rates, 2011 – 2013**

Legend:
- <5.0%
- 5.0% to 7.9%
- 8.0% to 10.9%
- 11.0% to 13.9%
- 14.0% to 16.9%
- ≥17.0%
- Rate has been suppressed, state had less than 10 deaths reported
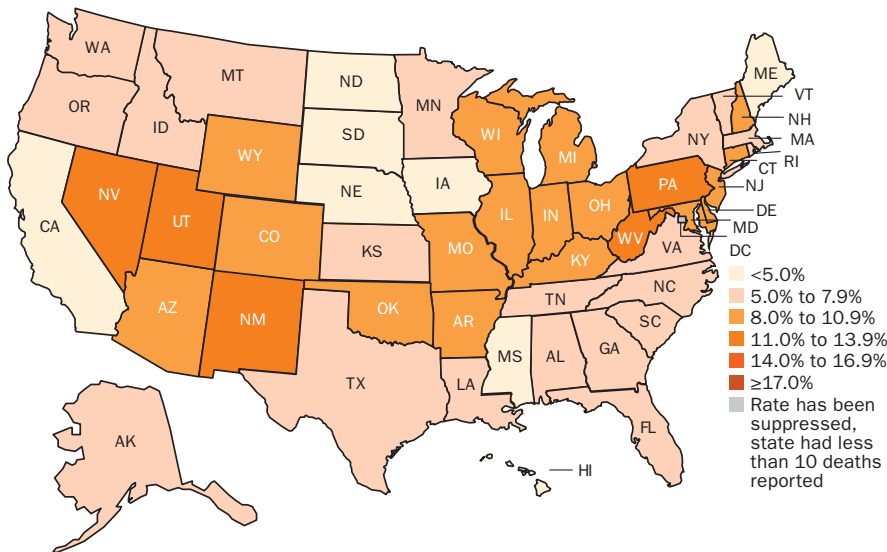
State	DRUG OVERDOSEE DEATHS, 2011-2013, AGES 12-18			DRUG OVERDOSE DEATHS, 2011-2013, AGES 19-25					
	Total Rates	Male Rates	Female Rates	Total Rates	Ranking	Male Rates	Ranking	Female Rates	Ranking
Alabama	1.1*	1.5*	—	10.9	32	16.0	29	5.8	31
Alaska	—	—	—	11.4	29	14.6*	33	—	
Arizona	2.9	4.6	1.1*	17.3	9	24.7	10	9.3	13
Arkansas	2.3*	2.8*	—	14.2	22	20.1	20	8.2	18
California	1.2	1.6	0.8	8.3	44	11.9	44	4.3	41
Colorado	2.7	3.2	2.2*	17.1	10	22.9	15	10.7	9
Connecticut	1.2*	1.9*	—	15.8	17	24.0	11	6.9	22
Delaware	—	—	—	16.0	15	19.6	22	12.4*	4
D.C.	—	—	—	—		—		—	
Florida	1.4	1.9	1.0	9.6	41	13.2	41	5.7	34
Georgia	1.1	1.3*	0.8*	9.2	42	12.2	43	6.1	29
Hawaii	—	—	—	7.4	45	9.9	46	—	
Idaho	—	—	—	10.4	34	13.6	39	7.0*	21
Illinois	1.9	2.4	1.3	14.5	21	22.0	17	6.9	22
Indiana	2.2	2.8	1.6*	16.7	11	26.3	7	6.9	22
Iowa	1.4*	—	—	7.0	46	10.7	45	3.1*	42
Kansas	1.7*	—	—	9.8	40	14.5	36	4.7*	38
Kentucky	1.9	2.4*	—	18.7	7	26.1	8	10.9	7
Louisiana	1.3*	—	1.6*	10.5	33	14.6	33	6.4	26
Maine	—	—	—	9.2	42	12.8	42	—	
Maryland	1.6	2.2*	—	15.2	19	21.4	19	8.8	16
Massachusetts	1.2	1.8*	—	13.5	23	19.6	23	7.4	20
Michigan	1.4	2.0	0.8*	14.7	20	20.0	21	9.2	14
Minnesota	1.3	1.7*	—	9.9	39	15.2	31	4.5	39
Mississippi	—	—	—	6.4	48	8.4	48	4.4*	40
Missouri	2.0	2.7	1.2*	16.6	13	23.8	12	9.2	14
Montana	—	—	—	11.2	31	13.6	39	8.5*	17
Nebraska	—	—	—	6.5	47	9.4	47	—	
Nevada	3.1	4.8*	—	20.1	5	28.0	5	11.7	5
New Hampshire	—	—	—	17.8	8	25.2	9	10*	12
New Jersey	1.9	2.4	1.5*	20.0	6	29.1	4	10.2	11
New Mexico	2.2*	3.6*	—	22.3	2	30.1	3	13.9	2
New York	1.0	1.5	0.4*	12.0	25	18.2	24	5.7	34
North Carolina	2.0	2.9	1.1*	11.8	27	17.4	26	5.8	31
North Dakota	—	—	—	—		—		—	
Ohio	1.3	1.9	.8*	16.7	11	22.9	15	10.5	10
Oklahoma	2.8	3.6*	1.9*	15.4	18	23.6	13	6.7	25
Oregon	1.4*	1.9*	—	11.4	29	17.0	27	5.5	37
Pennsylvania	1.8	2.8	.8*	21.0	4	30.4	1	11.4	6
Rhode Island	—	—	—	10.0	38	16.0	29	—	
South Carolina	0.8*	—	—	10.3	36	14.6	35	5.8	31
South Dakota	—	—	—	5.2*	49	7.7*	49	—	
Tennessee	1.9	2.2*	1.5*	11.9	26	17.6	25	6.1	29
Texas	1.5	2.2	0.8	10.4	34	15.0	32	5.6	36
Utah	2.0*	2.4	—	22.1	3	30.2	2	13.8	3
Vermont	—	—	—	12.6	24	14.2*	37	10.9*	7
Virginia	1.1	1.2*	1.0*	10.1	37	13.8	38	6.2	27
Washington	1.6	2.4	—	11.8	27	17.0	27	6.2	27
West Virginia	—	—	—	23.0	1	26.5	6	19.3	1
Wisconsin	1.4	1.5*	1.3*	16.0	15	23.6	13	8.1	19
Wyoming	—	—	—	16.1	14	21.7*	18	—	
U.S. Total Rates	**1.6**	**2.1**	**1.0**	**12.7**		**18.2**		**7.0**	

NOTE: For rankings, 1 = Highest mortality rate. * Indicates crude rate based on 20 or fewer deaths and may be unstable. --- indicates state-level counts and rates based on fewer than 10 deaths have been suppressed. All data are 3-year average rates from CDC's Web-based Injury Statisitics Query and Reporting System (WISQARS).

**Drug Overdose Deaths, 12- to 18-Year-Olds,
3-Year Average Mortality Rates, 2011 – 2013**

■ <5.0% ■ 5.0% to 7.9% ■ 8.0% to 10.9%
■ 11.0% to 13.9% ■ 14.0% to 16.9% ■ ≥17.0%
■ Rate has been suppressed, state had less than 10 deaths reported
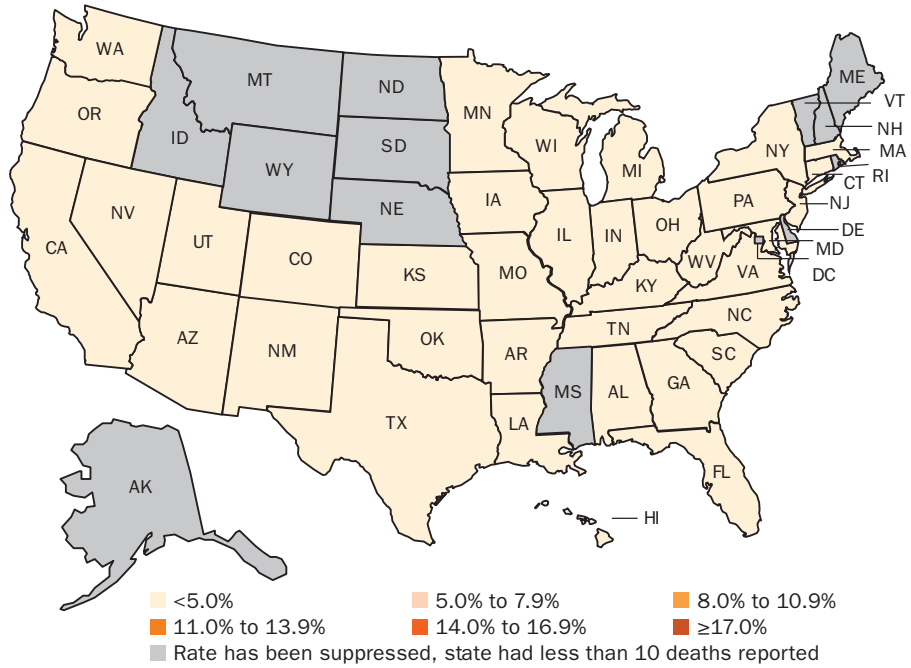
**Drug Overdose Deaths, 19- to 25-Year-Olds,
3-Year Average Mortality Rates, 2011 – 2013**

■ <5.0% ■ 5.0% to 7.9% ■ 8.0% to 10.9%
■ 11.0% to 13.9% ■ 14.0% to 16.9% ■ ≥17.0%
■ Rate has been suppressed, state had less than 10 deaths reported
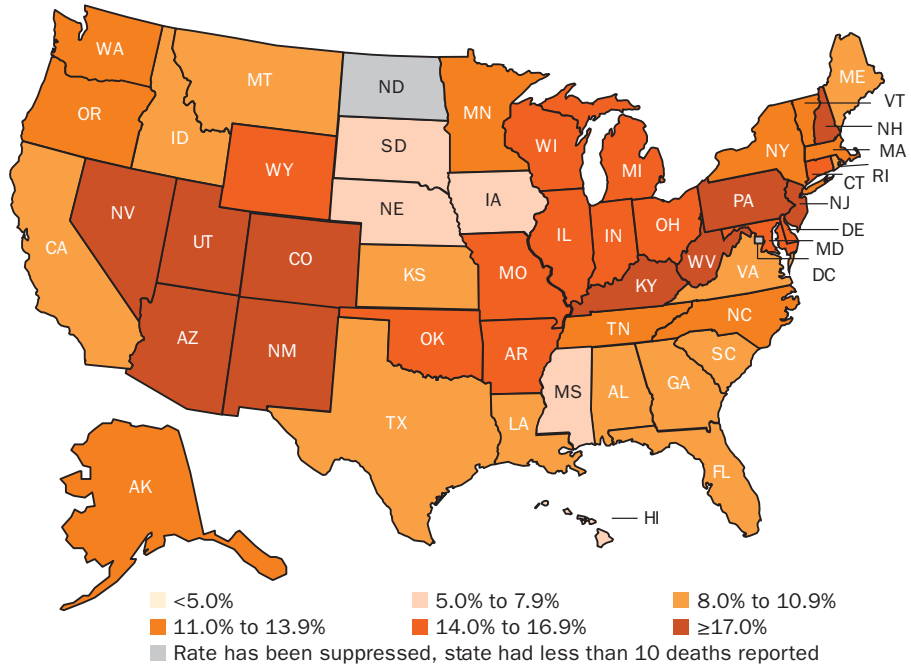
Building a Public Health Approach to Substance Misuse Prevention and Positive Youth Development

A public health approach to substance misuse focuses on a continuum-of-care: 1) putting prevention first — focusing on the health and well-being of children and teens, reducing risks and promoting protective factors; 2) supporting screening for risk-factors and early intervention; and 3) providing comprehensive, effective treatment and recovery support. This approach stresses strategies to support children, teens and families in their daily lives — where they live, learn and play — including by connecting children and their families to systems and programs that can help provide additional help as needed.

In this section, TFAH examines a series of 10 indicators of policies and/or programs that states may have in place that have been recommended by experts to help advance one or more of these key areas. Nearly every policy area has an impact on the well-being of children and youth — but these 10 specific policy areas help highlight the status of some specific strategies that help prevent and reduce youth substance misuse. Taken collectively, they provide a snapshot of areas of progress and ongoing gaps in youth development policies.

10 Indicators (Example Highlight Policies) for Teen Well-being and Substance Misuse Prevention

Indicator 1: Supporting Academic Achievement	35 states have at least an 80 percent high school graduation rate (2013-2014).
Indicator 2: Preventing Bullying	21 states have comprehensive bullying prevention laws.
Indicator 3: Preventing Smoking	30 states and Washington, D.C. have smoke-free laws prohibiting smoking in public places, including restaurants and bars.
Indicator 4: Preventing Underage Alcohol Sales	37 states and Washington, D.C. have liability laws (dram shop) holding establishments accountable for selling alcohol to underage or obviously intoxicated individuals.
Indicator 5: Screening, Intervention and Referral to Treatment Support	32 states and Washington, D.C. have billing codes for Screening, Brief Intervention and Referral to Treatment (SBIRT) in their medical health (Medicaid or private insurance) programs.
Indicator 6: Mental Health Funding	29 states and Washington, D.C. increased funding for mental health services in Fiscal Year (FY) 2015.
Indicator 7: Depression Treatment	30 states have rates of treatment for teens with major depressive episodes above 38.1 percent.
Indicator 8: Good Samaritan Laws	31 states and Washington, D.C. have laws in place to provide a degree of immunity from criminal charges or mitigation of sentencing for an individual seeking help for themselves or others experiencing an overdose.
Indicator 9: Treatment and Recovery Support for Prescription Drug Misuse	30 states and Washington, D.C. provide Medicaid coverage for all three FDA-approved medications for the treatment of painkiller addiction.
Indicator 10: Sentencing Reform	31 states and Washington, D.C. have taken action to roll back "one-size-fits-all" sentences for nonviolent drug offenses.

Youth Substance Misuse Prevention Indicator Map

Scores	Color
3	
4	
5	
6	
7	
8	
9	
10	
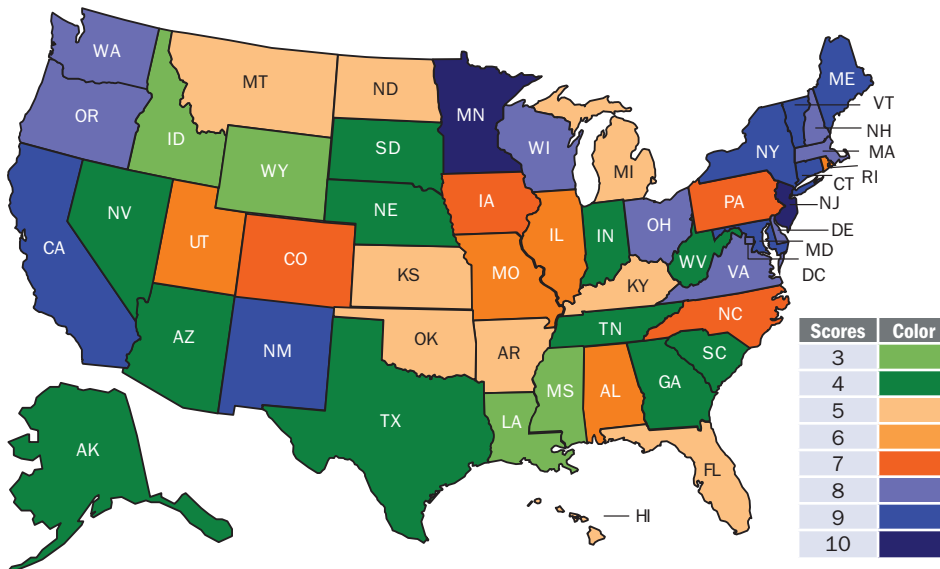
STATE INDICATORS

Each state received a score based on these 10 indicators. States received one point for achieving an indicator or zero points if they did not. Zero is the lowest possible overall score (no policies in place), and 10 is the highest (all the policies in place).

It is important to note the indicators measure whether a law, regulation or policy is in place but does not assess how the measures are enforced or if there is sufficient funding to carry them out.

SCORES BY STATE

10 (2 states)	9 (7 states)	8 (8 states & D.C.)	7 (4 states)	6 (5 states)	5 (9 states)	4 (11 states)	3 (4 states)
Minnesota	California	D.C.	Colorado	Alabama	Arkansas	Alaska	Idaho
New Jersey	Connecticut	Delaware	Iowa	Illinois	Florida	Arizona	Louisiana
	Maine	Massachusetts	North Carolina	Missouri	Hawaii	Georgia	Mississippi
	Maryland	New Hampshire	Pennsylvania	Rhode Island	Kansas	Indiana	Wyoming
	New Mexico	Ohio		Utah	Kentucky	Nebraska	
	New York	Oregon			Michigan	Nevada	
	Vermont	Virginia			Montana	South Carolina	
		Washington			North Dakota	South Dakota	
		Wisconsin			Oklahoma	Tennessee	
						Texas	
						West Virginia	

STATE INDICATORS

State	(1) Support Academic Achievement: State has at least an 80 percent chi school graduation rate (2012-2013).	(2) Preventing Bullying: State has comprehensive bullying prevention laws.	(3) Preventing Smoking: State has smoke-free laws that prohibit smoking in public places, including restaurants and bars.	(4) Preventing Underage Alcohol Sales: State has liability (dram shop) laws holding establishments accountable for selling alcohol to underage or obviously intoxicated individuals.	(5) SBIRT: State has billing codes for Screening, Brief Intervention and Referral for Treatment in their medical health programs (Medicaid or private insurance).	(6) Mental Health Funding: State increased funding for mental health services for Fiscal Year 2015.	(7) Depression Treatment: State have rates of treatment for teens with major depressive episodes at or above the National percentage of 38.1 percent (2009-2013).	(8) Good Samaritan Laws: State has laws in place to provide some immunity from criminal charges or mitigation of sentencing of seeking help for an overdose.	(9) Treatment and Recovery Support for Prescription Drug Misuse: State provides Medicaid coverage for all three FDA-approved medications for the treatment of painkiller addiction.	(10) Sentencing Reform: States has taken action to roll back "one-size-fits-all" sentences for nonviolent drug offenses.	Total Score
Alabama	✓	✓			✓	✓		✓	✓		6
Alaska				✓	✓		✓	✓			4
Arizona			✓	✓		✓			✓		4
Arkansas	✓	✓		✓				✓		✓	5
California	✓	✓	✓	✓	✓	✓		✓	✓	✓	9
Colorado		✓	✓	✓		✓	✓	✓		✓	7
Connecticut	✓	✓	✓		✓	✓	✓	✓	✓	✓	9
Delaware	✓		✓		✓	✓	✓	✓	✓	✓	8
D.C.			✓	✓	✓	✓	✓	✓	✓	✓	8
Florida		✓		✓		✓		✓	✓		5
Georgia				✓				✓	✓	✓	4
Hawaii	✓	✓						✓	✓	✓	5
Idaho				✓	✓	✓					3
Illinois	✓	✓	✓	✓				✓		✓	6
Indiana	✓			✓	✓					✓	4
Iowa	✓	✓	✓	✓	✓	✓	✓				7
Kansas	✓		✓		✓	✓	✓				5
Kentucky	✓				✓	✓	✓	✓			5
Louisiana					✓			✓			3
Maine	✓	✓	✓	✓	✓	✓	✓		✓		9
Maryland	✓	✓	✓	✓		✓	✓	✓	✓	✓	9
Massachusetts	✓	✓	✓	✓			✓	✓	✓	✓	8
Michigan			✓	✓			✓		✓	✓	5
Minnesota	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
Mississippi				✓				✓		✓	3
Missouri	✓			✓	✓	✓			✓	✓	6
Montana	✓		✓	✓	✓		✓				5
Nebraska	✓		✓	✓			✓				4
Nevada					✓			✓	✓	✓	4
New Hampshire	✓	✓	✓	✓		✓	✓	✓	✓		8
New Jersey	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
New Mexico		✓	✓	✓	✓	✓	✓	✓	✓	✓	9
New York		✓	✓	✓	✓	✓	✓	✓	✓	✓	9
North Carolina	✓	✓	✓	✓	✓			✓	✓		7
North Dakota	✓		✓	✓			✓			✓	5
Ohio	✓		✓	✓	✓	✓	✓		✓	✓	8
Oklahoma	✓			✓	✓	✓	✓			✓	5
Oregon		✓	✓	✓	✓		✓	✓	✓	✓	8
Pennsylvania	✓			✓		✓	✓	✓	✓	✓	7
Rhode Island	✓		✓	✓			✓		✓	✓	6
South Carolina	✓				✓	✓				✓	4
South Dakota	✓		✓			✓	✓				4
Tennessee	✓			✓				✓	✓		4
Texas	✓			✓					✓	✓	4
Utah	✓		✓			✓	✓		✓	✓	6
Vermont	✓	✓	✓	✓	✓	✓	✓	✓	✓		9
Virginia	✓	✓			✓	✓	✓	✓	✓	✓	8
Washington		✓	✓	✓	✓	✓	✓	✓	✓		8
West Virginia	✓					✓	✓	✓			4
Wisconsin	✓		✓	✓	✓	✓	✓	✓	✓		8
Wyoming				✓	✓		✓				3
Total States	35	21	30 + D.C.	37 + D.C.	32 + D.C.	29 + D.C.	30 + D.C.	31 + D.C.	30 + D.C.	31 +DC	

35 states have at least an 80 percent high school graduation rate (2013-2014). (1 point)		15 states and D.C. have less than 80 percent high school graduation rate (2013-2014). (0 points)
Alabama (86.3%)	New Hampshire (88.1%)	Alaska (71.1%)
Arkansas (86.9%)	New Jersey (88.6%)	Arizona (75.7%)
California (81.0%)	North Carolina (83.9%)	Colorado (77.3%)
Connecticut (87.0%)	North Dakota (87.2%)	D.C. (61.4%)
Delaware (87.0%)	Ohio (81.8%)	Florida (76.1%)
Hawaii (81.8%)	Oklahoma (82.7%)	Georgia (72.5%)
Illinois (86.0%)	Pennsylvania (85.5%)	Idaho (77.3%)
Indiana (87.9%)	Rhode Island (80.8%)	Louisiana (74.6%)
Iowa (90.5%)	South Carolina (80.1%)	Michigan (78.6%)
Kansas (85.7%)	South Dakota (82.7%)	Mississippi (77.6%)
Kentucky (87.5%)	Tennessee (87.2%)	Nevada (70.0%)
Maine (86.5%)	Texas (88.3%)	New Mexico (68.5%)
Maryland (86.4%)	Utah (83.9%)	New York (77.8%)
Massachusetts (86.1%)	Vermont (87.8%)	Oregon (72.0%)
Minnesota (81.2%)	Virginia (85.3%)	Washington (78.2%)
Missouri (87.3%)	West Virginia (84.5%)	Wyoming (78.6%)
Montana (85.4%)	Wisconsin (88.6%)	
Nebraska (89.7%)		

Source: U.S. Department of Education, ED Data Express, Regulatory Adjusted Cohort Graduation Rates, 2013-2014.

INDICATOR 1: SUPPORTING ACADEMIC ACHIEVEMENT

Key Finding: 35 states have at least an 80 percent high school graduation rate.

Ongoing substance misuse has a high correlation with school dropout rates.[87] In the United States, more than one million students per year dropout of high school, approximately 7,000 students per day.[88, 89]

This indicator examines high school graduation rates by state. Thirty-five states meet the national goal of at least 80 percent of students completing high school.[90] While a variety of factors contribute to higher likelihood of dropping out of schools (including family factors, socioeconomic status and trends and types of supports within a particular school or community), addressing substance misuse is a key component in supporting youth well-being and education attainment.

Nationally, around 20 percent of students do not graduate from high school — with the rate being higher (30 percent) among low-income students.[91]

Twelfth graders who do not complete high school (ages 16 to 18) are almost twice as likely to currently use cigarettes (56.8 percent versus 22.4 percent), illicit drugs (31.4 percent versus 18.2 percent), marijuana

(27.3 percent versus 15.3 percent) and nonmedical prescription drugs (9.5 percent versus 5.1 percent). Students who do not complete high school also have higher rates of alcohol use and binge drinking.[92]

Graduation rates are often interrelated to a teen's well-being and academic challenges. High rates of absenteeism, classroom behavior concerns and academic performance problems are warning signs for increased risk for future substance misuse.

According to research from NIDA, children with academic problems at ages 7 to 9 are more likely to be involved with substance use by age 14 or 15.[93] As children reach middle and high school, the correlation between substance use and school performance issues becomes bidirectional.[94] For some children, academic difficulties may precede the initiation of drug use, but once drug

use starts, it can lead to further decline. In other cases, substance use precedes academic problems, but they continue a cycle of increasing difficulties.

Substance use can impair cognitive development — the working memory and learning parts of the brain — diminishing a child's ability to pay attention in school and decreasing school engagement, reducing academic achievement and disrupting academic progress.[95, 96, 97] Drug use among adolescents leads to declines in academic motivation, study habits and goal setting.

Students with an average grade of 'D' or lower are more likely to be a person who uses substances compared to students whose grade average is better than a 'D.' Persistent marijuana users show a significant drop in IQ between childhood and midlife.[98]

Providing support to students with academic performance concerns — and with irregular school attendance — and helping improve the overall school climate, can help reduce substance misuse.[99] Identifying schools and school districts with low graduation rates can also help identify where to target resources for support at a community level.

Reducing the use or frequency of substance misuse can increase school attendance and improve academic performance.[100, 101]

Students who avoid substance use all together score higher on state reading and math tests, and have higher grades than their peers who use alcohol or other drugs.[102, 103]

Not having a high school diploma has both individual consequences (e.g. higher unemployment, lower work wages, poorer health outcomes) and societal implications (e.g. lower skilled work force, negative economic impact).

CHRONIC ABSENTEEISM: WARNING SIGN — MISSING SIGNIFICANT NUMBERS OF SCHOOL DAYS

Attending school regularly is essential to students gaining the academic and social skills they need to succeed. Students who miss a significant amount of school are likely to fall behind academically.[104, 105] Starting as early as preschool and kindergarten, chronic absenteeism has an impact, including missing basic milestones for literacy, early math skills and social-emotional development. Regularly missing 10 percent of the academic year in early primary school years can leave students unable to read proficiently by third grade and off track for high school graduation.

A key component of a safe, supportive school environment includes encouraging and fostering regular school attendance.

Chronic absenteeism can be an important warning signal that a child is experiencing problems — due to physical health, behavior or mental health, struggling with academic performance, family stability and financial security, fear of bullying and/or threats of violence. By tween and teen years, it can also be an early way to identify substance use problems.

For instance, a child with unmanaged asthma may miss a high number of school days, putting him or her behind on early school achievement which then escalates to falling further behind over time and being at higher risk for substance misuse, other risk behaviors and/or not graduating. If the problem was identified early in the child's school career — and appropriate healthcare and related services were provided — that child would have better odds for future academic and lifetime success.

In the past, absenteeism has often been treated as a behavior or truancy issue — where it becomes an additional "problem" to be punished — instead of a way of identifying children, teens and families who may need additional help and support.

Tracking patterns of chronic absenteeism can also lead to a better understanding of where and how to target resources within
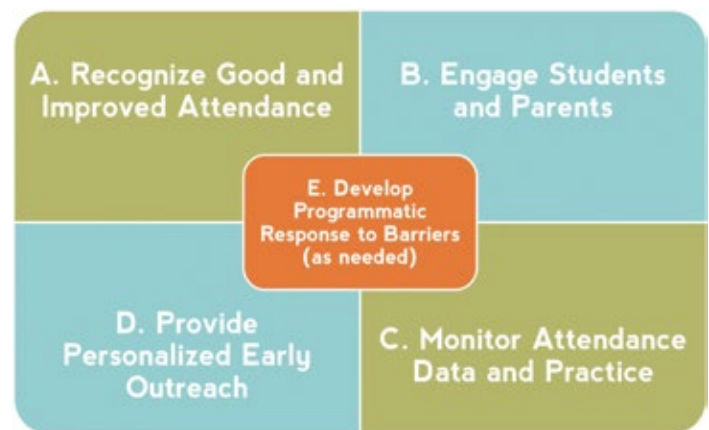
Source: Attendance Works

school systems and communities to match needs. A review of schools in six states found chronic absenteeism rates ranged from 6 percent to 23 percent — with high poverty urban schools reporting up to one-third of students as chronically absent.[106] High rates of chronic absenteeism are often concentrated in relatively few schools. In Florida, 15 percent of schools accounted for at least half of all chronically absent students.

Currently, school systems around the country track student absences in different ways — with few having early warning systems in place to monitor for chronic absenteeism throughout a school year and few providing follow up support or case management for students and families.

Educating parents and school systems about the importance of regular school attendance — starting as early as preschool and kindergarten — and building systems that keep track of students' attendance and providing follow up support when there are chronic absentee problems is an important component of improving the nation's school system to provide children with a better education and chance to thrive.

21 States have comprehensive bullying prevention laws. (1 point)		29 states and D.C. do not have comprehensive bullying prevention laws. (0 points)	
Alabama	Minnesota	Alaska	Nebraska
Arkansas	New Hampshire	Arizona	Nevada
California	New Jersey	Delaware	North Dakota
Colorado	New Mexico	D.C.	Ohio
Connecticut	New York	Georgia	Oklahoma
Florida	North Carolina	Hawaii	Pennsylvania
Illinois	Oregon	Idaho	Rhode Island
Iowa	Vermont	Indiana	South Carolina
Maine	Virginia	Kansas	South Dakota
Maryland	Washington	Kentucky	Tennessee
Massachusetts		Louisiana	Texas
		Michigan	Utah
		Mississippi	West Virginia
		Missouri	Wisconsin
		Montana	Wyoming

Source: American Academy of Pediatrics

INDICATOR 2: PREVENTING BULLYING LAWS

Key Finding: 21 states have comprehensive bullying prevention laws.

Bullying is a form of youth violence that can be inflicted physically, verbally, relationally or by damaging a young person's property.[107] CDC defines bullying as, "any unwanted aggressive behavior(s) by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated." [108] It can have a long-term negative psychological impact on victims.

Being bullied can result in physical injury, social and emotional distress and even death. Victimized youth are at increased risk for depression, anxiety, sleep difficulties, poor school adjustment, suicide and thoughts of suicide — as well as substance misuse.[109, 110]

In addition, youth who bully others are at increased risk for substance use, academic problems and violence later in adolescence and adulthood.

All 50 states, Washington, D.C., Guam, Puerto Rico and the U.S. Virgin Islands have bullying prevention laws or policies in place, according to the federal government website, StopBullying.gov.[111] However, only 21 states have comprehensive bullying prevention laws, according to the American Academy of Pediatrics.[112]

According to AAP, recommended state policy "clearly defines the role and the authority of the school officials, teachers, and other school employees to address bullying and would require a zero tolerance policy for bullying based on race, ethnicity, gender, sexual orientation, gender identity, disability, religious beliefs, and other personal attributes… [and applies] to students in all schools, both on or off campus, or through the use of technology (i.e., cyberbullying)."[113]

• About 20 percent of high school students report being bullied on school property and 15 percent report being bullied electronically in the previous 12 months, according to a 2013 national survey by CDC.[114] Reported rates are 22 percent among Whites, 18 percent

Percent of Students who Report Being Bullied on School Property vs. Electronic Bullying

20% On School Property

15% Electronic Bullying
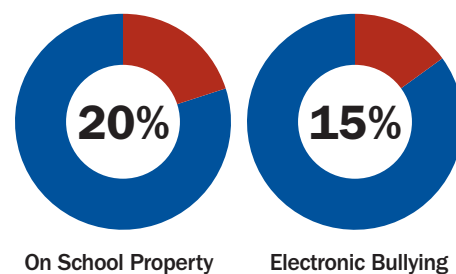
among Latinos and 13 percent among Blacks.[115] Females are more likely to report being a victim of bullying (24 percent versus 16 percent of males.)

- Lesbian, gay, bi-sexual and transgender (LGBT) youth are significantly more likely to be bullied and abused in a range of ways, which may contribute to increased risk and subsequent high incidence of mental health problems, substance misuse, risky sexual behavior and HIV.[116, 117] A study conducted by the Gay, Lesbian & Straight Education Network (GLSEN) found that of the 71 percent of U.S. school districts with anti-bullying policies, less than half of the districts mentioned protection for students based on their actual or perceived sexual orientation, fewer district policies (14 percent) mentioned protection for students based on their gender identity/expression and even less districts (3 percent) mentioned actual LGBT language and staff professional development in their anti-bullying policies.[118] And, in states with anti-bullying laws, 60 percent of non-conforming gender identity students and about 40 percent of LGB students where not provided protection from bullying.

There are efforts to align the "zero toler-ance" approaches to bullying with effective intervention strategies to address bullying — that avoid harsh discipline approaches that often end up exacerbating the unde-sired behavior, and conflict resolution and peer mediation are often not appropriate for bullying, which is characterized by victimization rather than conflict. In fact, participating in bullying can actually often be an early indicator of other problem behaviors. Additional research and efforts are needed to determine the best strate-gies for positively addressing and curtailing bullying behavior.[119]

POSITIVE, SUPPORTIVE SCHOOL CLIMATES

Schools are primarily concerned with promoting academic achievement, but it is also important to provide and foster a culture that is safe and supportive for students to learn and thrive — which helps them better reach their academic potential.

Traditionally, many school systems have relied on a punitive approach to address student behavior — including detention, suspension and expulsions. More than 3.3 million students are suspended or ex-pelled from U.S. public schools annually.[120]

Recently, a number of initiatives have emerged to help schools be more sup-portive and provide services and help for children who are struggling. Proactive, preventive approaches — both school-wide and individual focused — that address the underlying cause of negative behaviors have been associated with increases in academic engagement and achievement and reductions in suspension and dropout rates.[121] Conversely, punitive-centered approaches, such as suspensions and ex-pulsions, have been shown not to improve student behavior or school climate. In fact, they are associated with negative stu-dent outcomes, including lower academic performance and engagement, higher drop-out rates, failure to graduate on time and increased future disciplinary actions.

CDC has also defined key strategies that help improve positive protective factors through school connectedness and parent engagement, including promoting adult sup-port (school staff can dedicate their time, interest, attention, and emotional support to students); belonging to a positive peer group (a stable network of peers can improve stu-dent perceptions of school); commitment to education (believing that school is important to their future, and perceiving that the adults in school are invested in their education can get students engaged in their own learning and involved in school activities); and school environment (the physical environment and psychosocial climate can set the stage for positive student perceptions of school).[122] In addition, research shows that parent engagement in schools is closely linked to better student behavior, higher academic achievement, and enhanced social skills — and makes it more likely that teens will avoid unhealthy behaviors, such as sexual risk behaviors and tobacco, alcohol and other drug misuse. According to CDC, while efforts to improve child and adolescent health have typically addressed specific health risk behaviors, such as tobacco use or violence, results from a growing number of studies suggest that greater health im-pact might be achieved by also enhancing protective factors that help children and adolescents avoid multiple behaviors that place them at risk for adverse health and educational outcomes.[123]

A number of school districts have recently adopted the Positive Behavior Interventions and Supports (PBIS) model, applying evidence-based practices for all students to increase academic performance, improve safety, decrease problem behavior and establish a positive school culture.[124, 125, 126] It emphasizes multiple strategies to support social and behavioral improvement, such as character education, asset building, social skills instruction, bullying prevention, developmental guidance, building consultation teams, restorative justice practices, wrap-around services and behavioral intervention plans.

This approach can help benefit all students:

- **Universal support:** Infrastructure, processes and procedures to establish a supportive and respectful school culture — for all students and staff in all school settings (including classrooms, hallways, libraries, cafeterias, recreation spaces and school buses). For instance, setting standards where prompt intervention is taken for behaviors (by students or adults) that are inconsistent with this standard; behavior management strategies are clear, consistent, proactive and predictable; modeling appropriate and caring behavior by adults; implementing comprehensive and supportive counseling services.

- **Secondary/Tiered support:** Processes and procedures to address behavioral challenges of groups of students with similar behavior problems, such as attention-seeking or avoidance. Examples include building consultation teams that support classroom teachers' efforts to be more responsive to students affected by trauma; screening students to determine if other assessments or referrals would be helpful; monitoring students' responses to interventions; referrals to community services and programs; parent/caregiver education support and services; classroom support to help teachers differentiate instruction and behavior management; 504 plans and Individual Education Plans (IEPs) for students with identified disabilities; brief functional behavior assessment (FBAs) to understand why students may be responding in particular ways (for example, fight, flight or freeze); and low-intensity behavior intervention plans (BIPs) to

provide students with alternative, appropriate strategies and methods to cope with situations; and small group interventions to teach students emotional regulation, coping, stress management and problem-solving activities.

- **Tertiary/Intensive intervention:** Addresses problematic behavior of individual high-need students — setting expectations and developing team-based approaches. For example, training in teacher/environmental interventions that identify triggers and develop strategies to reduce and defuse situations; individual interventions to teach students emotional regulation, coping, stress management and problem-solving; comprehensive FBSs coupled with intensive BIPs to each individual students alternative, appropriate behavior patterns; wrap around services and interventions with multi-disciplinary teams from school, mental health, the family and other systems, such as child welfare and juvenile justice programs, as appropriate; intensive case management to closely monitor the student's response to interventions and coordinate involvement of multiple educators, other professionals and the family; IEPs and 504 plans for students with identified disabilities; and parent/caregiver training and support programs and services.

Two joint Department of Education and Department of Justice (DOJ) initiatives aimed at efforts to improve school climate and supportive interventions include the Safe and Supportive School Grants, which help support statewide measurement of, and targeted programs to improve conditions for learning to help improve school

safety and reduce substance misuse, and the School Climate Transformation Grants, which provide support to states and local school agencies to implement evidence-based, multi-tiered positive behavioral frameworks.[127] In 2014, School Climate Transformation Grants were awarded to 71 school districts in 23 states, Washington, D.C. and the U.S. Virgin Islands totaling $35.8 million, and 12 states totaling $7.3 million.[128] The goal of the program is to connect children, youth and families to appropriate services and support; improve conditions for learning and behavior outcomes for school-aged youth; and increase awareness of and the ability to respond to mental-health issues among school-aged youth.

Some local school districts have also begun trauma-informed practices to encourage safe, supportive climates in schools and to manage behavior concerns — acknowledging and responding to the role of trauma (ranging from having been physically abused to living in adverse circumstances contributing to a prolonged experience of "toxic stress") in the development of emotional, behavioral, educational and physical difficulties in the lives of children and youth.[129]

For instance, in Philadelphia, the United Way has helped fund courses for teachers on how to recognize when students are experiencing trauma and, when there are behavior incidents, how to help students calm down and recover sufficiently to rejoin the school day. For instance, sometimes a drink of water or having 20 minutes to "reset" — or an understanding of how not to retrigger a trauma in a child — is all that is needed.[130]

INDICATOR 3: PREVENTING SMOKING

Key Finding: 30 states and Washington, D.C. have smoke-free laws that prohibit smoking in public places, including restaurants and bars.

30 states and D.C. have smoke-free laws prohibiting smoking in public places, including restaurants and bars. (1 point)		20 states do not have smoke-free laws prohibiting smoking in public places, including restaurants and bars. (0 points)	
Arizona	Nebraska	Alabama	Missouri
California	New Hampshire	Alaska	Nevada
Colorado	New Jersey	Arkansas	Oklahoma
Connecticut	New Mexico	Florida	Pennsylvania
D.C.	New York	Georgia	South Carolina
Delaware	North Carolina	Idaho	Tennessee
Hawaii	North Dakota	Indiana	Texas
Illinois	Ohio	Kentucky	Virginia
Iowa	Oregon	Louisiana	West Virginia
Kansas	Rhode Island	Mississippi	Wyoming
Maine	South Dakota		
Maryland	Utah		
Massachusetts	Vermont		
Michigan	Washington		
Minnesota	Wisconsin		
Montana			

Source: Campaign for Tobacco-Free Kids

The number of 12- to 17-year-olds who report cigarette use in the past month reached an all-time low of 5.6 percent in 2013. This represented a decline from 13 percent in 2002, and from 26 percent in 1992.[131]

This indicator examines how many states have adopted smoke-free air laws that prohibit smoking in workplaces, restaurants, bars and other public spaces. Thirty states, Washington, D.C., Puerto Rico and the U.S. Virgin Islands have comprehensive smoke-free laws. In addition, hundreds of cities and counties around the country have smoke-free laws.[132]

These laws help protect individuals from exposure to secondhand smoke.[133] Secondhand smoke — which contains around 70 toxic chemicals that can cause cancer — contributes to a wide range of health problems including more frequent and severe asthma attacks, respiratory infections, ear infections, infant deaths, heart disease, heart attacks, stroke and lung cancer.[134, 135]

Smoke-free laws help limit the exposure of youth to secondhand smoke — but

also can help reduce smoking rates by limiting opportunities for smoking initiation and use.[136] The decline in teen smoking rates has been credited to a combination of smoke-free laws, along with awareness about associated health risks, more successful cessation treatments and growing social unacceptability.

Tobacco remains the leading cause of preventable diseases, disability and death in the United Sates.[137] It causes about one-third of all cancers, increases the risk of heart disease and is associated with leukemia, cataracts and pneumonia. On average, smokers die 10 years earlier than nonsmokers.[138] Regular exposure to second-hand smoke kills approximately 41,000 nonsmokers a year. Tobacco contains nicotine, which increases levels of dopamine, a neurotransmitter associated with

pleasure and reward. Nicotine is highly addictive — and can be as difficult to quit as cocaine or heroin.[139] Research suggests that children and teens may be especially sensitive to nicotine, making it easier for them to become addicted and even those who only smoke a few cigarettes per month can have cravings for cigarettes.[140, 141]

Nearly all tobacco use begins during youth or young adulthood. Among adults who smoke daily, 88 percent reported that they first smoked by the age of 18, and 99 percent reported that they first smoked by the age of 26.[142]

Preventing smoking initiation in youth is an important strategy for reducing a person's chance of ever smoking. A recent study by the Institute of Medicine (IOM) found that raising the legal age to purchase tobacco products from 18 to 21 has the most public

health benefit and is likely to prevent or delay initiation among 15- to 17-year-olds. One reason cited is that younger teens need older kids to buy their cigarettes. And while there is social overlap between younger and older teens, fewer 15- to 17-year-olds interact with 21-year-olds. The report finds that raising the legal age to buy tobacco products from 18 to 21 would result in 249,000 fewer premature deaths among people born between 2000 and 2019, and 12 percent fewer smokers by 2100. In addition, there would be 286,000 fewer preterm births, 438,000 fewer cases of low birth weight and about 4,000 fewer sudden infant death cases among mothers aged 15 to 49.[143]

Tobacco taxes are another policy measure that have been shown to be one of the most effective ways to reduce smoking and other tobacco use. An analysis of more than 100 studies found that, "Significant increases in tobacco taxes are a highly effective tobacco control strategy and lead to significant improvements in public health."[144] Tobacco tax increases result in higher product prices and encourage tobacco users to stop using, prevent potential users from starting and reduce consumption among those that continue to use. The Congressional Budget Office (CBO) reports that a 10 percent increase in cigarette prices will cause people under age 18 to reduce their smoking by 5 percent to 15 percent, and, among adults over age 18, they find that the decline would be 3 percent to 7 percent.[145] Higher tobacco taxes also save money by reducing tobacco-related healthcare costs, including Medicaid expenses.[146] Thirty states and Washington, D.C. currently have an excise tax of $1 or more per pack of cigarettes. The average tax is

Current Cigarette Use Among Youth (YRBSS) 2013
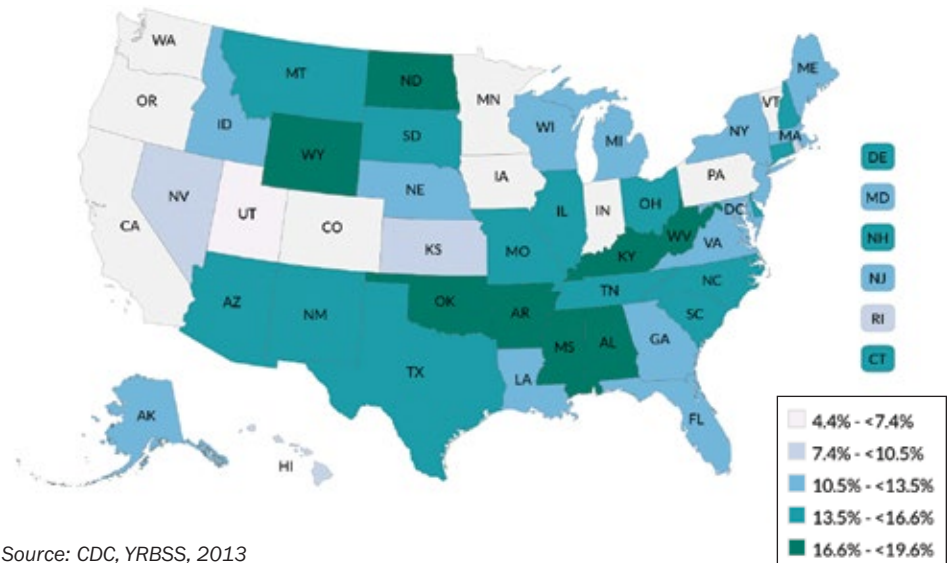
Source: CDC, YRBSS, 2013

$1.54, and the rates vary significantly from a low of $0.17 in Missouri to a high of $4.35 in New York. In addition, on April 1, 2009, the federal cigarette tax increased by 62 cents, to $1.01 per pack.

Limiting sales to minors under 18-years-old is another important strategy to curtail teen smoking. In July 1992, Congress enacted the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act (P.L. 102-321), which includes the Synar Amendment (section 1926) aimed at decreasing youth access to tobacco. The amendment required states to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18-years-old. Each state and U.S. jurisdiction is required to conduct annual, random, unannounced inspections of retail tobacco outlets and to report the findings to the U.S. Department of Health and Human Services (HHS) Secretary. The national weighted average rate of tobacco sales to minors as reported by states and

Washington, D.C. in the *FY 2013 Annual Synar Reports: Tobacco Sales to Youth* was 9.6 percent, an increase from 9.1 percent in FY 2012.[147]

Teens who smoke (traditional or electronic cigarettes) are also more likely to drink alcohol, binge drink, smoke marijuana and/or use other illegal substances, such as cocaine.[148, 149, 150, 151, 152, 153] In addition, the more dependent an individual is on nicotine, the more likely it is the individual will use and be dependent on other drugs.[154] The rate of illegal drug use among teens (12- to 17-year-olds) who smoked cigarettes in the past month was around 8.5 times higher than among those who did not smoke cigarettes in the past month (54.6 percent versus. 6.4 percent).

Teens often use more than one substance at a time.[155] Among young adults, drinking alcohol is associated with increased use of traditional cigarettes (by four times) and e-cigarettes (by nine times); and smoking marijuana is associated with greater risk of smoking traditional cigarettes and e-cigarettes (by 2 to 3 times).[156]

ELECTRONIC CIGARETTES

Electronic cigarettes are battery-operated products which enable inhalation of nicotine and other chemicals. These products are often made to look like cigarettes, cigars, pipes or pens.[157]

There are currently no federal regulations preventing the marketing and sale of e-cigarettes to children or teens, and they are widely available for sale online. The Food and Drug Administration (FDA) had originally stated it would have regulations complete by June 2015, but extended the comment period on Nicotine Exposure Warnings and Child-Resistant Packaging for Liquid Nicotine, Nicotine-Containing E-Liquid(s), and Other Tobacco Products to the end of September 2015.[158] Despite attempts at restrictions, a University of North Carolina study found that only five out of 98 attempts by teens to buy e-cigarettes online were blocked by online vendors' attempts to verify customer age.[159]

As of September 2015, 46 states and Washington, D.C. have prohibited sales of electronic nicotine delivery systems (ENDS) to minors — such as e-cigarettes, alternative nicotine products and/or or electronic product/devices that deliver nicotine.

While cigarette smoking among youth has been on a steady decline for years, the use of e-cigarettes has been increasing since they entered the U.S. market in 2007. Reported use has grown among high school students from 1.5 percent in 2011 to 13.4 percent in 2014, and 3.9 percent of middle school students reported using e-cigarettes in 2014.[160]

More teens now use e-cigarettes than traditional cigarettes or any other tobacco product. The product is available in a variety of flavors — including bubble gum and choc-olate. E-cigarettes are relatively new and long-term use trends and effects are not yet available. Monitoring the Future found that many teens initiate e-cigarette use in part because they feel they are not harmful to health — with only 14.2 percent of 12th graders viewing them as harmful.[161]

While e-cigarettes may be safer than traditional cigarette because they do not contain tar, e-cigarette vapor is filled with chemicals and nicotine, which is inhaled (versus "smoked").[162] In addition, liquid nicotine also poses a poisoning risk if handled in an unsafe manner and poisonings of small children are increasing.[163] Testing of some e-cigarette products found the vapor to contain known cancer-causing and toxic chemicals.[164] Poisoning cases involving e-cigarettes and liquid nicotine rose 148 percent from 2013 to 2014 and have increased more than 14 fold since 2011.[165]

In addition, a number of experts express concern that youth who use e-cigarettes will later go on to become traditional cigarette smokers — and that the exposure to nicotine can prime the brain for future substance misuse.[166, 167, 168] However, it is still unknown if the exposure to nicotine through e-cigarettes may increase the likelihood of nicotine addiction.

Studies are showing that teens who use ENDS are more likely to also use regular cigarettes and other tobacco products.[169, 170, 171] The same factors that contribute to trying/initiation of traditional cigarettes are correlated to trying/initiating e-cigarette (e.g. having parents or close friends that smoke, having positive attitudes towards tobacco products or having a lower perception that smoking/nicotine use is harmful).

Increase in Youth E-cigarette Use

| 2011 | 1.5% |
| 2014 | 13.4% |
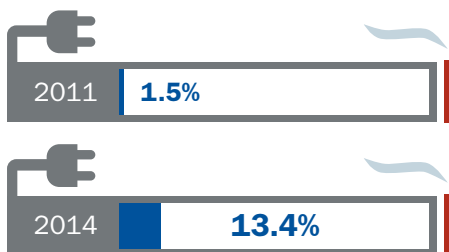
37 states and D.C. have dram shop laws that hold establishments liable for selling alcohol to underage customers. (1 point)		13 states do not have dram shop laws that hold establishments liable for selling alcohol to underage or clearly intoxicated customers. (0 points)
Alaska	Nebraska	Alabama
Arizona	New Hampshire	Connecticut
Arkansas	New Jersey	Delaware
California	New Mexico	Hawaii
Colorado	New York	Kansas
D.C.	North Carolina	Kentucky
Florida	North Dakota	Louisiana
Georgia	Ohio	Maryland
Idaho	Oklahoma	Nevada
Illinois	Oregon	South Carolina
Indiana	Pennsylvania	South Dakota
Iowa	Rhode Island	Virginia
Maine	Tennessee	West Virginia
Massachusetts	Texas	
Michigan	Utah	
Minnesota	Vermont	
Mississippi	Washington	
Missouri	Wisconsin	
Montana	Wyoming	

Source: National Conference of State Legislatures and NOLO

INDICATOR 4:
PREVENTING UNDERAGE ALCOHOL SALES

Key Finding: 37 states and Washington, D.C. have "dram shop" laws that hold establishments liable for selling alcohol to underage costumers.

Twelve- to 20-year-olds drink 11 percent of all alcohol consumed in the United States, and more than 90 percent of that consumption is in the form of binge drinking.[172]

Underage drinking is both illegal and has a higher risk for consumption in high quantities and settings that can lead to serious immediate and long-term consequences.

According to the Surgeon General's report on preventing underage drinking and CDC, youth who drink alcohol are more likely to experience:[173, 174]

- School problems, such as higher absence and poor or failing grades;
- Social problems, such as fighting and lack of participation in youth activities;
- Legal problems, such as arrest for driving or physically hurting someone while drunk;
- Physical problems, such as hangovers or illnesses;

- Unwanted, unplanned and unprotected sexual activity;
- Disruption of normal growth and sexual development;
- Physical and sexual assault;
- Higher risk for suicide and homicide;
- Alcohol-related car crashes and other unintentional injuries, such as burns, falls and drownings;
- Memory problems;
- Misuse of other drugs;
- Changes in brain development that may have life-long effects; and
- Death from alcohol poisoning.

The Community Preventive Services Task Force — which reviews the research

and evidence-base for health prevention strategies — has analyzed multiple public policies to reduce alcohol misuse and has recommended several, including "dram shop" liability laws. The Task Force found that holding alcohol retailers liable for injuries or damage done by their intoxicated customers can reduce motor vehicle deaths, violence, homicides, injuries and other alcohol-related problems.[175] The Task Force also recommended increasing alcohol taxes, maintaining limits on the days and hours of sale of alcohol and the regulation of alcohol outlet density as other effective policies for curtailing excessive and underage alcohol misuse.[176] The measures also were related to fewer alcohol-related motor vehicle crashes and fatalities and lower violence rates.

Dram shop liability laws — named after a common measure of alcohol — involve holding the owner or server of an establishment liable for selling or serving alcohol to individuals who cause injuries or death as a result of their intoxication.[177] These laws serve two purposes: to disincentivize retailers from serving minors or the intoxicated because of the risk of litigation resulting in monetary losses, and to allow parties injured as a result to gain compensation from those responsible. While the minor or intoxicated person would be the first to be sued by the injured party, dram laws allow the injured to seek monetary damages from the establishment that served the individual.[178]

Thirty-seven states and Washington, D.C. have statutory provisions related to dram shop that holds an establishment civically liable or assesses federal penalties for selling alcohol to a person under the legal drinking age.[179, 180] The specific terms of the statues can vary, however. For instance, Louisiana exempts licensed establishments from liability except in the cases where they serve a person under the legal drinking age. Hawaii and South Carolina do not have dram shop laws, but allow dram shop claims under state liquor control law (Hawaii) or Supreme Court case hearings (South Carolina). Louisiana has two exceptions to the prohibition against dram shop claims — if the vendor forcibly causes the intoxication or if the vendor misrepresents an alcohol beverage as non-alcoholic. Illinois's dram shop law includes the selling of illegal substances to minors. Nevada's dram shop law exempts licensed establishments from liability, except if a third party is injured by a minor. South Dakota exempts licensed establishments from liability.[181] Efforts to prevent sales of alcohol and tobacco to minors are most effective when they also engage and encourage the commitment of the stores, restaurants and other businesses as integral members of any community.

ALCOHOL TAXES

How High Are Wine Taxes in Your State?

State Wine Excise Tax Rates as of Jan. 1, 2015 (dollars per gallon)
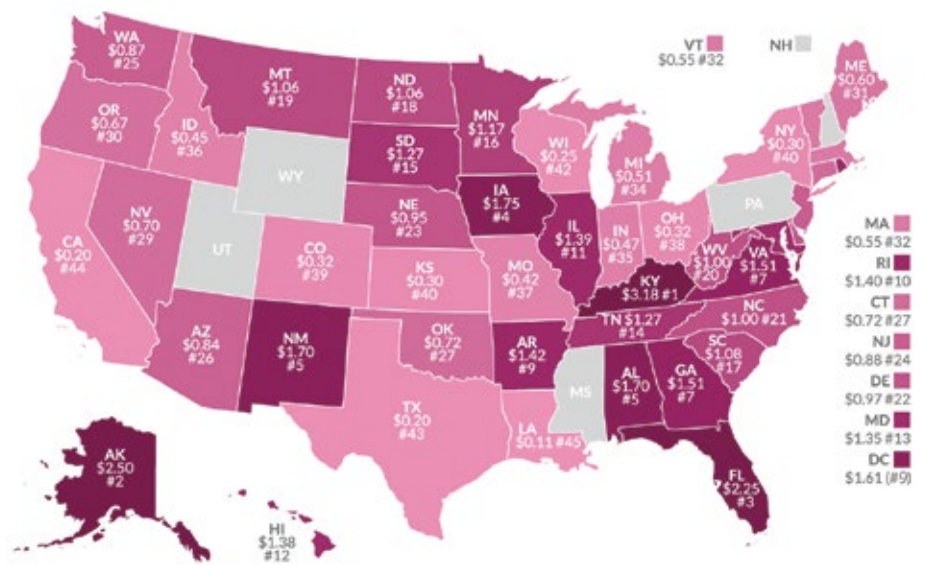
Note: Rates are those applicable to off-premise sales of 11% ABV non-carbonated wine in 750 mL containers. States may apply different rates to other wines, such as as sparkling wines. Rates do not include federal taxes.
MS, NH, PA, UT, and WY: Control states, where the government controls all sales. Products can be subject to ad valorem mark-up and excise taxes.
AR, MN, and TN: Includes case and/or bottle fees which may vary with the size of container.
AR, MD, MN, SD, and DC: Includes sales taxes specific to alcoholic beverages.
KY: Includes wholesale tax rate of 11%, converted into a gallonage excise tax rate.
Source: Distilled Spirits Council of the United States.

State Wine Excise Tax Rate (dollars per gallon)

Lower Rate — Higher Rate

How High Are Beer Taxes in Your State?

State Beer Excise Tax Rates as of Jan. 1, 2015 (dollars per gallon)

VT $0.27 #22 NH $0.30 #21

WA $0.26 #24
MT $0.14 #39
ND $0.39 #16
MN $0.47 #11
OR $0.08 #45
ID $0.15 #38
WY $0.02 #50
SD $0.27 #22
WI $0.06 #48
MI $0.20 #28
NY $0.14 #39
ME $0.35 #17
NV $0.16 #35
UT $0.41 #13
CO $0.08 #45
NE $0.31 #20
IA $0.19 #31
IL $0.23 #26
IN $0.12 #41
OH $0.18 #32
PA $0.08 #45
CA $0.20 #28
KS $0.18 #32
MO $0.06 #48
KY $0.83 #6
WV $0.18 #32
VA $0.26 #24
AZ $0.16 #35
NM $0.41 #13
OK $0.40 #15
AR $0.34 #18
TN $1.29 #1
NC $0.62 #8
MS $0.43 #12
AL $1.05 #3
GA $1.01 #4
SC $0.77 #7
TX $0.20 #28
LA $0.32 #19
FL $0.48 #10
AK $1.07 #2
HI $0.93 #5

MA $0.11 #44
RI $0.12 #41
CT $0.23 #26
NJ $0.12 #41
DE $0.16 #35
MD $0.49 #9
DC $0.58 (#9)

Note: Rates are those applicable to off-premise sales of 4.7% alcohol by volume beer in 12 ounce containers. Local excise taxes are excluded.
AL and GA: Includes statewide local taxes ($0.52 in Alabama and $0.53 in Georgia).
AR, MD, MN, and DC: Includes sales taxes specific to alcoholic beverages.
AR and RI: Includes case and/or bottle fees which may vary with the size of container.
TN: Includes wholesale tax rate of 17%, converted into a gallonage excise tax rate.
Source: Distilled Spirits Council of the United States.

State Beer Excise Tax Rates
(dollars per gallon)
Lower Rate — Higher Rate

How High Are Taxes on Distilled Spirits in Your State?

State Spirits Excise Tax Rates (Dollars per Gallon)

VT $7.68 #15   NH $0.00 #49

WA $35.22 #1
MT $9.74 #11
ND $4.66 #30
MN $8.59 #13
OR $22.72 #2
ID $10.90 #10
WY $0.00 #49
SD $4.63 #31
WI $3.25 #40
MI $11.90 #9
NY $6.44 #21
ME $5.79 #24
NV $3.60 #38
UT $12.18 #8
CO $2.28 #46
NE $3.75 #36
IA $12.49 #6
IL $8.55 #14
IN $2.68 #42
OH $9.34 #12
PA $7.20 #18
CA $3.30 #39
KS $2.50 #43
MO $2.00 #47
KY $7.35 #17
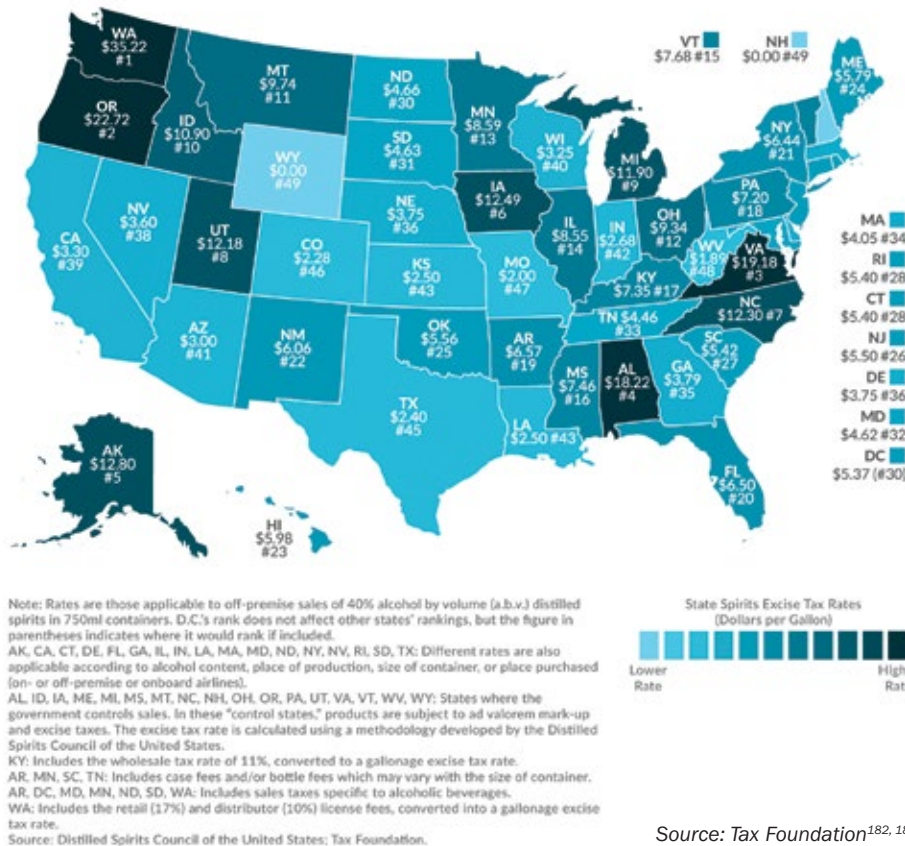WV $1.85 #48
VA $19.18 #3
AZ $3.00 #41
NM $6.06 #22
OK $5.56 #25
AR $6.57 #19
TN $4.46 #33
NC $12.30 #7
MS $7.46 #16
AL $18.22 #4
GA $3.79 #35
SC $5.42 #27
TX $2.40 #45
LA $2.50 #43
FL $6.50 #20
AK $12.80 #5
HI $5.98 #23

MA $4.05 #34
RI $5.40 #28
CT $5.40 #28
NJ $5.50 #26
DE $3.75 #36
MD $4.62 #32
DC $5.37 (#30)

Note: Rates are those applicable to off-premise sales of 40% alcohol by volume (a.b.v.) distilled spirits in 750ml containers. D.C.'s rank does not affect other states' rankings, but the figure in parentheses indicates where it would rank if included.
AK, CA, CT, DE, FL, GA, IL, IN, LA, MA, MD, ND, NY, NV, RI, SD, TX: Different rates are also applicable according to alcohol content, place of production, size of container, or place purchased (on- or off-premise or onboard airlines).
AL, ID, IA, ME, MI, MS, MT, NC, NH, OH, OR, PA, UT, VA, VT, WV, WY: States where the government controls sales. In these "control states," products are subject to ad valorem mark-up and excise taxes. The excise tax rate is calculated using a methodology developed by the Distilled Spirits Council of the United States.
KY: Includes the wholesale tax rate of 11%, converted to a gallonage excise tax rate.
AR, MN, SC, TN: Includes case fees and/or bottle fees which may vary with the size of container.
AR, DC, MD, MN, ND, SD, WA: Includes sales taxes specific to alcoholic beverages.
WA: Includes the retail (17%) and distributor (10%) license fees, converted into a gallonage excise tax rate.
Source: Distilled Spirits Council of the United States; Tax Foundation.

State Spirits Excise Tax Rates
(Dollars per Gallon)
Lower Rate — Higher Rate

Source: Tax Foundation[182, 183]

PALCOHOL

Palcohol is a new form of alcohol that when mixed with water creates an alcoholic beverage — including products such as freeze-dried rum, vodka and "powder-ritas." In March 2015, the U.S. Alcohol and Tobacco Tax and Trade Bureau (TTB) approved labels for Palcohol, allowing it to be sold legally in the United States unless otherwise prohibited.[184]

As of August, 2015, 23 states have banned powdered alcohol. Alabama, Alaska, Connecticut, Georgia, Hawaii, Kansas, Illinois, Indiana, Louisiana, Maine, Nebraska, Nevada, New York, North Carolina, North Dakota, Ohio, Oregon, South Carolina, Tennessee, Utah, Vermont, Virginia and Washington statutorily prohibit the sale of

powdered alcohol. Maryland and Minnesota have temporary one-year statutory bans. Colorado, Delaware, Michigan and New Mexico have included powdered alcohol in their statutory definitions of alcohol so that the product can be regulated under their existing alcohol statutes.

CURBING UNDERAGE ALCOHOL MISUSE

Alcohol is the most widely used substance misused by teens and youth. Nearly one-quarter of 12- to 19-year-olds reported drinking alcohol in the past month according to SAMHSA.[185] Early use of alcohol is often an indicator of future substance use — and delaying use can significantly improve later health. Heavy alcohol use by youth can also impair potential brain development. In addition, under aged drinking increases the risk for motor vehicle crashes, injuries, unsafe sexual practices, sexual victimization, violence, suicide and suicide ideation and impaired academic performance.

In 2015, SAMHSA issued a *Report to Congress on the Prevention and Reduction of Underage Drinking*, which included a review of a range of policies and strategies to prevent and reduce youth alcohol use, some of which included:[186, 187]

- Educating parents and others about the impact of alcohol misuse — including not supplying underage youth with alcohol, limiting the ability of youth to access alcohol at home and not hosting parties where underage drinking is tolerated;

- Restricting marketing of alcohol to youth;

- Maintaining and enforcing minimum drinking age, through policies such as enhanced enforcement of laws prohibiting sales to minors and related sale limitations like dram shop liability laws, increasing alcohol taxes, maintaining limits on days and hours of sales, limiting alcohol outlet density and electronic screening and brief intervention;

- Ensuring teens do not drink and drive — including with graduated drivers licenses that restrict the hours and number of passengers for novice drivers, "use and lose" license laws for teens, first-time offense ignition interlocks and other limitations; and

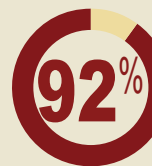IT'S NEVER TOO EARLY TO START TALKING ABOUT UNDERAGE DRINKING

10% OF 9- TO 10-YEAR-OLDS HAVE ALREADY STARTED DRINKING.[1]

More than **20%** OF UNDERAGE DRINKERS BEGIN DRINKING BEFORE AGE 13.[2]

92% OF THE ALCOHOL CONSUMED BY 12- TO 14-YEAR-OLDS IS IN THE FORM OF BINGE DRINKING.[3]

More than **90%** OF HIGH-SCHOOL SENIORS SAY THAT IT IS EASY OR VERY EASY TO GET ALCOHOL.[4]

Parents, you have the power to help prevent underage drinking by talking to your children early and often about the dangers of alcohol. Prepare for one of the most important conversations you may ever have with SAMHSA's "Talk. They Hear You." Mobile Application, available for download on iTunes, Google Play, and the Windows Store. Learn more at http://www.underagedrinking.samhsa.gov.

[1] Donovan, J., Leech, S., Zucker, R., Loveland-Cherry, C., Jester, J., Fitzgerald, H., et al. (2004). Really underage drinkers: Alcohol use among elementary students. Alcoholism: Clinical and Experimental Research, 28(2), 341–349.
[2] Centers for Disease Control and Prevention. (2012). Youth risk behavior surveillance—United States, 2011. Surveillance Summaries. Morbidity and Mortality Weekly Report, 61, SS-4, 1–162.
[3] Pacific Institute for Research and Evaluation. (2002). Drinking in America: Myths, realities, and prevention policy. Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
[4] Johnston, L.D, O'Malley, P.M., Bachman, J.G., & Schulenberg, J.E. (2013). Monitoring the Future national survey results on drug use, 1975–2012. Volume I: Secondary school students. Ann Arbor: Institute for Social Research, University of Michigan. Retrieved from http://www.monitoringthefuture.org/pubs/monographs/mtf-vol1_2012.pdf

- Encouraging and incentivizing colleges to adopt best practices to prevent underage drinking on campuses and in the surrounding community.

32 states and D.C. have Medicaid or private insurance billing codes for SBIRT. (1 point)		18 states do not have billing Medicaid or private insurance billing codes for SBIRT. (0 points)	
Alabama** p	Montana+	Arizona^	Nebraska
Alaska+	Nevada§	Arkansas^	New Hampshire^
California**	New Jersey+	Florida	North Dakota^
Colorado§	New Mexico+	Georgia	Pennsylvania^
Connecticut+	New York**	Hawaii^	Rhode Island
D.C.+	North Carolina+	Illinois	South Dakota^
Delaware+	Ohio**	Massachusetts	Texas
Idaho+	Oklahoma+	Michigan	Utah^
Indiana+	Oregon+	Mississippi	West Virginia
Iowa§	South Carolina +p		
Kansas§	Tennessee+		
Kentucky+	Vermont+		
Louisiana**	Virginia+		
Maine+	Washington+		
Maryland+	Wisconsin+		
Minnesota+	Wyoming**		
Missouri§			

Sources: Institute for Research Education & Training in Addictions and Community Catalyst

Notes: +States with only commercial insurance SBIRT codes (CPT codes). (Medicaid programs can often use commercial billing codes for services also).

***States with only Medicaid SBIRT codes (HCPCS codes).*

§States with both commercial insurance and Medicaid SBIRT codes.

p States with codes that currently only include pregnant women

^ States allow providers to bill Medicaid for SBIRT using Health and Behavior Assessment/ Intervention (HBAI) codes but do not have distinct or explicit SBIRT codes.

INDICATOR 5:
SCREENING, BRIEF INTERVENTION AND REFERRAL TO TREATMENT

Key Finding: 32 states and Washington, D.C. have billing codes and fees for Screening, Brief Intervention and Referral to Treatment in their medical health (Medicaid or private insurance) programs.

Screening, Brief Intervention and Referral to Treatment is a comprehensive, integrated public health approach to early intervention and treatment for persons with substance use disorders or are at risk for developing these disorders.[188]

The AAP and the NIAAA support routine screenings (through questionnaires) — and providing brief intervention (supportive short counseling with a health provider) and/or connection to care, treatment and services when they are needed.[189, 190, 191]
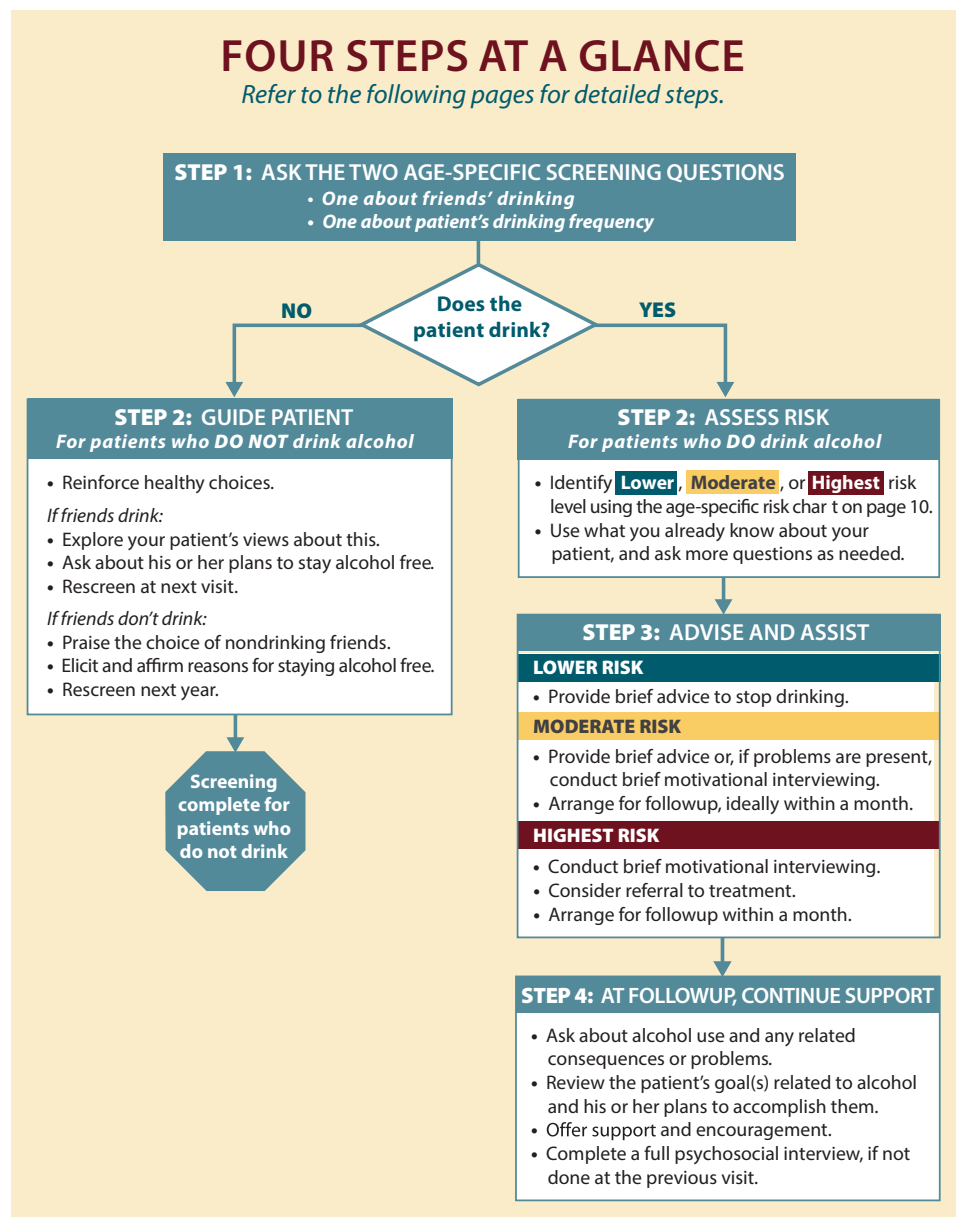
Without programs like SBIRT, many teens are never directly asked about aspects of their behavioral or mental health — and when given the opportunity to connect with help or support in a safe environment and by a trained, caring provider, they will be open about their needs. Fewer than half of pediatricians currently report asking teens about alcohol and other drug use, and fewer than 25 percent report asking teens about drinking and driving.[192] It is a quick, low-cost way to reach teens and young adults on a broad scale to deter risky behavior.

And, the brief interventions — even short counseling sessions or conversations with primary care providers, in emergency departments or in school settings by trained professionals — have shown that they can help prevent or reduce alcohol and marijuana use.[193, 194, 195, 196, 197, 198]

A meta-analysis found "compelling evidence that brief alcohol interventions can yield beneficial effects on [reducing] alcohol consumption and alcohol-related problems" among teens and young adults — demonstrating at least incremental reductions in drinking, with the effects lasting for more than year.[199] And, even a single session of motivational interviewing (questionnaire combined with counseling about health and other risks) in community settings showed significant reductions in marijuana use.[200] Early interventions may be particularly important before or while teens are beginning to reach experimental periods (i.e., when they have not yet faced decisions about use or have developed a significant history of use or dependence).

FOUR STEPS AT A GLANCE
Refer to the following pages for detailed steps.

STEP 1: ASK THE TWO AGE-SPECIFIC SCREENING QUESTIONS
- *One about friends' drinking*
- *One about patient's drinking frequency*

Does the patient drink? NO YES

STEP 2: GUIDE PATIENT
For patients who DO NOT drink alcohol

- Reinforce healthy choices.

If friends drink:
- Explore your patient's views about this.
- Ask about his or her plans to stay alcohol free.
- Rescreen at next visit.

If friends don't drink:
- Praise the choice of nondrinking friends.
- Elicit and affirm reasons for staying alcohol free.
- Rescreen next year.

Screening complete for patients who do not drink

STEP 2: ASSESS RISK
For patients who DO drink alcohol

- Identify **Lower**, **Moderate**, or **Highest** risk level using the age-specific risk char t on page 10.
- Use what you already know about your patient, and ask more questions as needed.

STEP 3: ADVISE AND ASSIST

LOWER RISK
- Provide brief advice to stop drinking.

MODERATE RISK
- Provide brief advice or, if problems are present, conduct brief motivational interviewing.
- Arrange for followup, ideally within a month.

HIGHEST RISK
- Conduct brief motivational interviewing.
- Consider referral to treatment.
- Arrange for followup within a month.

STEP 4: AT FOLLOWUP, CONTINUE SUPPORT
- Ask about alcohol use and any related consequences or problems.
- Review the patient's goal(s) related to alcohol and his or her plans to accomplish them.
- Offer support and encouragement.
- Complete a full psychosocial interview, if not done at the previous visit.

Source: National Institute on Alcohol Abuse and Alcoholism

The SBIRT approach emphasizes prevention and quick response — rather than the traditional methods of waiting for substance use to emerge as a major problem before responding to it. Making SBIRT routine practice also helps destigmatize the issue — acknowledging that it is a concern across all communities, socio-economic and racial and ethnic groups — and that providing positive support is the most effective means of reducing misuse. SBIRT also supports a continuum of care approach, with an integrated, seamless transition across the need for prevention, brief treatment and more extensive treatment or services as is appropriate for different individual needs.

SBIRT includes:

- **Screening** quickly assessing the severity of substance misuse and identifying the appropriate level of treatment — conducted through conversations and counseling that help determine and respond to risk.

- **Brief intervention** provides education and support — as well as motivation toward behavioral change.

- **Referral** to treatment ensures individuals identified as needing more extensive treatment with access to specialty care and support.[201, 202]

Currently, despite the support from AAP, NIAAA and other groups, SBIRT has not been fully incorporated into regular practice, school-based health centers or other school-based programs.

This indicator examines which states have distinct and explicit billing codes to support the use SBIRT in practice — which includes 32 states and Washington, D.C.[203] The billing codes vary within these states — where some are Medicaid, some are commercial insurances, some are both and some are limited, such as only for pregnant women in Alabama.

In addition, while some states may still allow for billing of SBIRT or other screenings via Medicaid Health and Behavior Assessment/Intervention (HBAI) codes or justify under the Early and Periodic, Diagnosis and Treatment (EPSDT) program, the lack of a unique billing code is a signal of less of a commitment and priority to the delivery of the services. Having a distinct billing code also allows for the tracking and reporting of delivery and use of the services. This helps be able to ensure that SBIRT becomes a more universal practice.

Even with billing codes, the extent of the coverage of available interventions and treatment still varies significantly by state. Substance use treatment services are defined at a state level and can range dramatically — and the availability of services and providers is also very different across communities and states.

The research on SBIRT to date on teens and young adults has been limited, but has shown promising results and is endorsed by pediatricians, NIAAA and others as a low-cost, low-risk, brief way to reach out teens to support their well-being. There has been more research on the impact of SBIRT with adults — showing it is highly effective in reducing the misuse of tobacco, alcohol and other drugs in a range of settings and locations.[204, 205] In addition, an analysis of Missouri's SBIRT (MOSBIRT) program has shown that individuals receiving brief interventions demonstrated reductions in risky use, along with improvements in employment, housing, legal involvement and physical and mental health.[206] Evaluations of the return on investment for adult SBIRT services has ranged from $3.81 to $5.60 for each dollar spent. This is the fourth largest return on medical investment after daily aspirin use, childhood immunizations and smoking cessation programs.[207]

INDICATOR 6: MENTAL HEALTH TREATMENT

Key Finding: 29 states and Washington, D.C. increased funding for mental health services in FY 2015.

29 states and D.C. increased funding for mental health services for FY 2015. (1 point)		21 states either decreased or maintained the same funding for mental health services for FY 2015. (0 points)	
Alabama	New Hampshire	Alaska	Montana*
Arizona	New Jersey	Arkansas	Nebraska
California	New Mexico	Georgia*	Nevada*
Colorado	New York	Illinois*	North Dakota*
Connecticut	Ohio	Indiana*	North Carolina
Delaware	Oklahoma	Hawaii	Oregon*
D.C.	Pennsylvania	Kentucky	Rhode Island
Florida	South Carolina	Louisiana	Tennessee*
Idaho	South Dakota	Massachusetts*	Texas*
Iowa	Utah	Michigan	Wyoming
Kansas	Vermont	Mississippi*	
Maine	Virginia		
Maryland	Washington		
Minnesota	West Virginia		
Missouri	Wisconsin		

Source: National Alliance on Mental Illness

*Note: *Level funding from FY2014 to FY2015. Funding is based on non-Medicaid state general fund dollars allocated to inpatient and outpatient mental healthcare for children, youth and adults as available.*

As many as one in five children (20 percent) have a serious debilitating mental disorder.[208] Approximately 50 percent of children with mental disorders receive treatment.[209]

Many individuals with mental health disorders are at higher risk for substance use — and substance misuse can lead to or exacerbate mental health disorders.[210] Substance use disorders and other mental illnesses are related to overlapping factors such as underlying brain deficits, genetic vulnerabilities and/or early exposure to stress or trauma. According to NIDA, drug use and mental health disorders are both developmental disorders that often begin in childhood or teen years — drug use may bring about symptoms of another mental illness, and mental disorders can lead to drug use — possibly as a means of "self-medication."[211]

- Persons diagnosed with mood or anxiety disorders and antisocial personality or conduct disorders are around twice as likely to also suffer from a drug use disorder. Conversely, individuals with a drug disorder are around twice as likely to also have a mood or anxiety disorder.[212] Untreated ADHD and conduct disorders in children can also put them at increased risk for substance use.

- Toxic stress and traumatic experiences during childhood increases the risk for social, mental health, behavioral and cognitive problems (leading to low academic performance and behavior problems in school); engaging in poor health behaviors and developing psychiatric disorders and chronic health diseases; and makes it more difficult to establish fulfilling relationships — and in adulthood maintain employment — and to become productive members of society.[213, 214]

- In addition, chronic misuse of some drugs can cause changes to the brain that can lead to paranoia, depression, aggression and hallucinations. Addiction also changes the brain, changing a person's hierarchy of needs and desires — making procuring and using the drug a driving priority — and weakens impulse control.

Among 16- to 17-year-olds, 6 percent had a co-occurrence of a mental health disorder and a substance use disorder; 4 percent had a co-occurrence of a serious mental health and substance use disorder; and 3 percent had a major depressive episode and substance use disorder.[215] Some children and teens use alcohol or drugs to cope with feelings of anxiety; depressive moods; symptoms of ADHD or a traumatic episode, such as physical, emotional and/or sexual abuse.

Early identification and access to quality mental health services can help reduce the risk that an individual may initiate drug use to "self-medicate" — related to mental disorders. Early identification of substance misuse can reduce the risk of contributing to the development of mental disorders.

This indicator examined which states increased funding for mental health services. According to an analysis by the National Alliance on Mental Illness (NAMI), 29 states and Washington, D.C. increased funding for mental health services for FY 2015.[216] Eleven states maintained their 2014 levels and 10 states cut their funding from FY 2014.

Mental health funding encompasses a broad range of services, for example medical professional development and training for assessing, treating and managing children with mental health disorders; intensive in-home therapy for children and adolescents; mental health and substance use disorder screenings in Medicaid's EPSDT program; access to reduced cost of care in psychiatric residential treatment facilities; psychiatric consultations for pediatricians treating children with mental health needs; mobile crisis response and stabilization services for defusing and de-escalating difficult mental health situations to prevent out-of-home placement of a child or adolescent; and outpatient treatment for youth with substance use disorders — including individual, group, and family counseling; partial hospitalization; and medication-assisted treatment.[217]

According to NAMI, investments help ensure individuals have effective treatment and can function well and be productive contributors to society.[218] The Psychiatric Residential Treatment Facility (PRTF) Demonstration Program — a Children's Mental Health Initiative (CMHI) program for children and adolescents with serious mental challenges — found that implementing home and community-based services improved the quality of life for those children, youth and families and saved Medicaid $40,000 per year per child served.[219] For children and youth participating in PRTF, more than 40 percent showed improvement in school attendance and grades as well as improvement in behavioral and emotional strengths, including interpersonal relationships, self-confidence, family connections and interpersonal relationships. In addition, there was a 64 percent decrease in youth attempting suicides; nearly a 50 percent decrease in youth being arrested; and 40 percent of children showed a decrease in clinical mental health symptoms.

Following the recession — from 2009 to 2012 — state funding for mental health services dropped significantly across the nation. States cut $4.35 billion from their mental health budgets. Budgets in many states have steadily increased since then, but not enough in most cases to make up for the recession drop-offs.

In 2014, a few states enacted legislation aimed at youth and mental health. For example, Minnesota allocated $300,000 for 2015 ($175,000 each year after) toward grants to community mental health centers to provide care to uninsured youth under age 21. Wisconsin has allocated $500,000 a year to fund a child psychiatric consultation program administered by primary care pediatricians.

NAMI's policy recommendations for states in 2015 include:

- Strengthen public mental health funding;

- Hold public and private insurers and providers accountable for appropriate, high-quality services with measurement of outcomes;

- Expand Medicaid with adequate coverage for mental health; and

- Implement effective practices such as first episode psychosis (FEP), assertive community treatment (ACT) and crisis intervention team (CIT) programs.

ADVERSE CHILDHOOD EXPERIENCES (ACEs)

Adverse Childhood Experiences can have a profound impact on the physical, mental, behavioral and social-emotional health throughout an individual's lifespan.

ACEs increase a child's risk for a series of health and social problems — including increased risk for substance misuse. More than half of children (52 percent) experience at least one ACE, 27 percent experience at least two, 14 percent experience three and 7 percent experience four or more. The risk for developing related problems increases in a strong and graded fashion with the increase in the number of ACEs a child experiences.[220, 221]

Growing up with substance misuse in the household is one of the most serious and pervasive reported adverse childhood experience — at more than 26.9 percent.[222] The other most significant ACEs include physical abuse, sexual abuse, parent divorce or separation.

Research has demonstrated a strong relationship between ACEs and a variety of substance-related behaviors, including:

- Early initiation of alcohol use;
- Experiencing an alcohol problem into adulthood;
- Increased likelihood of early smoking initiation;
- Continued smoking and heavy smoking during adulthood;
- Prescription drug use; and
- Lifetime illicit drug use, ever having a problems caused by alcohol/drugs and self-reported addiction.[223]

ACE Score and Drug Abuse
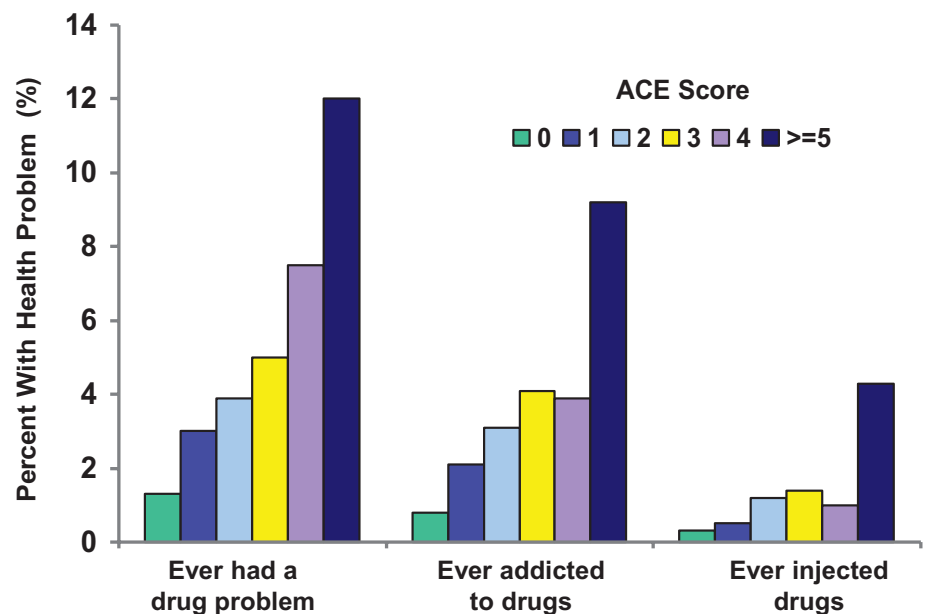
Source: Dube SR, Felitti VJ, Dong M, et al., 2003; ACEs Study

Mechanisms by Which Adverse Childhod Experiences
Influence Health and Well-being Throughout the Lifespan
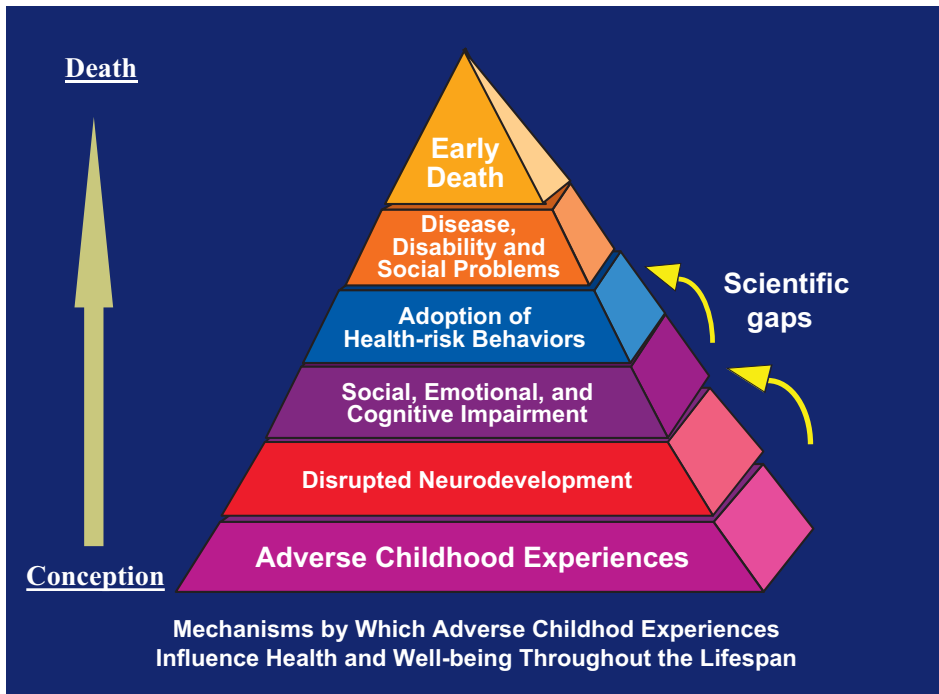
Source: Centers for Disease Control and Prevention (CDC)

STRENGTHENING FAMILIES: PROTECTIVE FACTORS FRAMEWORK

ACEs and their impact on children and teens can be reduced by helping reduce risks in the families and households — and by building supportive protective factors. The Center for the Study of Social Policy developed a framework summary of protective factors, which includes:[224]

● **Parental Resilience:** Managing stress and functioning well when faced with challenges, adversity and trauma (including general life stressors and parenting stressors);

● **Social Connections:** Having positive relationships that provide emotional, informational, instrumental and spiritual support;

● **Knowledge of Parenting and Child Development:** Understanding child development and parenting strategies that support physical, cognitive, language, social and emotional development (including age-appropriate and developmental expectations, being attuned and emotionally available, nurturing, responsive, predictable, interactive, and having a safe and educationally stimulating environment);

● **Concrete Support in Times of Need:** Having access to concrete support and services that address a family's needs and help minimize stress caused by challenges (including navigating and accessing service systems and building financial security); and

● **Social and Emotional Competence of Children:** Having family and child interactions that help children develop the ability to communicate clearly, recognize and regulate their emotions and establish and maintain relationships.

INDICATOR 7: DEPRESSION TREATMENT

Key Finding: 30 states and Washington, D.C. have rates of treatment for teens with major depressive episodes at or above 38.1 percent.

30 states and D.C. had rates for treatment of adolescents with major depressive episodes at or above the national percentage of 38.1 percent (aggregate 2009-2013). (1 point).		20 states had rates for treatment of adolescents with major depressive episodes at or below the national percentage of 38.1 percent (aggregate 2009-2013). (0 points).	
Alaska (41.6%)	New Mexico (39.7%)	Alabama (24.9%)	Indiana (31.9%)
Connecticut (52.3%)	New York (41.3%)	Arizona (29.0%)	Louisiana (35.9%)
D.C. (40.1%)	North Dakota (42.8%)	Arkansas (29.9%)	Mississippi (33.8%)
Delaware (45.1%)	Ohio (38.5%)	California (31.0%)	Missouri (36.8%)
Iowa (48.8%)	Oregon (40.8%)	Colorado (37.2%)	Nevada (29.9%)
Kansas (41.8%)	Pennsylvania (42.5%)	Florida (31.0%)	North Carolina (36.0%)
Kentucky (44.1%)	Rhode Island (48.5%)	Georgia (33.1%)	Oklahoma (38.0%)
Maine (47.7%)	South Dakota (50.5%)	Hawaii (30.9%)	South Carolina (24.7%)
Maryland (38.2%)	Utah (44.6%)	Idaho (35.6%)	Tennessee (32.7%)
Massachusetts (46.9%)	Vermont (48.0%)	Illinois (37.6%)	Texas (35.5%)
Michigan (44.2%)	Virginia (40.4%)		
Minnesota (54.0%)	Washington (41%)		
Montana (41.1%)	West Virginia (47.0%)		
Nebraska (44.0%)	Wisconsin (42.2%)		
New Hampshire (47.1%)	Wyoming (39.0%)		
New Jersey (41.8%)			

Source: SAMHSA, Behavioral Health Barometer: United States, 2014

In the United States, only 38.1 percent of adolescents ages 12 to 17 with a major depressive episode (MDE) (an estimated 977,000 adolescents) received treatment for depression in 2013.

This indicator examined which states had rates of teens who were treated for MDE at or above the national percentage of 38.1 percent (aggregate 2009-2013). According to the *Behavioral Health Barometer, 2014 Report,* 30 states treated for MDE at or above the national percentage (38.1 percent).[225]

Teens with untreated depression are at a higher risk to be aggressive, engage in risky behavior misuse drugs or alcohol, do poorly in school or run away. When experiencing an episode, teens have an increased risk for suicide. Suicide is the second-leading cause of death among children aged 15 to 19.[226, 227] Violence can also be a cause and an effect of depression.[228, 229]

Substance use and depression often interrelate. In 2013, 1.4 percent of adolescents aged 12 to 17 (359,000 adolescents) in the United States had both a substance use disorder and a MDE in the past year.[230, 231]

The symptoms of MDE include: [232]

- Loss of interest or pleasure in all activities;
- Change in appetite or weight;
- Sleep disturbances;
- Feeling agitated or feeling slowed down;
- Fatigue;
- Feelings of low self-worth, guilt or shortcomings;
- Difficulty concentrating or making decisions; and/or
- Suicidal thoughts or intentions.

According to SAMHSA's 2013 NSDUH, teens (12- to 17-years-old) were defined as having MDE if they had a period of 2 weeks or longer in the past 12 months when they experienced a depressed mood or loss of interest or pleasure in daily activities, and they had at least four of seven additional symptoms, such as problems with sleep, eating, energy, concentration and self-worth. Teens were defined as having MDE with severe impairment if their depression caused severe problems with their ability to do chores at home, do well at work or school, get along with their family or have a social life.[233]

For teens ages 12 to 17 in 2013:

● Approximately one in 10 (2.6 million) experienced a MDE in the past year;

● An estimated 7.7 percent of (1.9 million) had past year MDE with severe impairment; and

● The percentage of MDE was about three times higher among females (16.2 percent) than among males (5.3 percent).

Healthy People, 2020, which sets national health goals for the nation, set a goal to reduce the percentage of teens who experience a MDE to 7.5 percent.[234] Instead, the rates have been increasing — the baseline set in 2008 was 8.3 percent; by 2013, the rates had risen to 10.7 percent.

Currently, *Healthy People, 2020* does not include an MDE treatment goal for teens, but for adults it includes the goal of increasing the proportion of adults with an MDE treated to 78.2 percent, which would be an increase from the baseline of 71.1 percent in 2008.

The most common treatments for depression are medication and psychotherapy. Treatment for MDE, according to SAMHSA's 2013 NSDUH, is defined as seeing or talking to a medical doctor or other professional or using prescription medication for depression in the past year. [235]

● Of the 2.6 million adolescents in 2013 with past year MDE, 977,000 received treatment for depression. This represented 38.1 percent of adolescents with past year MDE.

● Among adolescents in 2013 who had past year MDE with severe impairment in carrying out responsibilities, 45.0 percent (832,000) received treatment for depression.

● In 2013, among U.S. adolescents who reported having an MDE within the year prior to being surveyed, a higher percentage of females (40.9 percent) than males (29.7 percent) received treatment for their depression.

INDICATOR 8:
GOOD SAMARITAN LAWS

Key finding: 31 states and Washington, D.C. have laws in place to provide a degree of immunity from criminal charges or mitigation of sentencing for an individual seeking help for themselves or others experiencing an overdose.

31 states and D.C. have a law in place to provide a degree of immunity from criminal charges or mitigation of sentencing for an individual seeking help for themselves or others experiencing an overdose. (1 point)		19 states do not have a law in place to provide a degree of immunity from criminal charges or mitigation of sentencing for an individual seeking help for themselves or others experiencing an overdose. (0 points)	
Alabama	Minnesota	Arizona	North Dakota
Alaska	Mississippi	Idaho	Ohio
Arkansas	Nevada	Indiana	Oklahoma
California	New Hampshire	Iowa	Rhode Island
Colorado	New Jersey	Kansas	South Carolina
Connecticut	New Mexico	Maine	South Dakota
D.C.	New York	Michigan	Texas
Delaware	North Carolina	Missouri	Utah
Florida	Oregon	Montana	Wyoming
Georgia	Pennsylvania	Nebraska	
Hawaii	Tennessee		
Illinois	Vermont		
Kentucky	Virginia		
Louisiana	Washington		
Maryland	West Virginia		
Massachusetts	Wisconsin		

Source: Network for Public Health Law

Drug overdose was the leading cause of injury death in 2013, exceeding motor vehicle crashes. Although most of these types of deaths could be prevented with quick and appropriate medical treatment, fear of arrest and prosecution may prevent people who witness an overdose or find someone who has overdosed from calling 911.

- There were 43,982 drug overdose deaths in the United States in 2013. Of these, 22,767 (51.8 percent) were related to prescription drugs. Of the 22,767 deaths relating to prescription drug overdose in 2013, 16,235 (71.3 percent) involved opioid painkillers, and/or 6,973 (30.6 percent) involved benzodiazepines.[236]

"Good Samaritan" laws are designed to encourage people to help those in danger of an overdose. For instance, a study following passage of Washington's 911 Good Samaritan Law found that 88 percent of people who use prescription painkillers indicated that once they were aware of the law, they would be more likely to call 911 during future overdoses.[237]

Teens and young adults may be even more wary to call for help if they or a friend are in danger of overdosing, due to added consequences from parents and schools.

State laws have been put in place to provide a degree of immunity from criminal charges or mitigation of sentencing for an individual seeking help for themselves or for others experiencing an overdose. They remove perceived barriers to calling 911 through the provision of limited legal protections.

Thirty-one states and Washington, D.C. received a point for this indicator for having some form of Good Samaritan law that reduces legal penalties for an individual seeking help for themselves or others experiencing an overdose.[238] These laws, however, vary significantly from state to state. Among the Good Samaritan laws, all states except two (Indiana and Utah) and Washington, D.C. prevent an individual who seeks medical assistance for someone experiencing a drug-related overdose from either being charged or prosecuted for possession of a controlled substance. Vermont, Hawaii, Nevada and Delaware have the broadest version of the law — providing protection from arrest on all drug offenses, as well as protections against asset forfeiture, the revocation of parole or probation or the violation of restraining orders, for people who seek help for overdose victims. Some states have more limited laws where people assisting an overdosing individual receive protection but the individual themselves may not be protected from legal action. Alaska and Maryland have more limited Good Samaritan statutes. Utah requires and Indiana permits courts to take the fact that a Good Samaritan summoned medical assistance into account at sentencing.

In addition, Good Samaritan policies are in effect on more than 90 U.S. college campuses. Such policies have been proven to encourage students to call for help in the event of an alcohol or other drug overdose.[239]

PREVENTING PRESCRIPTION DRUG MISUSE AND THE RISING HEROIN EPIDEMIC

The prescription drug epidemic — and the related increase in heroin use, which is typically easier to access and cheaper for people who have become addicted to pain-killers — has some additional important strategies that can used to prevent mis-use. Some of these include:[240]

- **Education for providers:** Efforts should be increased to ensure responsible prescribing practices from every medical professional with the ability to prescribe painkillers and other prescription drugs. This includes increasing education of healthcare providers and prescribers to better understand how medications can be misused and to identify the signs of addiction so patients who need treat-ment can be referred for it.

- **Strengthening Prescription Drug Moni-toring Programs (PDMPs):** PDMPs can be a useful tool to help prescribers and pharmacists keep track of what medica-tions a patient is using — and also for health and other officials to track pat-terns of potential overprescribing by cer-tain healthcare professionals or clinics. Every state except Missouri currently has a PDMP, but the systems vary significantly in their capabilities and requirements for use. PDMP use should be mandated for providers in every state, and PDMPs should be modernized and fully funded so that they are real-time, can communicate across state lines and across different types of providers and are incorporated into electronic health records.

- **Education for patients — including par-ents and educators — and expanded take-back programs:** Many people as-sume that prescription drugs are safe be-cause they were at some point prescribed by a doctor. Public education should be ex-panded to ensure teens and their parents understand the risks of misusing prescrip-tion medications, as well as how to safely store and dispose of potentially addictive drugs. Efforts should also be expanded to provide increased information and training to educators about the epidemic, its harms and prevention strategies. This should include concerted efforts to discuss safe use of medications and monitoring use of painkillers when they are prescribed to teens — such as for sport-in-juries and removal of wisdom teeth — with parents and the patients themselves.

- **Information to pediatricians, doctors and school-based staff:** Additional ed-ucation and training is also needed for prescribers — as well as school-based health providers and educators about the prescription drug epidemic — including about issues of overprescribing and signs of potential misuse and ways to provide positive support to patients and students.

- **Increased research into alternative pain management strategies:** Additional research is needed into how to best ad-dress pain through other strategies that would reduce the potential for overuse and misuse of prescription pain medication.

- **Access to rescue drugs and expan-sion of Good Samaritan laws:** All states should expand protections for healthcare professionals to be able to prescribe naloxone — a drug that can be used to counter an overdose — for at-risk patients and families, and provide legal protection for individuals who help and report an overdose in good faith. Research has shown that availability of rescue drugs does not encourage or in-crease drug use.

INDICATOR 9:
TREATMENT AND RECOVERY SUPPORT FOR PRESCRIPTION DRUG MISUSE

Key Finding: 30 states and Washington, D.C. provide Medicaid coverage for all three FDA-approved medications for the treatment of painkiller addiction (as of 2014).

30 states and D.C. provide Medicaid coverage for all three FDA-approved medications for treatment of painkiller addiction. (1 point)		20 states do not provide Medicaid coverage for all three FDA-approved medications for treatment of painkiller addiction. (0 points)	
Alabama	New Hampshire	Alaska	Mississippi
Arizona	New Jersey	Arkansas	Montana
California	New Mexico	Colorado	Nebraska
Connecticut	New York	Idaho	North Dakota
D.C.	North Carolina	Illinois	Oklahoma
Delaware	Ohio	Indiana	South Carolina
Florida	Oregon	Iowa	South Dakota
Georgia	Pennsylvania	Kansas	Tennessee
Hawaii	Rhode Island	Kentucky	West Virginia
Maine	Texas	Louisiana	Wyoming
Maryland	Utah		
Massachusetts	Vermont		
Michigan	Virginia		
Minnesota	Washington		
Missouri	Wisconsin		
Nevada			

Source: American Society of Addiction Medicine

Accessible, affordable treatment is critical to helping individuals with substance use disorders be successful in recovery. Substance use treatment is paid for through a combination of federal, state and local government programs and services and/or coverage through private and public health insurance programs.

The United States faces a "treatment gap" for substance use disorders. Only around 10 percent of teens and adults who need treatment for substance use disorders get treatment. In 2013, 22.7 million Americans ages 12 and older needed treatment for a substance use problem, but only 2.5 million received treatment at a substance use facility.[241]

There are special considerations that need to be taken into account when providing treatment for teens and young adults. They are still maturing — and depending on their age and other factors may be at different developmental stages in their cognitive, emotional, social and physical development.[242, 243] Treatment plans must also take into account the types of substance use, if there are coexisting psychiatric disorders and other factors that impact treatment, such as family dynamics, motivation for treatment, gender, culture, ethnicity, self-esteem, peer group influences, and social influences. Teens under 18-years-old are also still minors and under the care and supervision of their parents or guardians, which impacts treatment options and decisions. Many are directed toward treatment in response to acute problems — such as difficulties in school or in the community, when family members become aware of a problems or noticeable behavioral changes — and many of these youth are not seeking treatment on their own or may seek treatment after experiencing the consequences of long-term substance use. A majority of teens in

publicly funded substance use programs have been referred to treatment through the juvenile justice system.[244] However, treating teens is particularly important because effective approaches can help prevent them from future substance use related problems as they transition into adulthood

There is currently no uniform consensus about the extent to which state governments or private insurers require coverage for substance use treatment. Around one-third of youth are covered under Medicaid or the Children's Health Insurance Program (CHIP), while a majority are covered under their parents' insurance plans.[245] The ACA requires plans that offer dependent coverage to make coverage available until the dependent reaches age 26. Most teens and many young adults rely on access to medical, behavioral and/or psychological care through their parents.

Prior to the ACA, about one-third of Americans covered in the individual market had no coverage for substance use disorder services.[246] With the passage of ACA, and in conjunction with the Mental Health Parity and Addiction Equity Act, substance use and mental health treatment and benefits have been expanded to approximately 60 million people.[247] However, even with the expanded benefits and services, individuals may still experience barriers to substance use disorder services. Often, even if addiction treatment is covered, there is a cap on how long or how many times a person can receive services.[248] Furthermore, the shift towards managed care has resulted in shorter average stays in treatment programs.[249] Many inpatient drug treatment centers continue to have Medicaid billing restrictions — limiting centers to only 16 beds — de-incentivizing treatment centers from

taking new patient's with expanded coverage.[250] There also remains a widespread shortage of substance use treatment providers, including state law limitations on the number of providers allowed to treat opioid dependence with buprenorphine.

Medicaid coverage of substance use treatment is one of many essential components in any strategy to ensure millions of Americans in need of treatment have affordable, accessible care. [251] State Medicaid programs currently provide a significant percentage of overall spending for substance use treatment — accounting for one in every five dollars spent as of 2009.[252]

Substance use disorder treatment for youth can include behavioral counseling, family-based approaches and ongoing recovery support and services.[253]

Treatment for prescription painkillers and other opioids is also typically most effective when it pairs counseling with Medication-Assisted Treatment (MAT), which can ease or eliminate the withdrawal symptoms and relieve cravings.[254, 255] Research indicates that MAT can increase retention and decrease drug use, infectious disease transmission and criminal activity.[256] Other research has shown that patients are more likely to relapse if they only go through a detoxification or are treated with one of the three approved treatment medications.[257]

The three medications approved by FDA to help treat painkiller addictions include methadone, buprenorphine or naltrexone. They act on the parts of the brain and neuropathways that have been affected and altered by opioids and provide a maintenance treatment, stabilize neurological processes, prevent opioid withdrawal, reduce chronic dependence and prevent relapse.[258]

The tested and approved options for treating individuals under the age of 16 are more limited. FDA has only approved use of the treatment drugs for ages 16 and older. While FDA has not approved the use of buprenorphine for pediatric use, some research indicates that it has been prescribed and has been effective for use by older adolescents.[259, 260] In select cases and in some states, opioid-dependent adolescents between the ages of 16 and 18 may be eligible for methadone treatment, provided they have two documented failed treatments of opioid detoxification or drug-free treatment and have a written consent for methadone signed by a parent or legal guardian.

States differ significantly in their Medicaid coverage for the three FDA-approved painkiller treatment medications.

This indicator examined which states provided Medicaid coverage for all three FDA-approved medications — which included 30 states and Washington, D.C., according to a review by the American Society of Addiction Medicine.[261]

- In addition, according to a 2014 report by SAMHSA, 30 states and Washington, D.C. have Medicaid fee-for-service programs that cover methadone maintenance treatment provided in outpatient narcotic treatment programs, including: Alabama, Arizona, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, Texas, Utah, Vermont, Virginia, Washington and Wisconsin.[262] Another three states reported that

methadone treatment is funded in their state through using funds from their Substance Abuse Prevention and Treatment Block Grant (federal program) and/or state or county funds: Alaska, Illinoi and Nebraska.[263, 264]

Even for those providing MAT coverage, a number of states and insurance providers have placed lifetime limits on coverage of buprenorphine-naloxone treatment. Given that addiction is a recurring illness, multiple courses of treatment are often necessary and placing restrictions on the number of treatment courses covered can prevent many addicts from receiving life-saving treatment. Three states (Illinois, Michigan and Washington) and Washington, D.C., established a 1-year limit in total length of treatment with buprenorphine-naloxone, six states (Arkansas, Maine, Mississippi, Montana, Virginia and Wyoming) established a 2-year treatment limit, and one state (Utah) established a 3-year treatment limit.

Physicians, other healthcare providers and treatment centers must receive special authorization under federal law to treat painkiller addiction with controlled substances, including methadone and buprenorphine so the number of providers and availability of medications for treatment is limited and often difficult for patients to access, and there is also a limit to the number of patients each authorized doctor may treat with the drugs.

Approximately two-thirds of states have fewer than six medical professionals per every 100,000 people approved to treat patients with buprenorphine — Indiana has the fewest at 0.7 per 100,000 people and Arizona has the highest at 33.1 per 100,000 people.[265]

31 states and Washington, D.C. have taken action to roll back "one-size-fits all" sentences for nonviolent drug offenses. (1 point).		19 states have not taken action to roll back "one-size-fits all" sentences for nonviolent drug offenses. (0 points)	
Arkansas	Minnesota	Alabama	North Carolina
California	Mississippi	Alaska	South Dakota
Colorado	Missouri	Arizona	Tennessee
Connecticut	Nevada	Florida*	Utah
D.C.	New Jersey	Idaho	Vermont
Delaware	New Mexico	Iowa	Washington
Georgia	New York	Kansas	West Virginia
Hawaii	North Dakota	Montana	Wisconsin
Illinois	Ohio	Nebraska	Wyoming
Indiana	Oklahoma	New Hampshire	
Kentucky	Oregon		
Louisiana	Pennsylvania		
Maine	Rhode Island		
Maryland	South Carolina		
Massachusetts	Texas		
Michigan	Virginia		

Sources: The Vera Institute of Justice for 2000-2013 laws. For 2014 updates, The Sentencing Project, National Conference of State Legislatures and additional legislative scans for states meeting the thresholds set by the Vera Institute review.

Note: * In 2014, Florida rolled back some minimum sentencing requirements for prescription drug possession/sales.

INDICATOR 10: SENTENCING REFORM

Key Finding: 31 states and Washington, D.C. have taken action to roll back "one-size-fits-all" sentences for nonviolent drug offenses.

In the 1980s and 1990s, a series of "tough on crime" laws were adopted, including a number of drug laws which were developed as an attempt to deter drug use and sales. Many of these laws and practices included longer mandatory sentences for specific types of drug offenses and sentencing youths as adults. Research shows, however, that these laws have done little to deter crime, reduce recidivism or "rehabilitate" individuals. They have resulted in rapid growth in prison, probation and parole populations — with corresponding increases in correctional system spending — while harming the development and future prospects of many of the nation's youth.[266]

Around 73,000 individuals ages 10- to 17-years-old, more than 15,700 individuals ages 18- to 19-years-old and 173,200 individuals ages 20- to 24-years-old are incarcerated.[267] Of those ages 17 and younger, around 1,200 are in state adult correctional facilities (23 percent of those are in New York and Florida).[268]

FIGURE 2
Inmates age 17 or younger held in adult state and federal prison facilities, 2000–2013
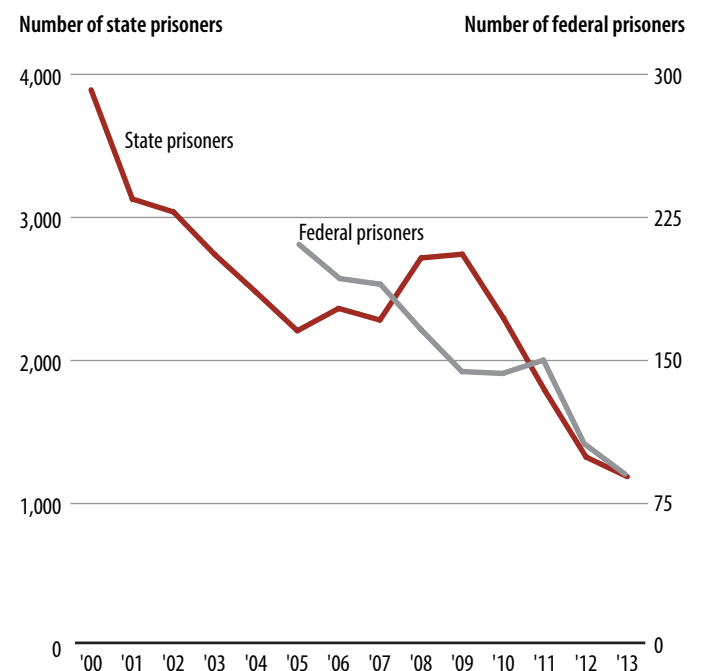
Note: Counts based on inmates age 17 or younger in custody of state and federal correctional authorities, regardless of sentence length. The Federal Bureau of Prisons holds inmates age 17 or younger in private contract facilities. Counts for BOP may include some inmates under the jurisdiction of U.S. probation being held by the BOP in private contract facilities.

Source: Bureau of Justice Statistics, National Prisoner Statistics Program, 2000–2013.

Community-based programs have shown to reduce recidivism by up to 20 percent.

- Youth incarceration costs state and local governments as much as $21 billion annually — costing states an average of $400 per person per day and over $140,000 per person per year.[269]

- Black youth (605 per 100,000) are almost five times more likely to be incarcerated than Whites (127 per 100,000), and Latino and American Indian youth are two to three times more likely to be incarcerated.[270]

- For all ages: more than half of individuals in federal prisons (98,200 out of 193,775) were sentenced for drug offenses; 16 percent of individuals in state prisons (210,000) were sentenced for drug offense — 25 percent of females in state prisoners and 15 percent of males in state prison had a drug offense (in 2012).[271]

State & Federal Prison Population by Offense, 2014

Federal | State

	Federal		State
Violent	7.3%		53.2%
Drug	50.1%		15.7%
Property	6%		19.3%
Public Order	35.9% (Immigration 8.9%, Weapons 15.9%, Other 11.1%)		11%
Other	0.7%		0.8%

Source: Carson, E.A. (2015). *Prisoners in 2014.* Washington, D.C.: Bureau of Justice Statistics.

- In 1980, the total number of Americans incarcerated for drug offenses was 41,000. In 1986, the average time served for a federal drug offense was 22 months. Due to changes in increased mandatory minimums, by 2004, the average time served for comparable offenses was 62 months.[272]

This indicator examines actions states have taken to revisit mandatory or one-size-fits-all sentencing for nonviolent drug offenses.

When teens and young adults are arrested, incarcerated or under correctional supervision — even for minor offenses — their development is impaired and their education and employment prospects become severely limited.

The majority of youth (40 percent) who are incarcerated are institutionalized for nonviolent offenses — such as probation violations, drug possession, low-level property offenses (including status offenses which are not considered crimes among adults, such as school truancy, alcohol possession, curfew violations). Imprisonment of individuals with nonviolent offenses — including for drug offenses — is less cost-effective than other alternative strategies — where for every $1 invested a state receives $0.29 to $0.39 in public safety benefits versus a $7 return for drug misuse treatment.[273]

Incarceration can have long-term negative consequences for youth — putting them at increased risk for developing psychological issues, such as stress related illnesses, psychiatric problems and suicidal behavior, and lowering their ability to develop social skills, such as self-control and conflict resolution.[274] Youth who have been incarcerated are less likely to graduate from high school and more likely to have unstable employment and reduced earning potential, and are in worse health, including increased risk of mortality.[275, 276]

In many states, individuals are required to declare that they have been convicted of a crime on many job and housing applications. In addition, youth who have been incarcerated have high rates of recidivism — one-third of incarcerated youths return to jail or prison within a few years after being released.

Instead of incarceration — early intervention approaches and connection to services and treatment have a more effective impact for deterring youth from the judicial system and preventing youth from being at risk for developing a range of physical and mental health problems and risk of institutional violence.[277] For instance, community-based programs have shown to reduce recidivism by up to 20 percent and programs like multi-system therapy and functional family therapy are more cost-effective than incarceration — every dollar spent yields up to $13 in benefits in public safety.[278] Large states like California, Illinois, New York, Ohio and Pennsylvania are realigning their fiscal resources away from correctional institutions and towards more community-based services — resulting in curbing the number of repeat offenses and crimes committed by youth.[279] Between 2001 and 2011, incarceration of youths dropped 46 percent, and the rate of crimes committed by youth decreased 31 percent.

Thirty-one states and Washington, D.C. took steps between 2000 and 2014 to roll back mandatory sentences that apply to "one-size-fits-all" sentences for certain types of nonviolent offenses — most of which focused on adjusting penalties for nonviolent drug offenses through use of one or a combination of the following reform approaches:

- **Expanding judicial discretion by creating so-called "safety valve" provisions.** These laws allow judges to depart from statutorily prescribed mandatory penalties by taking into account certain circumstances or conditions;

- **Limiting automatic sentence enhancements.** These laws limit or adjust circumstances that trigger longer sentences, like speeding in a construction zone or selling drugs within a certain distance from a school; and/or

- **Repealing or revising mandatory minimum sentences.** Mandatory minimum sentences fail to distinguish between low-level non-violent offenses and serious, violent offenses and the role of an individual in a crime (e.g., a low level offense of carrying drugs can receive same penalty as a drug kingpin).

The information are based on a legislative review conducted by the Vera Institute of Justice's Center on Sentencing and Corrections for legislation between 2000 and 2013 — and was updated to include 2014 information from reviews of legislative scans conducted by the Sentencing Project's *The State of Sentencing 2014: Developments in Policy and Practice* and the National Conference of State Legislatures.[280, 281, 282]

In addition, a review by the Campaign for Youth Justice found that 23 states had made changes in their juvenile justice policies in the past decade, reducing the prosecution of individuals ages 17 and younger in the adult justice system or preventing minors from being placed in adult jails or prisons.[283] Around 95 percent of approximately 250,000 individuals under the age of 18 tried in adult courts nationwide are non-violent offenders. Minors placed in the adult justice system have significantly higher rates of recidivism and are 36 times more likely to commit suicide than those in juvenile detention facilities. As of the 2014 review:

- Eleven states had enacted laws limiting states' authority to house youths in adult jails and prisons: Colorado, Hawaii, Idaho, Indiana, Maine, Nevada, Ohio, Oregon, Pennsylvania, Texas and Virginia;

- Five states increased the age for juvenile court jurisdiction (where older teens cannot automatically be tried in adult courts): Connecticut, Illinois, Massachusetts, Mississippi and New Hampshire;

- Fourteen states and Washington, D.C. revised laws on the transfer of youth to the adult criminal justice system, making it more likely young people remain in the juvenile justice system: Arizona, Colorado, Connecticut, Delaware, Indiana, Illinois, Maryland, Nebraska, Nevada, New York, Ohio, Utah, Virginia and Washington; and

- Twelve states changed mandatory minimum sentencing laws: California, Colorado, Florida, Georgia, Hawaii, Indiana, Iowa, Missouri, Ohio, Texas, Washington and West Virginia.

SENTENCING REFORM: EXAMPLE EFFORTS AND APPROACHES

New York City

New York State's Rockefeller drug laws, enacted in 1973, mandated lengthy prison sentences for people convicted of a range of felony drug offenses and contributed to dramatic increases in state prison populations. In 2009, they were essentially dismantled in reforms that eliminated mandatory minimum sentences for the possession, use, or small-scale sale of illicit drugs and increased eligibility for diversion to treatment. [284]

The National Institute of Justice-funded study focusing on New York City, found that drug law reform led to a 35 percent rise in the rate of diversion of individuals eligible to treatment, which is associated with reduced recidivism rates. Thirty-six percent of a sample of individuals who received treatment following the reforms were re-arrested within two years, compared to 54 percent of those who were sentenced to prison, jail, probation, or time served before the laws changed. Racial disparities were cut in half as well.

California

In November 2014, California voters passed Proposition 47, a law that changes some low level crimes like drug possession and minor theft from potential felonies to misdemeanors. State prison cost savings from the changes will be invested in grants for drug treatment and mental health services for people in the criminal justice system, programs for at-risk students in K-12 schools and victim services. [285]

Drug Courts

Drug courts are a partnership-based, problem solving-solution to drug use and misuse. The courts intend to help non-violent drug offenders get rehabilitation and recovery to prevent further drug and social problems. As such, a wealth of partners (law enforcement, treatment, social service, mental health, judiciary, prosecution, and defense and probation communities) work together. While drug courts vary based on the jurisdiction, a typical drug court requires individuals to take random drug testing; attend treatment and counseling; and meet with probation officers and/or social workers. If an individual successfully completes the program, he/she likely avoids having a conviction on their record and jail time. [286] The Government Accountability Office conducted an analysis of 23 different adult drug court programs, finding lower rates of re-arrest/re-conviction and fewer recidivism events across different types of offenses. [287] Other research suggests drug courts: [288]

- Reduce crime — 75 percent of drug court graduates remain arrest free for at least 2 years;
- Save money — for every $1 spent on drug courts, taxpayers save up to $3.36 in fewer future criminal justice costs and up to $27 for every dollar in total;
- Combat addiction — courts increase methamphetamine treatment program graduation rates by nearly 80 percent; and
- Restore families — family re-unification is 50 percent higher for Family Drug Court participants.

Mental Health Courts

Mental health courts take a similar approach to Drug Courts by substituting a problem-solving model for the traditional court process and taking a partnership approach to prevent future crimes. Participants voluntarily participate in a treatment plan that was built by court staff and mental health professionals, with the entire process supervised by the judicial system. Additionally, programs often link offenders to vital community services such as housing, healthcare and life skills training to help prevent relapse. A recent Urban Institute study evaluated the effectiveness of the Bronx Mental Health Court programs, finding participation reduces the chance of being re-arrested and that those who recidivate are more likely to commit drug crimes rather than violent crimes. [289]

Reclassifying Offenses

Another type of sentencing reform is reclassifying offenses so that "the punishment fits the crime." [290] Some states found that their felony classes (A, B, C, D, etc.) and their sentencing structures did not sufficiently differentiate between minor and serious offenses and that, in many cases, penalties were too harsh. For example, in Indiana, three grams of cocaine with intent to deliver carried a harsher sentence than rape. A number of states, including Indiana, along with Colorado, Connecticut, Maryland, Oregon, South Dakota and Vermont, reclassified offenses to realign their sentencing, creating more felony categories per type of criminal offense, reclassifying low-level crimes from felonies to misdemeanors and introducing or increasing felony thresholds for certain crimes.

"BAN THE BOX" FAIR CHANCE EMPLOYMENT LAWS

As of September 2015, 18 states, Washington, D.C. and more than 100 additional cities and counties have adopted "ban the box" fair chance employment laws, which limit the ability of employers to ask applicants about conviction histories to help reduce the stigma or discrimination when candidates apply for jobs, delaying the background check inquiry until later in the hiring process. [291] States with ban the box laws include: California, Colorado, Connecticut, Delaware, Georgia, Hawaii, Illinois, Maryland, Massachusetts, Minnesota, Nebraska, New Jersey, New Mexico, Ohio, Oregon, Rhode Island, Virginia and Vermont.

Conclusions and Recommendations

Preventing and reducing teen substance misuse is important for improving the health and quality of life for millions of young Americans.

Currently, however, many of the most effective strategies and policies for achieving this goal are not being widely used or well implemented.

The rapid rise of prescription drug and heroin use epidemics makes it imperative to act quickly — and the progress that has been made toward reducing alcohol, tobacco and other drugs misuse shows that redoubled efforts can make a significant difference in persistent concerns.

TFAH has identified a set of recommendations to modernize the nation's strategy to substance use using research-based approaches to support a full continuum-of-care that:

A. Puts prevention first — using evidence based approaches across communities and in schools;

B. Makes screening and early intervention routine practice — including connecting teens and families to support services; and

C. Supports comprehensive and sustained treatment and recovery.

Achieving these goals will require a much stronger investment in the well-being of children and teens — leading to a return of improved outcomes not just during youth but for a lifetime. It will also mean thinking differently about some aspects of school, health and social service delivery and funding systems — in pragmatic, achievable ways.

A. PUTTING PREVENTION FIRST

Research shows that the most effective prevention strategies focus on reducing risks and boosting protective factors starting early in a child's life — and continuing through the tween, teen and early adult years. Putting prevention first would be a marked shift in national substance misuse policy — since traditionally, the policy has been focused on when problems are emerging or have already emerged, which is often too late to have as strong a benefit.

Despite more than 40 years of research, most prevention approaches have not translated into widespread, regular real-world use. In recent years, there have been even more advances in brain science and evaluations of prevention programs that can help inform the development and successful implementation of effective programs. Many of these efforts support general well-being and development — and may not necessarily be viewed as "substance abuse prevention" strategies — but they have been shown to have the largest impact.

Some key recommendations include that efforts must:

Start Younger — and Sustain Support throughout Youth: The most effective way to prevent and reduce substance misuse is to invest upstream — before problems emerge — partnering with larger positive development programs that help build protective factors and reduce risks for children, youth and families. Support must be sustained over time, particularly when tweens and teens reach life transition points. For instance, addressing early risk signs — such as behavior and academic concerns in preschool or elementary school — and providing multi-generational services that support parents as well as young children can have some of the biggest long-term payoffs.

Integrate School-based and Wider Community Efforts — via Multisector Collaboration: Studies repeatedly show that strategies work best when they are integrated and reinforce each other — at home, in schools, within the community and in media. To achieve optimal results, efforts must engage families, schools and school systems, peers (including youth themselves and youth advocates), health professionals and insurers, mental and behavioral health specialists, non-traditional health providers, counselors, social services, juvenile justice programs, community and faith groups, colleges and employers to work together as partners to have a reinforcing effect. Local multi-sector coalitions or collaborations that engage a range of stakeholders can help bring different expertise areas, perspectives, resources and the potential for diverse funding streams to support child and youth development. The goal is not to duplicate cross-sector efforts already in place — but to build onto and integrate with existing child and youth development collaborations in a community and state.

Prioritize the Collection, Analysis and Integration of Teen Health, Well-being and Services Data to be Able to Better Assess Trends and Target Services and Programs: Currently, most communities do not have enough quality information to develop strategies and target programs in the most effective and efficient ways possible. It is essential to have good measurement to understand the issues within a community; be able to match the most effective types of programs to those needs; and to assess how effective the programs are at reducing risks, increasing protective factors and lowering substance use rates. There needs to be more systematic and standardized systems for collecting and correlating data — to do needs assessments, measure results and assure accountability of efforts. A better understanding of how child and teen health trends, patterns of underlying risk and protective factors, social service supports, income and nutrition assistance programs interrelate are important to be able to:

- Match the most appropriate types of programs with community needs;

- Understand how to evaluate the effectiveness of programs and adjustments that may need to be made; and

- Ensure accountability and demonstrate the ongoing value of programs and services. This data collection and analysis can functionally serve as electronic health records at a community level — and are essential to effectively determine strategies, deliver programs, assess the impact of efforts and determine how to best allocate resources.

Current federal surveys, including NSDUH, YRBS and MTF, all provide different and important data. However, it important to find ways to better understand how the data work together to evaluate trends and implement policies and programs. The federal government should support an evaluation to determine how to align and update the surveys — and determine what changes should be made, such as including additional questions to measure risk and protective factors in communities (such as those asked in the Communities that Care and/or the Pennsylvania Youth Survey) and also how to make the data available and accessible for communities to use to inform their needs assessments and evaluations. Communities should be trained in ways to collect and use real-time data to inform and improve on their prevention and public health strategies for reducing substance misuse and improving youth well-being.

Have End-to-End Support — From Selection to Implementation to Evaluation and Improvement: An expert and technical assistance backbone support organization at the state level provides assistance to help programs be successful and sustained over time. Strategies, programs and services need end-to-end support — including through networks of experts, access to research and evidence-based practices and guidance on multi-sector collaboration. A backbone organization — housed at an academic center or a nonprofit organization — can provide assistance to support the development and efforts of community-based multi-sector collaborations and coalitions — and to help identify and braid different funding streams. One model is to have a public-private partnership "backbone" organization in a state that can:

- Provide needs assessments to match the best policy and program choices to a specific community's needs;

- Ensure programs are adopted and implemented successfully by providing training support for a range of professionals from different backgrounds and sectors; technical assistance; and access to learning networks;

- Engage and sustain the participation of a wide range of stakeholders and partners;

- Provide technical support and ongoing data collection and analysis — performing regular evaluations to measure results, ensure accountability and inform continuous quality improvement and updates to improve programs. Community level analyses can help identify patterns of concerns — including of risks and protective factors — and help understand where and how to direct programs and efforts; and

- Continue to build the evidence base by ensuring implementation with high fidelity and building the networks and relationships to conduct additional research.

Support Sustained and Multi-sector Funding for Youth Development: Improved models should be developed to allow for sustained resources for youth development programs — in schools and communities — and for cross-sector coalitions. Since successful programs require the participation of multiple stakeholders, it is important to find better systems for both requiring multisector participation to receive funding for programs and allowing for flexibility to use and leverage multiple funding streams to support efforts. Investing in prevention yields longer-term returns in reduced costs for a wide range of healthcare and social service needs.

- At a federal level, programs and grants across agencies — including the Department of Education, SAMHSA, CDC, Office of National Drug Control Policy (ONDCP), DOJ and others should be fully funded and coordinated to be mutually reinforcing and integrated through the National Prevention Council or other similar mechanism — to cut down on bureaucracy and leverage resources. Requirements of programs should include the adoption and effective implementation of evidence-based programs; incentives and flexibility to support multi-sector collaboration; state, local and/ or private matching resources and maintenance of a state-level backbone organization to support local grantees; and evaluations and accountability;

- At a state and local level, there should be ongoing support for assuring a strong expert backbone organization is established and maintained — and all available mechanisms are used to sustain and braid public and private funding steams to support place-based youth development initiatives. At a minimum, all HHS programs and the Department of Education should work to ensure collaboration and coordination across programs and funding of existing and new resources; and

- Non-traditional funding mechanisms should be explored, including for outcome-based health reform models (including Accountable Health Communities), working with community benefit programs at nonprofit hospitals, pay-for-success programs and/or the delegation of sin taxes, such as those from legalized marijuana, alcohol or tobacco sales, to support substance use prevention and treatment efforts. The Center for Medicare and Medicaid Innovation (CMMI) should also explore the advantages of supporting backbone organizations in states — which result in achieving better health outcomes and lowering healthcare spending.

| NIDA'S PREVENTING DRUG USE AMONG CHILDREN AND ADOLESCENTS: A Research-Based Guide for Parents, Educators and Community Leaders	
Key Principles for Successful Substance Use Prevention Programs	
More than 40 years of research shows that:	
• Prevention efforts are most successful when they address the individual level and community influence concerns.	
• Integrated strategies should include "universal" approaches that benefit all individuals, "targeted" support for children and teens and communities with increased risk and "indicated" programs for those who are already using substances.	
	Prevention Principles
Risk Factors and Positive Factors	Programs should enhance protective factors and reverse or reduce risk factors.
	• Risk involves the relationship between the number and type of risk factors and protective factors.
	• The potential impact of specific risk and protective factors changes with age.
	• Early intervention often has a greater impact than later intervention — changing a child's trajectory away from problems and toward positive behaviors.
	• Risk and protective factors impact the entire population, but can have different effects also depending on age, gender, ethnicity, culture and environment.
	Programs should address all forms of substance use — legal and illegal — and the potential for use in combination.
	Programs should target specific community risks.
	Programs should be tailored to match the intended group or audience — such as being age or culturally appropriate.
Family-Based Prevention	Family-based programs should enhance bonding and relationships, including accurate education about risks of substance use, developing parenting skills and clear limit setting.
School-Based Prevention	Preschool programs should address risk factors such as aggressive behavior, poor social skills and academic difficulties.
	Elementary school programs should also address academic and social-emotional learning — addressing aggression, academic difficulties and school dropout or absenteeism.
	Middle and high school programs should increase academic and social competence — including study habits and academic support; communication, peer relationships; self-efficacy and assertiveness; drug resistance skills; reinforcement of antidrug attitudes; and strengthening personal commitments against drug use.
Community Programs	General community programs should focus on periods of life transitions — such as transition to middle school — can benefit the entire population, not just high-risk families.
	Community programs that combine two or more effective programs — such as family-based and school-based programs — can be more effective than a single program alone.
	Community programs across multiple settings (schools, clubs, faith-based organizations, media, etc.) are most effective when they present consistent, community-wide messages in each setting.
Prevention Program Delivery	When communities adapt programs to match their needs, community norms or cultural requirements, they should retain core elements of the original research-based interaction (structure, content and delivery).
	Programs should be long-term with repeated interventions to reinforce the original goals. Research shows that the benefits from middle school prevention programs diminish without follow up programs in high school.
	Prevention programs should include teacher training on good classroom management practices, such as rewarding appropriate behavior, in addition to fostering positive peer behavior, achievement, academic motivation and school bonding.
	Prevention programs are most effective when they employ interaction — such as peer discussion groups, parent role-playing — that allow for active involvement in learning about drug use and reinforcing skills.
	Research-based prevention programs can be cost-effective — saving up to $10 in avoided treatment for every $1 invested.

PUBLIC-PRIVATE NETWORK MODELS

Evidence-based Prevention and Intervention Support Center (EPISCenter)

Evidence-based Prevention and Intervention Support Center is a state-level prevention support system that helps connect research, policy and the real-world practice of child and youth development programs.[292] The center serves as a backbone organization that promotes the dissemination, high-quality implementation and sustainability of: community-level infrastructure for prevention planning; evidence-based programs and practices; and continuous improvement of locally-developed juvenile justice and substance use programs, which also provide much broader support for positive childhood and youth development. They help communities assess their specific needs through a process designed to help communities identify and prioritize the risk and protective factors they want to focus on; and provide information about which programs and interventions can help best address the identified needs (many of which start in early childhood and continue through youth) technical assistance and support for quality implementation of the programs and evaluations of efforts and continued community needs. EPISCenter also supports the Pennsylvania Youth Survey — which helps communities collect data about rates of substance use as well as underlying protective and risk factors to inform needs assessments and evaluations.

EPISCenter is a collaborative partnership between the Pennsylvania Commission on Crime and Delinquency (PCCD), the Pennsylvania Department of Human Services (DHS) and the Bennett Pierce Prevention Research Center, College of Health and Human Development at Penn State University.

Translating Science to Practice
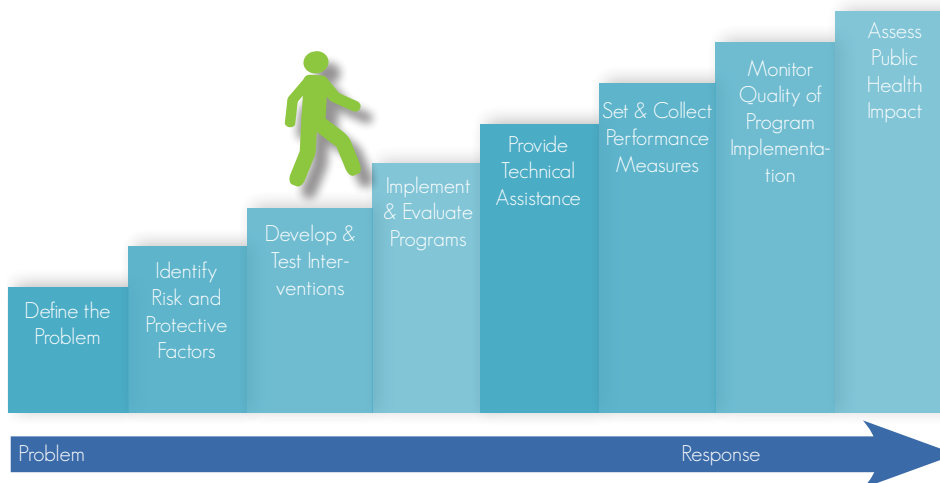
This diagram shows the multiple, coordinated steps involved in taking research from the lab into communities ("research to practice"). The first four steps show the research activities that lead up to introducing programs into the field. The last four steps show the translation and implementation activities that are undergone to run programs in "real-world" settings.

Source: EPISCenter, 2014

Source: The UW Center for Communities that Care

Communities that Care

Communities that Care (CTC) was developed and tested by researchers at the Social Develop Research Group at the University of Washington to provide a prevention-planning system and network of expert support for the use of evidence-based approaches to promote the positive development of children and youth and prevent problem behaviors, including substance use, delinquency, teen pregnancy, school drop-out and violence.[293] Hundreds of U.S. and international communities have used the approach, which includes involving all parts of a community — engaging multi-sector collaboration — to target predictors of problems, rather than waiting for problems to occur. It is grounded in research from public health, psychology, education, social work, criminology, medicine and organizational development.

A randomized controlled test of CTC programs in 24 communities across seven states that followed 4407 5th grade youth found that by the spring of 8th grade, significantly fewer students from CTC communities had health and behavior problems, and were 25 percent less likely to have initiated delinquent behavior; 32 percent less likely to have initiated alcohol use; and 33 percent less likely to have initiated cigarette use.[294] The results were sustained through 10th grade; by the end of 10th grade, these students also had 25 percent lower odds of engaging in violent behavior. Cost-Benefit analyses find a $4.23 benefit for every dollar invested in the Communities that Care operating system. Another long-term study found that 12th graders who were part of the CTC-prevention system were more likely than their non-CTC prevention system peers to have abstained from any drug use (32 percent); were more likely to have avoided ever using alcohol, cigarettes or marijuana (31 percent); were more likely to have avoided delinquent behavior (18

percent); and were less likely to have engaged an act of violence (14 percent).[295]

The CTC operating system approach allows each community to conduct its own needs assessment using the CTC survey. The Communities that Care Youth Survey helps identify prevalence rates — but also measures a comprehensive set of risk and protective factors that affect a community's teen populations — which are factors that impact academic performance and positive youth development, as well as problems that inhibit development, which provide communities with important information on risk and protective factors. The community creates its own data-based community need profile; develops a focused, long-range community action plan for building on existing resources and filling gaps with new tested, effective programs, policies and practice that best match community needs. It helps bring together elected officials, youth, parents, law enforcement, schools, public health officials, agencies and organizations serving local youth and families, the faith community, the business community and residents. It also includes evaluation tools to understand the impact and ongoing/remaining concerns within a community. CTC uses a five-phase process, including:

- **Getting Started** (Phase 1): defining the community to be involved; recruiting a community-leader champion to guide the process; assessing community conditions, activities and initiatives that may affect readiness; identifying building blocks and stumbling blocks; and identifying community stakeholders who need to be involved.

- **Getting Organized** (Phase 2): educating and engaging identified stakeholders; developing a shared vision for the future of the community's children; and putting an organizational structure in place to help the community move toward the vision.

- **Develop a Community Profile** (Phase 3): collecting community-specific data; constructing a profile from the data — allowing the community to analyze its unique strengths and challenges; collecting data on risk factors and protective factors to help the community focus efforts and resources; identifying and assessing community resources that currently address the priority risk and protective factors; and identifying gaps to be filled in existing resources by expanding the resources or implementing new, tested effective approaches.

- **Create a Community Action Plan** (Phase 4): defining clear, measurable desired outcomes using the community profile; reviewing evidence-based programs that best match the community's self-identified needs and priorities; and creating plans for putting new tested, effective programs, policies and practices into place; and developing an evaluation plan for collecting and analyzing data to measure progress toward desired outcomes.

- **Implement and Evaluate** (Phase 5): forming task forces to put the evidence-based programs, policies and/or practices into place; identifying policymakers, organizations, service providers and practitioners to implement the chosen approaches; training implementers; building and sustaining collaborative relationships among organizations and other stakeholder groups; developing information and communication systems to support the collaboration; educating and involving the entire community; adjusting programing to meet plan goals; and celebrating successes.

Partnerships in Prevention Science Institute at Iowa State University[296]

Since the early 1990s, the Partnerships in Prevention Science Institute has been a large-scale research program focused on interventions designed to build family and youth competencies, which would likely prevent substance use and other behavioral problems. The Institute intends to enhance the well-being of participating families and children through scientifically-tested programs and practices by forging important community partnerships. The goal of all Institute research is to increase youth competencies, strengthen families, reduce youth problem behaviors, and improve community capacity to implement scientifically-tested prevention interventions.

Over the past few decades, 17 studies have been conducted, including six randomized, controlled intervention outcome studies. Altogether the Institute's research has resulted in long-term reductions in substance use; long-term positive effects on school engagement and academic success; long-term conduct/behavior problem reduction; positive youth protective factor and skills-building outcomes; and positive returns on investments. Additionally, the Institute has demonstrated that the types of partnerships they utilize — school-community-university — are effective in delivering evidenced-based interventions and evaluating these interventions. Some major programmatic findings include:[297]

- Iowa Strengthening Families Program (ISFP) — estimated reduction of adult alcohol use disorder rates by 13 percent, returning $9.60 for every $1 spent in implementing;

- Preparing for the Drug Free Years (PDFY) — estimated reduction of adult alcohol use disorder rates by 6 percent, returning $5.85 for every $1 spent on the program;

- Life Skills training returned $25.61 for every $1 invested; and

- Project Alert returned $18.02 for every $1 invested.

PROSPER

The PROSPER project (PROmoting School/community-university Partnerships to Enhance Resilience), developed by the Institute and the cooperative extension, is an evidence-based delivery system for supporting sustained, community-based implementation of scientifically-proven programs that reduce adolescent substance use or other problem behaviors and promote youth competence. The PROSPER delivery system has been shown to reduce a number of negative behavioral outcomes, including drunkenness, smoking, marijuana use, use of other substances and conduct behavior problems, with higher-risk youth benefiting more.[298, 299, 300] PROSPER also demonstrates positive effects on family strengthening, parenting and youth skills outcomes and reduces negative peer influences.[301, 302]
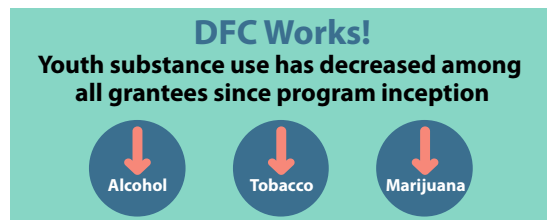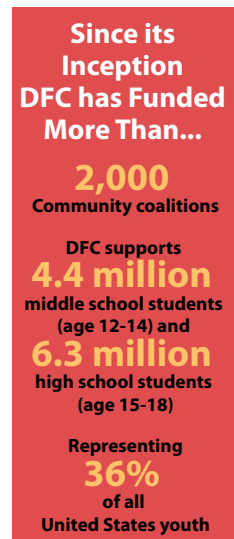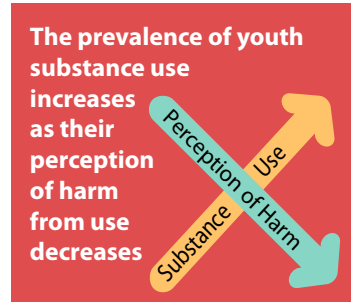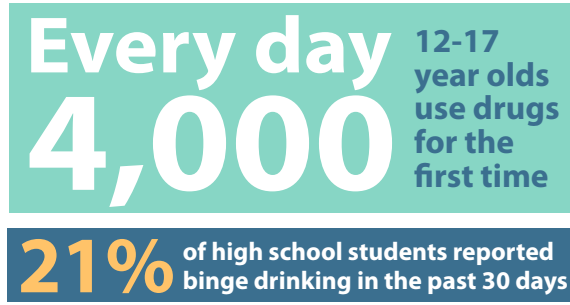
COMMUNITY PROGRAMS

Community partnerships are a necessary component of any strategy to reduce prescription drug use and misuse.

One major system for support of substance use prevention is the Community Anti-Drug Coalitions of America (CADCA), a national membership organization that works to strengthen the capacity of community coalitions to create and maintain drug-free communities. CADCA has engaged in ongoing educational and communications efforts around prescription drug use including putting out publications to provide community anti-drug coalitions with the research and tools they need to implement effective prevention strategies and training community anti-drug coalitions in effective community problem-solving strategies using local data.[303]

The federal grant program Drug Free Communities Support Program (DFC) provides funding to community-based coalitions that organize to prevent youth substance use. The program is a match, meaning that all grantees must secure dollar-for-dollar non-federal funds, which demonstrates the community buy-in and participation necessary to be successful.[304]

DFC was funded at $93.5 million in FY 2015. The President's FY 2016 budget requests $85.7 million — a $7.8 million cut to the program.

DFC-funded community coalitions have achieved significant reductions in youth alcohol, tobacco, and marijuana use.[305] For middle school youth living in DFC-funded communities, data from the DFC National Evaluation indicate a

Every day 4,000 12-17 year olds use drugs for the first time

21% of high school students reported binge drinking in the past 30 days

The prevalence of youth substance use increases as their perception of harm from use decreases

Perception of Harm

Substance Use

Drug-Free Communities

Youth

Parents

Substance Abuse Organizations

Business

State/Local/Tribal Government

Local Problems Require Local Solutions

Media

Healthcare Professionals

Schools

Religious/Fraternal Organizations

Civic/Volunteer Organizations

Law Enforcement

Youth Serving Organizations

Since its Inception DFC has Funded More Than...

2,000
Community coalitions

DFC supports
4.4 million
middle school students (age 12-14) and
6.3 million
high school students (age 15-18)

Representing
36%
of all United States youth

Coalition Strategies

Providing Information

Enhancing Skills

Changing Physical Design

Providing Support

Enhancing Access/Reducing Barriers

Changing Consequences

Modifying/Changing Policies

DFC Works!
Youth substance use has decreased among all grantees since program inception
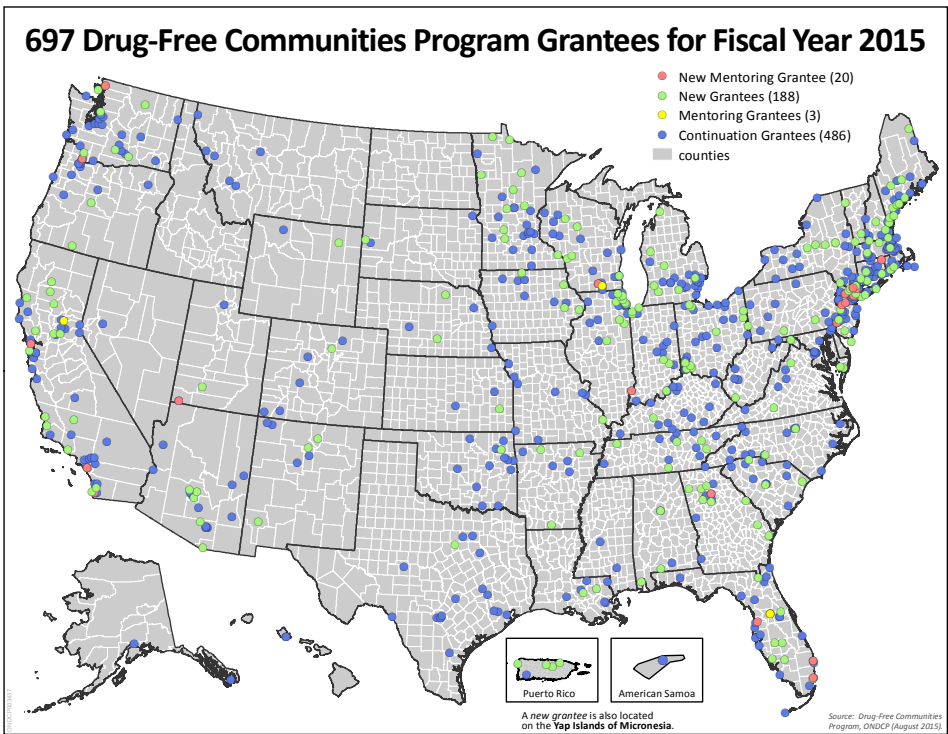
Alcohol

Tobacco

Marijuana

Sources:
SAMHSA-NSDUH 2013
Monitoring the Future 2012
2012 DFC National Evaluation Report
YRBS 2013

Source: Office of National Drug Control Policy, Drug-Free Communities

24.4 percent reduction in alcohol use, 29.4 percent reduction in tobacco use and 15.1 percent reduction in marijuana use. High school-aged youth have reduced their use of alcohol by 15.5 percent, tobacco by 23.7 percent and marijuana by 4.9 percent in DFC-funded communities.

DFC funded community coalitions reported significant decreases in past 30-day illicit prescription drug use. Data from the DFC National Evaluation indicate a 21.4 percent reduction in past 30-day illicit prescription drug use for middle school youth and a 14.5 percent reduction for high school youth.

697 Drug-Free Communities Program Grantees for Fiscal Year 2015

- ● New Mentoring Grantee (20)
- ● New Grantees (188)
- ● Mentoring Grantees (3)
- ● Continuation Grantees (486)
- ▢ counties

Puerto Rico

American Samoa

A *new grantee* is also located on the **Yap Islands of Micronesia**.

Source: Drug-Free Communities Program, ONDCP (August 2015).

SAMHSA PARTNERSHIPS FOR SUCCESS (PFS) GRANTS

PFS supports a positive change approach at the community level by providing funding to eligible jurisdictions to reduce rates of substance misuse by increasing the state and local capacity to prevent misuse in the first place.[306] The partnerships are aimed at filling gaps in preventive services and helping states lend assistance to the highest need areas. Successful programs leverage, redirect and realign funding for prevention. Another important element of PFS is bringing SAMHSA's Strategic Prevention Framework to a national scale by providing grant recipients with opportunities to acquire additional funding.

SCHOOLS: EXPANDING THE ADOPTION AND IMPLEMENTATION OF EVIDENCE-BASED PROGRAMS

Traditionally, substance use prevention programs have often been targeted via schools — but schools cannot solve the problem alone, and school-based programs cannot work in isolation.

However, schools will always be a central component of any strategy. Children and teens spend a significant amount of time at school and with peers they meet at school, and they are influenced by what they learn and culture of the school. More than 90 percent of the 42 million 10- to 19-year-olds are enrolled in school.[307] One key element of improving substance use prevention and reduction programs is to increase the number of schools adopting and implementing evidence-based programs.

In the past, a number of substance use prevention strategies have focused on providing limited "information-based" programs in middle and high schools — often in the form of a "pep rally" or rapid-response to a crisis in a community that often serve as a "feel good" quick fix for parents and administrators. Many substance use prevention programs have focused on the latest in a series of gimmicky campaigns that focus on individual willpower of tweens and teens — from "just say no" to "scared straight" and others. According to the research, however, programs that have been shown to be ineffective include information only, testimonials (including by celebrities), scare tactics and stand-alone, limited affective education or self-esteem building efforts.

In addition, there is also a long-standing cultural stigma attached to substance use disorders — where students are often judged as "bad" and/or are punished for behavior rather than being connected to help and support. The stigma-effect can extend to the school level, where acknowledging or providing a sensitive environment for dealing with substance use has resulted in a negative impact on a school's reputation and support from the parents and larger community.

The research supports what most teachers, principals and other educators already know best: substance use harms a student's academic performance, behavior and attendance; and that social-emotional learning can benefit all children starting in early childhood — has not received enough support; and that the most effective programs also provide additional time, attention and resources to support children who struggle with behavior and academic performance throughout their entire school career.

The most effective school-based approaches incorporate: individual behavior change; skills training (academic and social competence and resistance skills); norms education; cognitive/behavioral interventions; social emotional learning; environmental change; media literacy; and persuasive communications. In addition, approaches should involve families, educators and other school staff. Strong performing programs also must address the larger school climate — and support a more sensitive response, early intervention and support services for behavior and academic problems.

Despite growing research distinguishing effective from ineffective approaches, as of 2005, only 23 percent of middle schools reported using evidence-based programs for most of their substance use prevention efforts, and less than half (42.6 percent) used some evidence-based programming.[308] Only around 13 percent of elementary schools use evidence-based programs for most of their substance use efforts, and

only 35 percent use some evidence-based programming.[309] Even within schools that adopt evidence-based programs, there are still concerns about how effectively or thoroughly they may be implemented.

Adopting and implementing evidence-based programs will require a commitment to devote the resources, time and training to support these efforts — as well as a shift to understanding that many of these initiatives focus on broader positive development — that start with younger children and go far beyond direct education about the harms of substance use. Moving toward a more impactful approach will require:

■ **Providing Increased Education About What Works Best — For Parents, Educators, School Administrators, School Superintendents and Boards, Civic and Community Leaders and Policymakers:** Research has advanced significantly about: 1) the most recent brain science and how substance use works as a physical, mental and behavioral disorder; 2) the latest research on the positive impact of reducing risks and building protective factors throughout childhood — and how this helps improve academic performance and reduce behavior problems in classrooms and schools; and 3) how and why some of the strongest evidence-based programs work — and work better than other efforts — and processes that allow communities to find and choose the programs that can best match the needs of their particular schools and communities. Many educators are skeptical based on experiences with ineffective approaches and programs in the past. It is important to engage leading experts and community leaders to translate the latest research and approaches in a way that educators and parents will understand and appreciate their value. In addition, information must be conveyed in culturally-competent ways via culturally-competent messengers to effectively reach different communities.

■ **Ensuring Sustained, Sufficient Funding and End-to-End Support for Adoption, Implementation and Evaluation of Programs:** It is important to provide more stable and sustained funding to support a long-term commitment to effective, ongoing evidence-based programs — which is a culture change from previous practices of funding limited and short-term campaigns or grant programs. It is also important to have a backbone expert network to support schools in selecting which of a select menu of evidence-based programs best fit their needs, starting and effectively maintaining a new program — including with training and ongoing technical support, provide evaluations and advise on continuous quality improvement. Training, guidance and program performance analyses should be provided throughout the education system — for teachers, counselors, principals, administrators, superintendents and school boards — to help sustain longevity and ongoing understanding of why and how programs are working.

■ **Partnering with Larger Community and Multi-sector Efforts:** School-based efforts should be made in context with other programs and supports in a community. Schools and school districts should work with multi-sector child and youth development coalitions and collaborations. This can help ensure that programs and efforts are mutually reinforcing and the combined efforts yield better overall results.

■ **Increasing Resources and Professional Training Opportunities to Recruit and Retain More School Counselors, Psychologists and Behavioral Specialists:** There is a shortage of trained professionals to support social-emotional development and to address the behavioral and mental health needs of U.S. students. For instance, the National As-

sociation of School Psychologists (NASP) reported a shortage of more than 9,000 school psychologists in 2010, with a projected shortage of 15,000 by 2020. The national ratio was 457 students to one school psychologist. In some areas, the ratio is as high as 2,000 or 3,500 to one.[310] In 2012, there were 262,300 school counselors in around 99,000 public and 30,000 private elementary and secondary schools in the United States.[311] Currently, school psychologists, counselors and behavior specialists spend a significant portion of their time supporting the academic needs of students and/or dedicated to addressing the needs of around 13 percent of U.S. students who receive special education services. There is little time or resources to provide support for additional mental health and/or social, behavioral and emotional problems. It is important to increase the number of trained professionals to provide support to the school community and students.[312, 313] These professionals help students in academic achievement, personal/social development and career development. They can provide support and intervention to students; consult with families and teachers; promote positive peer relationships, social problem solving and conflict resolution; develop school-wide practices and approaches; and connect and collaborate with community providers for needed services.

■ **Improved Delivery of Health — and Mental Health — Services in Schools and Better Coordination and Integration Across the Education, Healthcare and Social Service Sectors:** When children have unmet needs — including medical, mental and behavior health issues — it can make it difficult to be able to be effectively ready to participate and learn in school. And, screenings and identification of concerns need follow up with

appropriate care and services to have an impact. However, schools are often overstretched and underfunded to meet their core responsibilities to educate children and teens. Providing, or even linking, children and families to health and social services is beyond the scope and capacity that most schools can currently offer.

- Some schools and school systems have been developing different models and approaches to try to address these needs — which often do involve working across sectors, programs and funding systems — but help ensure students receive services on the school campus or are connected with the services they need. Models range from full on-site school based health centers (SBHCs) to mobile health centers to expanding school nursing staff to strong partnerships with local community health centers (CHCs) and designated case managers. There also a range of potential payment models — for instance, in California, there are more than 230 SBHCs serving nearly a quarter million children — which are financed through a variety of sources including reimburse-

ment from public insurance programs and private health plans; local, state and federal grants; philanthropic foundation; and in-kind contributions from school districts and other partners.[314]

- School systems are also working to develop systems and models that align the health (Health Insurance Portability and Accountability Act (HIPAA)) and education (Family Education Rights and Privacy Act (FERPA)) privacy protection requirements — to allow educators, health providers and social service professionals to be able to better work together and coordinate needed services and treatments while maintaining family privacy.[315]

■ **Promoting Positive School Climate Efforts:** Positive behavior and school climate improvement initiatives help shift the focus from punishing "bad" behavior toward prevention and providing help and support to children and teens with behavior issues. These approaches have been shown to be more effective in reducing behavior incidents and substance misuse while improving attendance, school per-

formance and graduation rates. Safer, positive school climates help: reduce bullying and other forms of violence; support social-emotional learning; improve school connectedness; implement positive discipline and restorative justice; implement school-wide positive behavioral supports; identify at-risk students and school vulnerabilities; and provide crisis prevention and intervention services. They can help families better understand their child's learning and mental health needs — and help staff understand and respond to diverse cultures, backgrounds and needs of students. As one important element of improving school climates, a number of states are eliminating "zero tolerance" school punishments, reducing the number of suspensions and expulsions — which end up contributing to increased attendance, behavior, academic and attrition problems. The Department of Education has developed the Safe Supportive Learning Web site (safesupportivelearning. ed.gov) to provide resources, information and technical assistance and planning tools for school districts and schools.[316]

DIFFERENT NEEDS FOR DIFFERENT COMMUNITIES

It is important to have programs match needs of particular school communities, including recognizing and acknowledging that substance use issue impact all socio-economic levels — to normalize the need to address the underlying factors for individuals and across the school community. In fact, while smoking is higher among teens of parents with lower levels of incomes and education, alcohol use, binge drinking and marijuana use are higher for teens of parents with higher levels of income and education.[317, 318, 319]

So, for instance, at schools with higher-income, high-achieving students, there is often significant pressure to achieve in academics, sports, in a range of extracurricular activities and socially. This is often interrelated with high rates of depression, anxiety and other mental health disorders — by middle school, these rates are as high or higher than students in low-income families, even among those who experience toxic stress — which

can increase risk for substance use. In addition, higher-income students have increased resources to be able to access drugs and alcohol. Students from affluent families often initiate and regularly use substances starting in younger grades — often by 7th grade. Families with teens or youth often have an increased desire to not want to acknowledge individual or community-level problems because of potential stigma or fear of impacting their child's future or the reputation of their school — and may also have increased resources to deal with problems privately. This contributes to the lack of attention — and resources — devoted to the problem at a community level. The research shows that it is particularly important to begin prevention programs for higher-income youth before they enter middle school years.

For lower-performing and lower-income schools, by the time students enter middle and high school, substance use concerns are often interrelated with school performance, attendance and
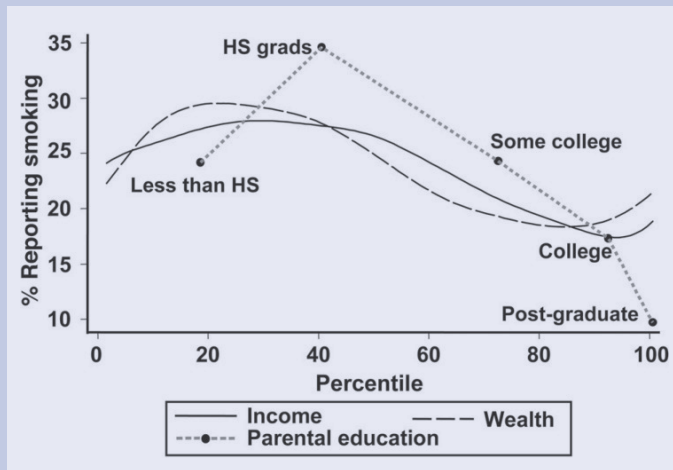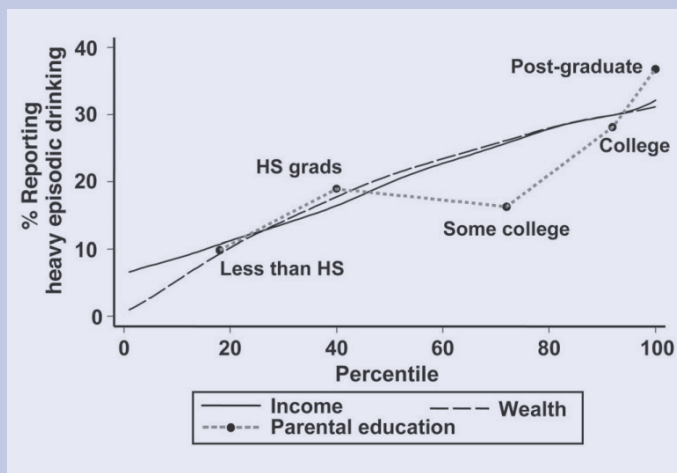

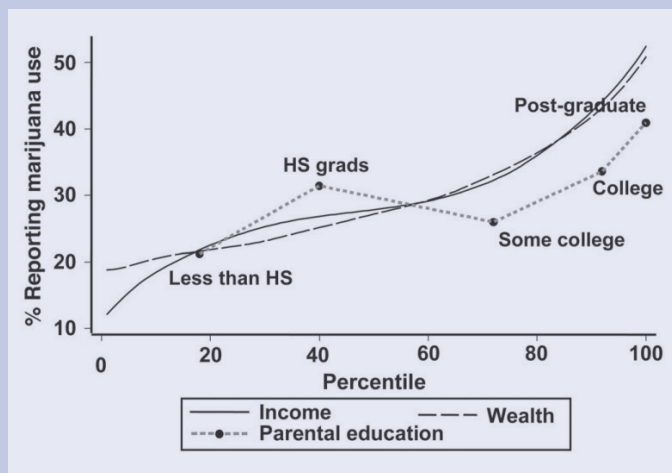Source: Patrick ME et al., 2012
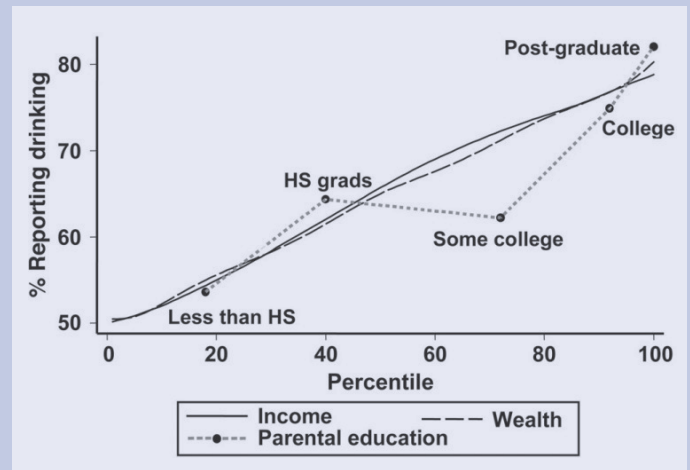
Source: Patrick ME et al., 2012

behavior problems. Often, lower-income families have less social capital and resources to provide support or get treatment for students at an individual level — and substance use has often been dealt with in terms of punishing "bad behavior," including in some cases involving the juvenile justice system. In some communities, substance use issues are interwoven with what has been named the "school-to-prison pipeline" or "schoolhouse to jailhouse track" because of the significant number of lower-income students who are arrested and/or incarcerated — often for minor and non-violent offenses related to drugs — rather than connecting children to treatment or other support services.[320, 321] Many lower-income schools are disproportionately under-funded to address core academic programs and a wide range of other pressing concerns — and often do not have sufficient or dedicated funding to support child and youth development prevention programs aimed at reducing substance misuse and related factors.

It is also important to ensure culturally and linguistically appropriate education, interventions and support are available within and across communities.

Prevention programs and starting efforts in younger years — including "universal" approaches — help recognize that the problem exists across all social and economic strata and can 1) lower risk across an entire community; 2) help benefit positive development for all children and youth; and 3) provide additional protective benefits to children at higher risk. By integrating programs into schools as a routine practice, it also helps lead to increased ability to help identify and destigmatize the need to provide added support to many. A number of evidence-based programs targeting elementary, middle and high schools exist — and communities and schools can conduct needs assessments to determine which programs are the best fit to address their needs.

Source: Patrick ME et al., 2012

Source: Patrick ME et al., 2012

School-Based Prevention Interventions[322]

Longitudinal research over the past several decades from NIDA has identified risk factors and interventions — as well as specific evidence-based school-focused programs — that have shown effective results.

Developmental Stage	Modifiable Risk	Intervention
Early Childhood	Inability to share	Child social practice
	Lack of school readiness	Early education
	Inconsistent discipline	Parent skill training
Elementary School	Aggressive behavior	Good classroom management
	Failure to read	Remedial reading support
	Lack of parental involvement	Parent/teacher communication
Middle School	School failure	Academic skills
	Poor social skills	Social competence
	Poor parental monitoring	Parent skills
High school	Misperceptions of acceptability/extent of peer use	Normative education/refusal skills
	Family conflict	Family therapy
	Lack of self-control	Social skills

Examples of Evidence-Based Drug Use Prevention Programs

Resources, such as CTC, NIDA's review of evidence-based prevention programs, CDC's Health Education Curriculum Analysis Tool (HECAT), SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP), the Center for the Study and Prevention of Violence's Blueprints for Healthy Youth Development, the Coalition for Evidence-based Policy, the Institute of Education Sciences' What Works Clearinghouse, the National Institute of Justice's Crimesolutions.gov and others can help school districts, schools and communities identify which of the range of evidence-based programs best match with their needs.[323, 324, 325, 326, 327, 328, 329, 330]

Good Behavior Game (GBG) [Elementary School Program]	GBG is a universal classroom prevention strategy of behavior management that centers on positive reinforcement of rules. Teachers use GBG to help students develop skills such as teamwork and self-regulation. GBG is integrated into the school day, including instructional time, transition times, lunch, etc. Teachers give students positive reinforcement for meeting behavioral expectations, monitoring and managing their own behaviors and supporting the positive behavior of peers. GBG has been demonstrated to reduce aggressive, disruptive and off-task behavior in elementary school males, reduction in smoking and use of mental health services in middle school males, and reduction in alcohol use, tobacco use, illicit drug use and suicide attempts in young adult males (ages 19 to 21). In Cincinnati, GBG is being layered onto the walking school bus in a partnership between the state education, school safety and transportation agencies. A Washington state analysis of implementing the GBG estimated a benefit-to-cost ratio of $31.19 and 25 percent rate of return on investment.
Life Skills Training (LST) Program [Middle School and High School Booster Program]	LST is designed to address a wide range of risk and protective factors by teaching general personal and social skills, along with drug resistance skills and normative education. This universal program consists of a 3-year prevention curriculum for students in middle or junior high school. LST contains 15 sessions during the first year, 10 booster sessions during the second, and 5 sessions during the third. The program can be taught either in grades 6, 7 and 8 (for middle school) or grades 7, 8 and 9 (for junior high schools). LST covers three major content areas: 1) drug resistance skills and information, 2) self-management skills, and 3) general social skills. The program has been extensively tested over the past 20 years and found to reduce the prevalence of tobacco, alcohol and illicit drug use relative to controls by 50 percent to 87 percent. When combined with booster sessions, LST was shown to reduce the prevalence of substance use long term by as much as 66 percent, with benefits still in place beyond the high school years. Although LST was originally tested predominantly with White youth, several studies have shown that the LST program is also effective with inner-city minority youth. An age-appropriate version of the LST program for upper elementary school students was recently developed and shown to reduce tobacco and alcohol use. It contains 24 classes (8 classes per year) to be taught during either grades 3 to 5 or 4 to 6.
The Strengthening Families Program (SFP): For Parents and Youth (Ages 10–14) [Middle School and High School]	SFP program offers seven sessions, each attended by youth and their parents. Program implementation and evaluation have been conducted through partnerships that include state university researchers, Cooperative Extension System staff, local schools and community implementers. A longitudinal study of comparisons with control group families showed positive effects on parents' child management practices (for example, setting standards, monitoring children, and applying consistent discipline) and on parent-child affective quality. In addition, a recent evaluation found delayed initiation of substance use at the 6-year follow up. Other findings showed improved youth resistance to peer pressure to use alcohol, reduced affiliation with antisocial peers, and reduced levels of problem behaviors. Conservative benefit cost calculations indicate returns of $9.60 per dollar invested in SFP.

B. MAKING SCREENING, EARLY INTERVENTION, TREATMENT AND CONNECTION TO SERVICES ROUTINE PRACTICE

There has generally been little emphasis on screening tweens and teens for health issues. Often, older children and teens struggle with problems at home, mental and behavioral health issues and pressures around substance use on their own or it is a treated as an individual family problem. Routinely checking in with tweens, teens and youth is an important way to help reduce substance misuse and provide quick and effective help for those who may be at risk or struggling with dependence.

While middle and high schools often have routine requirements for screening for sight, vision, fitness and scoliosis — as well as some school districts requiring annual physical well care exams — there has not been comparable support to identify mental health and behavior concerns, including substance use and experimentation, and the ability to connect children to help and support. Making these types of screenings routine — through quick questionnaires and brief counseling with teens and youth — helps reduce the stigma associated with mental and behavioral health concerns; emphasizes a cultural value of care and support; and normalizes the use of systems for providing help and resources.

AAP and NIAAA both support routine screening, brief intervention and referral to treatment as routine care.[331, 332] This approach can help prevent the potential initiation of substance use in the first place; provide early intervention support in many cases, avoiding escalation to more serious substance use problems; and/or ensure teens with problems get appropriate care and treatment when necessary.[333, 334]

Screening, Brief Intervention and Referral to Treatment Should Be Incorporated as a Routine Screening Practice in Middle and High Schools — Along With Other Regular Health Screenings: Evidence-based screening tools, including SBIRT, have been developed to help identify individuals — including tweens, teens and youth — at risk for experimenting with alcohol or drugs, initiating substance use or developing a substance use disorder — in sensitive ways, and connecting them to care and support resources.

- Models should be developed and tested for the best way to make SBIRT routine for teens — such as completely school-based programs; hybrid school-and-medical professional approaches; and requiring screening for states and school districts with annual well care requirements for school attendance — to see what is most effective and if/how efforts can be adaptable to different schools and school-systems while ensuring they are still effective.

  - Funding and payment issues should also be explored as part of developing effective models — and information about approaches that work should be disseminated and supported via national, federal and state agencies and expert backbone organizations. For instance, in many cases, schools could directly bill Medicaid and/or private insurance plans. In December 2014, CMS issued a clarification of a longstanding rule that permits schools to be reimbursed for health services provided to students who are covered by Medicaid.[335] This updated interpretation could have a significant impact in the delivery of health services through schools — including the ability to conduct SBIRT in schools.

- Development of the most effective ways to professionally staff SBIRT should also be explored and evaluated. For instance, potential models could address delivery in schools with in-house or mobile SBHCs; training of nurses, counselors and/or select teachers or administrators; or bringing in externally trained professionals. Other approaches that involve potential hybrid delivery via schools and pediatricians/doctors can and should be considered, accounting for ways to ensure that all students have the opportunity for screening and support.

SBIRT Should Be Adopted as Part of a Continuum of Regular Well-being Screenings — That Start in Early Childhood and Continue through Youth: Screenings for issues that can contribute to underlying risk factors that increase chances for future substance use and other problems can and should actually begin in early childhood. Identifying and providing early intervention for risks can help prevent, delay or mitigate the impact of different concerns, and put a child on course for improved health and well-being throughout their entire life. Health providers can also help screen parents' well-being and a child's living and environmental conditions to help identify and mitigate potential risks, such as by connecting families to help, medical services and a range of other support services. While early childhood screenings and care are supposed to be routine, there are still significant gaps in the number of children not receiving regular screenings or recommended follow up care and services, particularly among low-income students.

SCHOOL-BASED SBIRT

Northampton Public Schools, Massachusetts

Northampton Public Schools implemented a SBIRT for ninth graders, which called for universal counseling and screening; parental education and notification, with an opt-out provision; providing positive reinforcement for students to encourage them to avoid alcohol/substance use; having outside referral resources for at-risk students; and asking students about potential future alcohol or drug use.

According to the most recent data, 86 percent of students were "completely honest" with the school nurse about their alcohol and drug use and 27 percent were less likely to use drugs or alcohol after screening.[336]

New Mexico

To focus on individuals with severe substance use, New Mexico created a SBIRT initiative by contracting with an independent non-profit organization (Sangre de Cristo Community Health Partnership (SDCCHP)) to provide implementation and administration expertise. The plan was to integrate the SBIRT into rural primary care medical

Source: Community Catalyst

settings, federally qualified health centers (FQHCs), public health offices and SBHCs. In addition, the initiative provided access to a connected and integrated statewide telehealth network to provide clinical supervision, training and patient case consultations. In total, SDCCHP has implemented 20 clinical partner sites and 21 SBHCs.[337]

A study of follow-up change found a 58 percent improvement of participants who did not use alcohol or illegal drugs, a 60 percent reduction in binge drinking and a 54 percent reduction in the mean

days of drug use per month. An economic analysis found that the treatment population demonstrated savings of $97,356.67 per month.[338]

Another study published in the National Center for Biotechnology Information found that participants reported significant reductions in the frequency of drinking to intoxication and drug use if they received any intervention. The study stated "these findings support school-based SBIRT for adolescents, but more research is needed on this promising approach."[339]

CHILDHOOD SCREENINGS

Childhood developmental screenings can help identify and provide opportunities to provide early intervention support for a range of physical, behavioral and mental health concerns — reducing a child's risk for later substance use and other potential problems.

- Early and Periodic Screening, Diagnosis and Treatment Program is Medicaid's child health program which insures that young children from low-income families receive the unique and appropriate health, mental health and developmental services they need.[340] Children covered by Medicaid are guaranteed comprehensive coverage including access to mental health therapies (this may not be covered or may be limited in the CHIP).[341] Despite the guarantee of coverage, many children still do not receive the required care or services due to lack of access, follow-up support or other issues. For instance, only 17 states and Washington, D.C. achieved at least an 80 percent EPSDT participation rate among children ages 1- to 2-year-olds, and only 2 states reach 80 percent for 3- to 5-year-olds.

- For children covered by their family's private insurance plans, under the ACA, these insurers are required to cover a set of preventive services — such as regular pediatrician visits, immunizations, developmental assessments, hearing and vision screening and nutrition counseling — recommended by AAP through the Bright Futures Initiative.[342] As part of the Bright Futures initiative, AAP has developed screening tools and a set of advice and suggestions for teens, young adults and their parents around a wide range of topics to support well-being — including basic health concerns, physical changes, social-emotional development and related concerns, mental health issues and

identifying and reducing risky behaviors — and includes SBIRT screening for tweens and teens.[343]

- Screening parents for ACEs and their well-being can help also better identify if a family could use additional support — ranging from parent education to social services to mental health services for parents — to help improve a child's well-being. For instance, AAP's Safe Environment for Every Kid (SEEK) screening tool includes questions about potential use, parental depression and substance use, smoking in the home and other risks.[344] Pediatricians and other childcare professionals can also provide important advice for ways to help promote healthy development.

- Part C of the Individuals with Disabilities Education Act (IDEA) helps provide screening services for children from birth to age 2 for disabilities and helps connect families with early intervention services.[345] The goals of IDEA Part C are to enhance the development of infants and toddlers with disabilities, reduce educational costs by minimizing the need for special education through early intervention, minimize the likelihood of institutionalization and maximize independent living and enhance the capacity of families to meet their

child's needs. An assessment released in June 2014 by the U.S. Department of Education found that 36 states met the requirements of IDEA Part C — which includes being able to ensure that early intervention will be administered for every eligible child and his or her family.[346]

According to AAP, "adolescence has usually been thought of as a period characterized by good health; however, millions of adolescents face significant challenges that can result in physical, emotional, and social morbidities. Among these challenges are high-risk behaviors such as alcohol, tobacco, and other drug use, and sexual behaviors that can lead to adolescent pregnancy and sexually transmitted diseases; mental health concerns such as eating disorders and depression; learning disabilities and school dropout rates; serious family problems, including neglect and use; and socioeconomic factors such as poverty and lack of health insurance. These health issues, most of which are preventable, can lead to significant morbidity and even mortality. Unintentional injuries, homicide, and suicide are leading causes of death in adolescence."[347] Unintentional injuries can include overdose, alcohol poisoning and other harm from substance use.

C. COMPREHENSIVE AND SUSTAINED TREATMENT AND RECOVERY SUPPORT

Around 22.7 million Americans ages 12 or older — 8.6 percent — need treatment for a substance use disorder. However, only 2.5 million — 10.9 percent — of those individuals received recommended treatment in a specialty facility.[348]

Around 1.3 million teens (ages 12 to 17) — 5.4 percent — were classified as needing treatment, but only around 122,000 of these individuals received treatment at a specialty facility, leaving around 1.2 million without the recommended treatment.

Substance use disorder is defined as a chronic, relapsing brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences. Drug use changes the structure of the brain and how it works, which can be long lasting and lead to harmful behaviors — and is a brain disease that can be effectively treated.[349, 350]

Any strategies to prevent and reduce substance misuse must focus on providing sustained and ongoing treatment and recovery support – otherwise they are inherently incomplete and ineffective. The final component of developing a full-spectrum strategy is to have an effective, funded, compassionate treatment system in place.

The ACA and the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 are significantly changing the accessibility and affordability of mental and substance misuse treatment services for millions of Americans by defining these services as essential benefits and requiring that they be covered on parity with general medical and surgical care under individual, group and Medicaid expansion plans.[351]

But, even with these changes, private and public insurance still varies dramatically, and coverage is often limited and does not match what is needed to provide effective and ongoing treatment.

And, the existing system for substance use treatment has been underfunded for decades and has a severe shortage of trained professionals to provide services.

The rapid rise in prescription drug misuse is increasing the need for treatment; while there has been a five-fold increase in treatment admissions for prescription drug misuse in the past decade, millions are still going untreated.[352] The "treatment gap" has been fueled by lack of funding, limits on insurance coverage, ongoing social stigma around substance use disorders and misperceptions about how effective treatment works.

KEY RECOMMENDATIONS FOR EXPANDING ACCESS TO QUALITY, EFFECTIVE CARE AND RECOVERY SUPPORT INCLUDE:

Increasing Funding Support for Mental Health and Substance Misuse Treatment: States and insurance providers should significantly increase access to substance use treatment programs, which can help reduce overdose injuries and deaths, avoid relapses and support ongoing recovery. Only around 7.4 percent of all health spending in the United States is devoted to mental health treatment services and one percent is devoted to substance use treatment.[353] The United States spends around $24 billion on substance use treatment annually (as of most available recent data, 2009).[354] Around 69 percent of the spending was government supported — by Medicaid, Medicare, federal grants and state and local government programs. State and local government spending accounted for $9.4 billion. SAMHSA's Substance Abuse Prevention and Treatment Block Grant supported around 5 percent of the total spending — providing priority treatment for individuals without insurance; services not covered by public or private insurance; community-based prevention activities; and program performance evaluations.[355] More than 30 percent of overall spending was private insurance and out-of-pocket spending.

Addressing Workforce Gaps and Modernizing Treatment to Match the Latest Research for Best Practices: There is an acute shortage of professionals trained to provide substance use services. Nationally, there are only 32 behavioral health specialists for every 1,000 with a substance use disorder, with the numbers ranging from a low of 11 per 1,000 in Nevada to a high of 70 per 1,000 in Vermont, according to a 2014 analysis by Advocates for Human Potential, Inc.[356] A reported 55 percent of rural U.S. counties do not have a single practicing psychiatrist, psychologist or social worker.[357] Behavioral therapy specialists often having lower-pay scales compared to fields with comparable training is considered a key factor. In addition, according to SAMHSA's Action Plan for Behavioral Workforce Development, treatment services are often silo-ed from other aspects of the healthcare system, and there is relatively little training for other healthcare professionals in how to identify and learn the most effective ways to provide treatments.[358]

There should be a concerted effort to expand the workforce for mental health services and substance misuse treatment — through recruitment and incentive programs — and to improve training and standards for those directly providing treatment. A number of states are also supporting models to expand the use of use trained alternative care providers, such as certified peer specialists, to help fill some of the treatment provider gap. Many of these states support Medicaid reimbursement for these specialists, which can include certified addition recovery empowerment specialists (CARES), parent peer specialists and youth mental health peer specialists.[359, 360, 361]

As part of this endeavor, a concerted effort should be made to support programs designed to recruit and train specialists and counselors who can focus on the treatment needs of youth. In addition, more training should be provided to pediatricians and primary care providers — to be able to deliver SBIRT, identify issues and know the most up-to-date prevention and treatment options available.
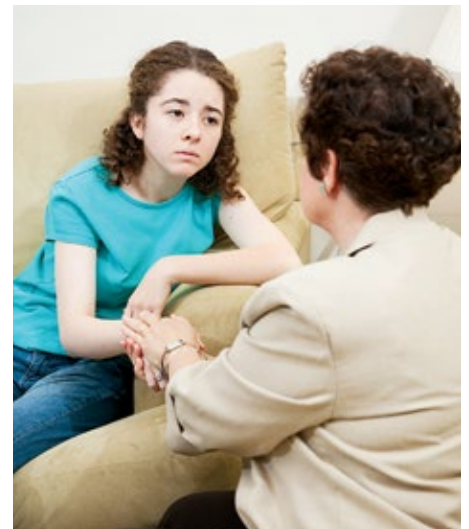
RECOVERY HIGH SCHOOLS[362]

Recovery high schools are intentionally designed for students recovering from a substance use disorder as part of the continuum of recovery care. These schools offer programs that uniquely meet the education and therapeutic challenges faced by those in recovery and who were struggling to succeed in traditional school settings. They provide an alternative to the justice system and delinquency and a way to reduce school violence while improving education at-tainment. While no single recovery high school is the same, they often feature intensive therapeutic and peer recovery support and are typically small (with student to counselor ratios as small as 10 to 1). In addition, they intentionally combine the academic curriculum with structured recovery-focused programming. A study found that complete avoidance of alcohol or other drugs increased from 20 percent during the 90 days before entering the school to 56 percent after.

Components of Comprehensive Drug Abuse Treatment

Source: National Institute on Drug Abuse

NIDA'S PRINCIPLES OF ADOLESCENT SUBSTANCE USE DISORDER TREATMENT: A RESEARCH-BASED GUIDE[363]

- Adolescent substance use needs to be identified and addressed as soon as possible;

- Adolescents can benefit from a drug use intervention even if they are not addicted to a drug;

- Routine annual medical visits are an opportunity to ask adolescents about drug use;

- Family pressure may play an important role in getting adolescents to enter, stay in and complete treatment;

- Substance use disorder treatment should be tailored to the unique needs of the adolescent;

- Treatment should address the needs of the whole person, rather than just focusing on his or her drug use;

- Behavioral therapies are effective in addressing adolescent drug use;

- Families and the community are an important aspect of treatment;

- Effectively treating substance use disorders in adolescents requires also identifying and treating any other mental health conditions they may have;

- Sensitive issues such as violence and child abuse or risk of suicide should be identified and addressed;

- It is important to monitor drug use during treatment;

- Staying in treatment for an adequate period of time and continuity of care afterward are important; and

- Testing adolescents for sexually transmitted diseases like HIV, as well as hepatitis B and C, is an important part of drug treatment.

Some Evidence-based Treatment for Adolescents

- **Behavioral Approaches.** Examples (many used in combination) include: Adolescent Community Reinforcement Approach — addressing coping, problem-solving and communication skills and encouraging active participation in recreational activities; Cognitive-Behavioral Therapy — anticipating problems, monitoring feelings and thoughts and developing effective coping strategies; Contingency Management — positive incentives combined with psychosocial treatment; Motivational Enhancement Therapy — motivational interviewing; Twelve-Step Facilitation Therapy — adolescent-specific 12-step program facilitation; and Group Therapy — providing positive social reinforcement through peer discussion.

- **Family-based Approaches.** Often focus on whole-being, family communication and conflict resolution, co-occurring behavior and mental health disorders, problems with school or work attendance and peer networks.

FEDERAL APPROPRIATIONS AND REQUEST[364, 365] (Dollars in Millions)						
	2011	**2012**	**2013**	**2014**	**2015**	**FY 2016 President's Budget**
NIDA (scientific and biomedical research support)	$1,050.50	$1,051.40	$1,058.60	$1,051.40	$1,015.70	$1,047.70
SAMHSA Block Grant	$1,800.20	$,1,800.20	$1,811.30	$1,815.40	$1,819.80	$1,819.80

Appendices

Appendix A

Table 8.3 Comparison of NSDUH, MTF, and YRBS Past Month Prevalence Estimates among Youths: Percentages, 2002-2013

Substance/ Survey	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Marijuana												
NSDUH	8.2[a]	7.9[a]	7.6	6.8	6.7	6.7	6.7	7.4	7.4	7.9[a]	7.2	7.1
MTF	13.1	12.3	11.2[a]	10.9[a]	10.4[a]	10.0[a]	9.8[a]	11.2[a]	12.4	12.4	11.8	12.5
YRBS	--	22.4	--	20.2[a]	--	19.7[a]	--	20.8[a]	--	23.1	--	23.4
Cocaine												
NSDUH	0.6[a]	0.6[a]	0.5[a]	0.6[a]	0.4[a]	0.4[a]	0.4[a]	0.3	0.2	0.3	0.1	0.2
MTF	1.4[a]	1.1[a]	1.3[a]	1.3[a]	1.3[a]	1.1[a]	1.0[a]	0.9	0.8	0.8	0.7	0.7
YRBS	--	4.1	--	3.4	--	3.3	--	2.8	--	3.0	--	--
Ecstasy												
NSDUH	0.5[a]	0.4[a]	0.3	0.3	0.3[a]	0.3	0.4[a]	0.5[a]	0.5[a]	0.4[a]	0.3	0.2
MTF	1.6[a]	0.9	0.8	0.8	1.0	0.9	1.0	1.0	1.5[a]	1.1	0.8	0.9
YRBS	--	--	--	--	--	--	--	--	--	--	--	--
LSD												
NSDUH	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1[a]	0.2
MTF	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.6	0.4	0.6
YRBS	--	--	--	--	--	--	--	--	--	--	--	--
Inhalants												
NSDUH	1.2[a]	1.3[a]	1.2[a]	1.2[a]	1.3[a]	1.2[a]	1.1[a]	1.0[a]	1.1[a]	0.9[a]	0.8[a]	0.5
MTF	3.1[a]	3.2[a]	3.5[a]	3.2[a]	3.2[a]	3.2[a]	3.1[a]	3.0[a]	2.8[a]	2.5[a]	2.1	1.8
YRBS	--	--	--	--	--	--	--	--	--	--	--	--
Alcohol												
NSDUH	17.6[a]	17.7[a]	17.6[a]	16.5[a]	16.7[a]	16.0[a]	14.7[a]	14.8[a]	13.6[a]	13.3[a]	12.9[a]	11.6
MTF	27.5[a]	27.6[a]	26.9[a]	25.2[a]	25.5[a]	24.7[a]	22.4[a]	22.7[a]	21.4[a]	20.0[a]	19.3[a]	18.0
YRBS	--	44.9[a]	--	43.3[a]	--	44.7[a]	--	41.8[a]	--	38.7[a]	--	34.9
Cigarettes												
NSDUH	13.0[a]	12.2[a]	11.9[a]	10.8[a]	10.4[a]	9.9[a]	9.2[a]	9.0[a]	8.4[a]	7.8[a]	6.6[a]	5.6
MTF	14.2[a]	13.5[a]	12.6[a]	12.1[a]	11.6[a]	10.6[a]	9.6[a]	9.8[a]	10.4[a]	9.0[a]	7.9[a]	6.8
YRBS	--	21.9[a]	--	23.0[a]	--	20.0[a]	--	19.5[a]	--	18.1	--	15.7

MTF = Monitoring the Future; NSDUH = National Survey on Drug Use and Health; YRBS = Youth Risk Behavior Survey.

-- Not available.

NOTE: NSDUH data are for youths aged 12 to 17. Some 2006 to 2010 NSDUH estimates may differ from previously published estimates due to updates (see Section B.3 in Appendix B of this report).

NOTE: MTF data are simple averages of estimates for 8th and 10th graders. MTF data for 8th and 10th graders are reported in Johnston et al. (2014), as are the MTF design effects used for variance estimation.

NOTE: Statistical tests for the YRBS were conducted using the "Youth Online" tool at http://www.cdc.gov/HealthyYouth/yrbs/. Results of testing for statistical significance in this table may differ from published YRBS reports of change.

[a] Difference between this estimate and 2013 estimate is statistically significant at the .05 level.

Sources: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2002-2013.
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Centers for Disease Control and Prevention, Youth Risk Behavior Survey, 2003, 2005, 2007, 2009, 2011, and 2013.

Appendix B: Drug Overdose Death Rates Analysis Methodology

State death rates from drug overdose include all causes, by accidents and violence (unintentional and intentional). The data come from CDC's Web-based Injury Statistics Query and Reporting System (WISQARS), Fatal Injury Reports. The drug overdose death rates by state are between the ages of 12 and 25 and are not age adjusted. The rates are based on 3-year averaged data for the years 1999-2001, 2005-2007 and 2011-2013 to stabilize the death rates for comparison purposes, and refer to deaths per 100,000 teens and youths.

State death rates for drug overdose for teens and young adults were individually compared between 1999-2001 and 2005-2007 and between 2005-2007 and 2011-2013 to determine if the state rates had a significant increase or decrease between the grouped years. This was done by individually calculating the difference between the state rate (1999-2001, 2005-2007 and 2011-2013), standard error (S.E.), confidence intervals (C.I.) and standard error of the differences between the two state rates, expressed as proportions, using the following formulas:

$$S.E. = R \; / \; \text{square root of } N$$

$$C.I. = R +/- (1.96 * S.E.)$$

$$\sqrt{\frac{p_1 \, q_1}{n_1} + \frac{p_2 \, q_2}{n_2}}$$

Where R is equal to age-adjusted rates, N is number of deaths, p is equal to number of deaths per births and q is equal to 1-p and n is the population size. The differences between the two rates were regarding as statistically significant at the 95% confidence level by determining if confidence intervals were overlapping, not overlapping, and if the difference between the rates exceeded 1.96 standard errors.

Data is available at: http://www.cdc.gov/injury/wisqars/fatal_injury_reports.html, WISQARS, Fatal Injury Reports 1999-2013, for National, Regional, and States (RESTRICTED).

For Drug Poisoning Deaths and Rates, Years 1999-2001: Choose All Intents, Drug Poisoning, Choose State, Years of report 1999-2001, Choose Custom Age Range 12 to 25, Select Output Groups State and Sex, Submit Request

For Drug Poisoning Deaths and Rates, Years 2005-2007: Choose All Intents, Drug Poisoning, Choose State, Years of report 2005-2007, Choose Custom Age Range 12 to 25, Select Output Groups State and Sex, Submit Request

For Drug Poisoning Deaths and Rates, Years 2011-2013: Choose All Intents, Drug Poisoning, Choose State, Years of report 2011-2013, Choose Custom Age Range 12 to 25, Select Output Groups State and Sex, Submit Request

For Teen Drug Poisoning Deaths and Rates, Years 2011-2013: Choose All Intents, Drug Poisoning, Choose State, Years of report 2011-2013, Choose Custom Age Range 12 to 18, Select Output Groups State and Sex, Submit Request

For Young Adult Drug Poisoning Deaths and Rates, Years 2011-2013: Choose All Intents, Drug Poisoning, Choose State, Years of report 2011-2013, Choose Custom Age Range 19 to 25, Select Output Groups State and Sex, Submit Request

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