

Pain in the Nation: The Epidemics of Alcohol, Drug, and Suicide Deaths

2022

SPECIAL FEATURE: Two Decades of the Drug Overdose Crisis



Acknowledgements

Trust for America's Health (TFAH) is a nonprofit, nonpartisan public health policy, research, and advocacy organization that promotes optimal health for every person and community, and makes the prevention of illness and injury a national priority.

Well Being Trust (WBT) is an impact philanthropy dedicated to advancing the mental, social, and spiritual health of the nation.

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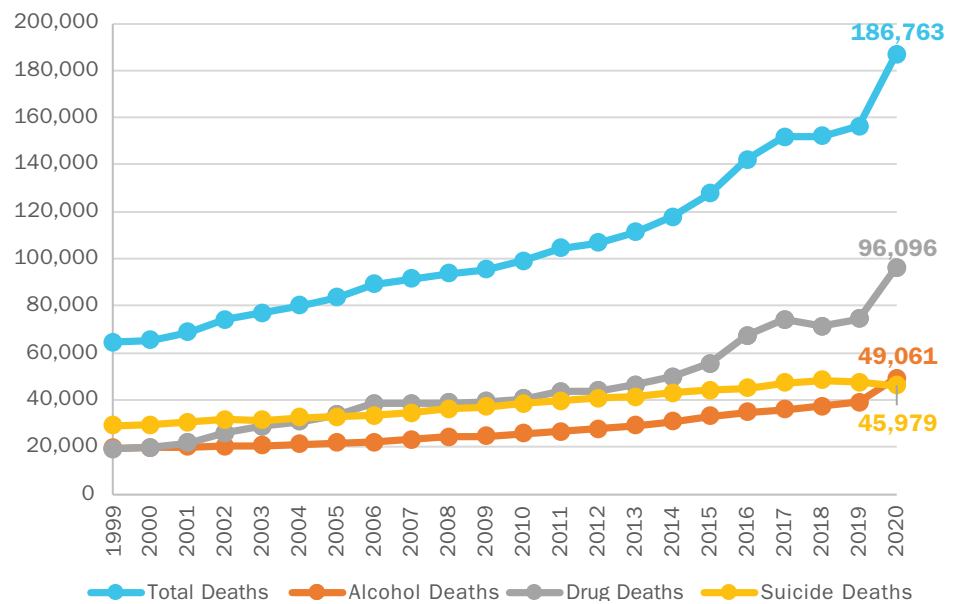
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Introduction

COVID-19 has intensified the nation’s troubling long-term trends for alcohol, drug, and suicide deaths. Between 2019 and 2020, these deaths increased a stunning 20 percent, driven by a 27 percent increase in the rate of alcohol-induced deaths and a 30 percent increase in drug-induced deaths. Increases were particularly large among communities of color and young adults. The rise in deaths occurred across all states and the District of Columbia, except for New Hampshire. And for the first time, two states—West Virginia and New Mexico—surpassed 100 deaths from alcohol, drugs, and suicide per 100,000 people.

Annual Deaths from Alcohol, Drugs, and Suicide in the United States, 1999–2020



Source: TFAH and WBT analysis of National Center for Health Statistics data

Five years ago, Trust for America's Health and Well Being Trust started the *Pain in the Nation* report series to examine the alcohol, drug, and suicide crises in the United States and called for a comprehensive National Resilience Strategy. At the beginning of the series, drug-induced causes accounted for 55,403 deaths per year, a rate of 17.2 deaths per 100,000 people. The first *Pain in the Nation* report projected that, if mortality trends held steady, drug-induced deaths would reach 28.4 deaths per 100,000 people in 2025. In reality, that projection was low and was reached by 2020—within half the time expected.¹

Despite the various federal and state programs and policies implemented, they have not slowed the trends, and likely were insufficient—especially considering that the worldwide

pandemic further exacerbated existing problems. The latest provisional data show fatal overdoses exceeding 100,000 Americans annually, driven by a significant rise in synthetic opioid and psychostimulant overdoses.² Policymakers, health officials, and all Americans must recognize the shortcomings of existing policy efforts to address the ever-changing and escalating drug overdose crisis and also consider how to make progress in the years ahead.

This brief includes three sections: (1) a look back at the past two decades of the drug overdose crisis and a reconsideration of policy priorities; (2) a review of the latest mortality trends from alcohol, drugs, and suicide; and (3) an outline of key policy solutions and recommendations to stem and reverse these trends.



COVID-19 IMPACT ON WELL-BEING IN THE UNITED STATES

The COVID-19 pandemic has caused vast harm across the world, including widespread illness and death in the United States over the past two years.³ Beyond the direct impact of COVID-19 illness, the pandemic has led to a wide variety of secondary effects—such as increases in depression and anxiety, additional stressors, as well as economic, educational, and social disruption—that have touched individuals, families, and communities across the country.

COVID-19 cases, hospitalizations, and deaths have disproportionately affected certain populations, including American Indians and Alaska Natives, Black, and Latino Americans; older Americans; individuals with certain underlying medical conditions such as obesity, chronic lung diseases, heart disease, mental health conditions, and substance use disorders; and those living in congregate settings (e.g., nursing homes and prisons).^{4,5,6} The indirect consequences of the COVID-19 pandemic also disproportionately hurt these communities in a number of ways. For example, Black and Latino households were more likely to experience job loss during the pandemic's resulting recession, hold essential jobs that require work outside the home, have higher food insecurity, and were more likely to experience symptoms of anxiety or depression.^{7,8,9}

While children and adolescents have lower risk of severe COVID-19 illness than adults, young Americans have experienced heightened secondary effects.^{10,11} School and childcare closures hurt youth academic/educational progress, limited socialization and peer relationships, reduced school-based services and supports (e.g., counseling services, breakfast and lunch meal programs, physical education, and child abuse reporting), and impacted family finances due to new childcare costs or lost wages.^{12,13,14} Many of these experiences varied by community, with some areas and groups disproportionately affected. For example, Black and Latino youth had less access to internet and online learning, and lower rates of full-time, in-person schooling (as of April 2021); and there were extra challenges around remote learning for students with disabilities and those learning English.^{15,16,17,18}

In addition, many children lost a parent or grandparent caregiver to COVID-19. Losing a parent or caregiver is an adverse

childhood experience and is associated with increased risks of a range of negative health outcomes, as well as negative impacts on educational and economic opportunities later in life.^{19,20,21,22} A 2021 *Pediatrics* study estimated that between April 1, 2020, and June 30, 2021, more than 120,000 children from 0 to 17 years old lost a primary caregiver and another 20,000 children lost a secondary caregiver to COVID-19. American Indian/Alaska Native, Black, Latino, and Asian children were more likely to lose a caregiver than white children.^{23,24}

Certain adverse outcomes on youth emerged immediately. In 2020, deaths from drug-induced causes and suicide increased disproportionately for youth and young adults—including increases in suicide despite an overall decrease across the U.S. population. (See Section II and appendix B for more trends by age.) The same appears to be true for nonfatal harm as well. One Centers for Disease Control and Prevention (CDC) study looking at emergency department visits found that, after an initial decline, suspected suicide attempts among adolescents began to increase in May 2020—shortly after the beginning of the pandemic—and remained higher through 2021. The increase was particularly high among girls. During the weeks of February 21 to March 20, 2021, suspected suicide attempts were 51 percent higher among girls ages 12 to 17 than during the same period in 2019; among boys ages 12 to 17 years, suspected suicide attempts increased 4 percent.²⁵ Another study of emergency department visits at a children's hospital from 2018 to 2020 found that the proportion of emergency visits for mental health conditions increased during the COVID-19 pandemic.²⁶ These data, in part, led children's hospitals and child and adolescent mental health providers to declare a mental health state of emergency.²⁷

Policy responses addressing the direct harms and range of secondary effects and trauma from COVID-19—tailored to populations disproportionately affected—are essential to mitigate current and future adverse outcomes. If government does not pursue strategies that address these problems facing countless families, the trends over the last two decades will not change. Evidence suggests that traumatic events, like those from natural disasters and pandemics, have a lasting effect on mental health for years after the trauma.^{28,29,30}

140,000
Youth lost a caregiver

COMPARED WITH WHITE CHILDREN:

American Indian and Alaska Native children were
4.5X more likely to lose a caregiver

Black children were
2.4X more likely to lose a caregiver

Hispanic children were
1.8X more likely to lose a caregiver

Source: Hillis, et al. COVID-19–Associated Orphanhood and Caregiver Death in the United States. *Pediatrics*, December 2021

SUMMARY OF SOLUTIONS AND RECOMMENDATIONS

Trust for America's Health (TFAH) and Well Being Trust (WBT) call for a multifaceted approach to reduce alcohol, drug, and suicide deaths and to improve mental health and well-being, with a particular emphasis on responding to the harm from the COVID-19 pandemic. These recommendations focus on actionable items in three areas and are primarily aimed at federal and state governments. A summary of recommendations follows; the full recommendations are on page 31.

Invest in Prevention and Conditions that Promote Health

- Promote policies and programs to address the social determinants of health (SDOH).
- Reduce traumatic experiences and promote resilience in children, families, and communities by implementing and funding evidence-based strategies at the local, state, and federal level.
- Expand CDC's comprehensive suicide-prevention efforts.
- Increase federal funding for substance use prevention, mental health, and resiliency programs and staff in schools across the country.
- Boost access to early prevention and family support programs.
- Bolster the continuum of crisis-intervention programs and supports, with a focus on the newly established 988 lifeline.
- Adopt trauma-informed and culturally competent policies and practices for youth-serving programs and agencies, including the juvenile justice system.
- Limit access to lethal means of suicide, including drugs and firearms, among at-risk individuals through state and federal laws, more funding of foundational research, and the adoption of counseling programs in healthcare systems.

Address the Worsening Drug Use and Overdose Crisis

- Reduce the availability of illicit drugs and unnecessary prescriptions through responsible opioid prescribing practices and hotspot monitoring for overdoses.
- Target the prevention of substance misuse among youth with additional support for the Drug-Free Communities Support Program, and direct funding from opioid litigation settlements to primary prevention of youth substance misuse.

- Lower excessive alcohol use through evidence-based policies.
- Implement policies targeting psychostimulant use that complement current opioid-focused policies.
- Promote harm-reduction policies to reduce overdose and blood-borne infections, including increasing access to syringe service programs, naloxone, and fentanyl test strips.
- Continue pandemic-related flexibilities in access to and rules for substance use treatment.

Transform the Mental Health and Substance Use Prevention System

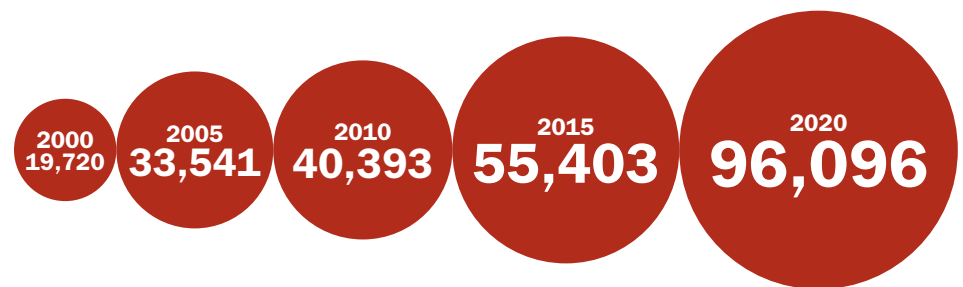
- Expand efforts to combat stigma and improve social attitudes toward mental healthcare.
- Improve data accuracy, completeness, and timeliness through innovation and additional federal funding.
- Promote equity in mental health, including through workforce diversity and culturally appropriate services.
- Modernize mental health and substance use services by aligning healthcare provider payment, quality measures, service delivery, and training to clinical models focused on the whole health of individuals.
- Increase access to mental health and substance use healthcare through full enforcement of the Mental Health Parity and Addiction Equity Act.
- Expand the mental health and substance use treatment workforce through additional federal support in education and development programs, and allow for higher reimbursement for mental and substance use services through public and private insurance.
- Build community capacity for early identification and intervention for individuals with mental health and substance use disorder needs, including through community-based or nontraditional settings.

Pain in the Nation: *The Epidemics of Alcohol, Drug, and Suicide Deaths*

SPECIAL FEATURE: Two Decades of the Drug Overdose Crisis

Long-term trends in alcohol, suicide, and drug deaths have been extremely disconcerting—but recent trends, particularly for drug overdoses, warrant immediate attention. The national rate of drug-induced deaths increased by 70 percent in the past five years. This section reviews the last two decades of the drug overdose crisis to better understand what has happened. This section also provides context and policy considerations for the next two decades.

Growth of Drug-Induced Deaths Over the Past Twenty Years



Source: TFAH and WBT analysis of National Center for Health Statistics data

The Three Waves: Who, What, and When

There is a long history of substance use, opioid addiction, and drug overdoses in the United States. Historically, the first major opioid addiction crisis in the United States ran from 1840 to 1920, and was driven by morphine and opium medications. Opioid addiction waned in the 1900s due to shifts in prescribing practices, new laws restricting prescriptions and supply, and trade disruption during World War I.³¹

More recently, federal government policy focused on law enforcement and criminalization of drug use with the initiation of the “War on Drugs” in 1971, an approach that proved to be ineffective and that had a vast number

of unintended consequences. In the 1980s and 1990s, there was a major cocaine epidemic in Black communities. The federal policy response focused on individual blame (“Just Say No”), policing, and incarceration. This response left a growing number of Americans in jail, heightened existing structural inequities, and seeded mistrust in drug policy and law enforcement.^{32,33,34}

Since 1999, when the primary national mortality data begins, there have been sustained increases in overall drug mortality. During this period, the burden of drug overdoses shifts by type of drugs involved, demographics, and geography.

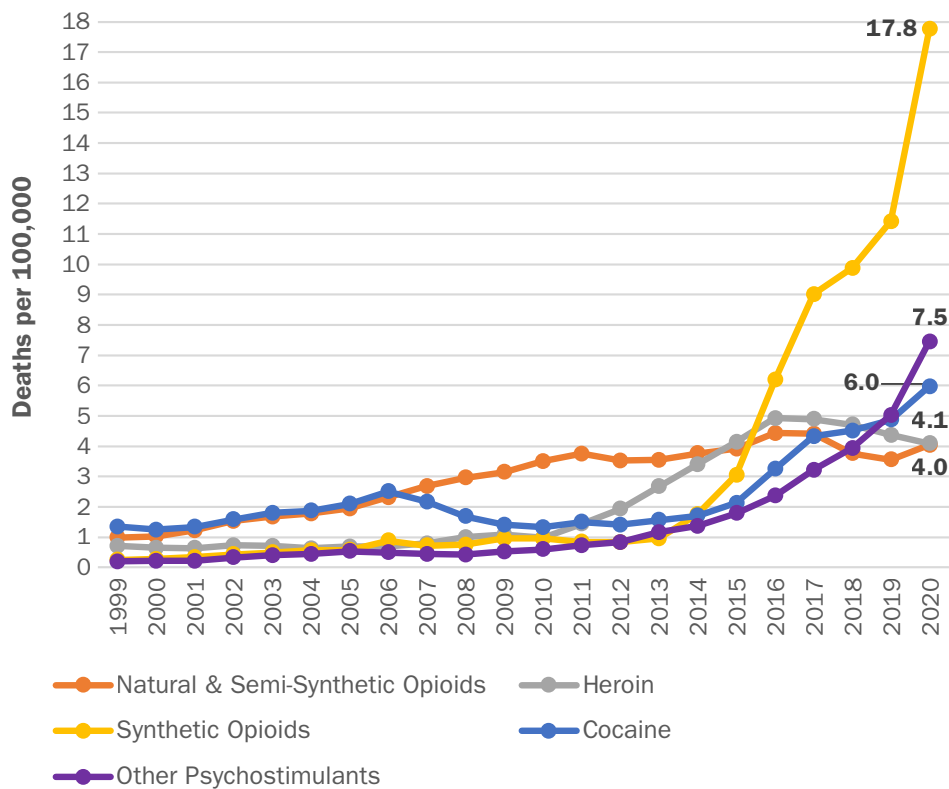
The first wave of the modern overdose crisis—starting in the 1990s and continuing through 2010—saw steady, large increases in overdoses driven by natural and semi-synthetic opioids. Cocaine overdoses also increased on par with natural and semi-synthetic opioids through 2006 but then markedly declined for the subsequent decade. Demographically, this first wave resulted in the highest incidence and highest increases among American Indian/Alaska Native populations, white populations, and populations in non-metro areas. There were large increases across sex, regions, and adult age groups.

Between 2011 and 2014, the rate of overdoses from natural and semi-synthetic opioids noticeably stabilized,

but heroin overdoses markedly increased. This wave also produced the highest rates among American Indian/Alaska Native and white communities. Unlike the earlier wave, increases focused on the Midwest and Northeast regions, with South and West regions holding steady. Increases also occurred across metro and non-metro areas, sex, and adult age groups.

The third wave, between approximately 2015 through the latest data in 2020, saw an increase in all drug-induced deaths of more than 70 percent—by far the largest increases in drug overdose deaths of any of the waves—including unprecedentedly large increases in deaths from synthetic opioids, cocaine, and other psychostimulants. Between

Annual Age-Adjusted Mortality Rate (Deaths per 100,000) from Overdoses by Drug Type, 1999–2020



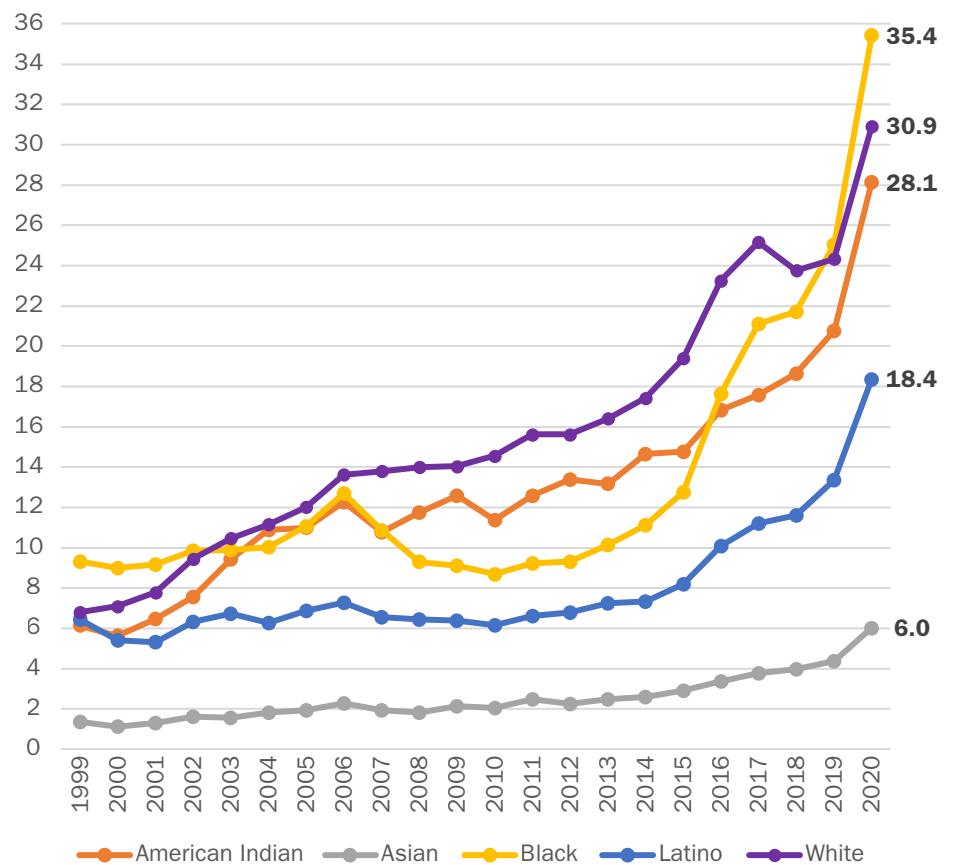
Source: TFAH and WBT analysis of National Center for Health Statistics data

2015 and 2020, overdoses from synthetic opioids increased six-fold and overdoses from psychostimulants increased four-fold. In contrast, overdoses from natural and semi-synthetic opioids and heroin were all relatively steady during this time period.

In addition to the increase in the overdoses from different drug types, this third wave saw a big divergence in demographic impacts. Asian, Black, and Latino communities all saw their rates

of drug mortality more than double between 2015 and 2020. The mortality rate in the Black community almost tripled and moved from being lower than the rates among American Indian/Alaska Native and white populations in 2015 to becoming the highest rate among all racial/ethnic groups in 2020. This wave also saw disproportionate increases among males and in metro areas. Increases crossed regions and adult age groups.

Annual Age-Adjusted Drug-Induced Death Rate (Deaths Per 100,000) By Race/Ethnicity, 1999–2020



Source: TFAH and WBT analysis of National Center for Health Statistics data

Underlying Causes and Policy Responses

Over the past two and half decades, several developments in drug availability and supply combined with inadequacies in the healthcare system, and specific social, economic, and environmental conditions in the United States converged to start and grow the latest drug overdose crises. These conditions—including fragmented safety nets and healthcare systems, long-term rising economic inequality, and historic and ongoing racial/ethnic discrimination and inequities—have shaped the overdose response as well.

In 1995, the U.S. Food and Drug Administration approved OxyContin, which was marketed to physicians by Purdue Pharma as a new kind of pain medication that was not addictive.^{35,36} Other pharmaceutical manufacturers followed with other opioid medications. Manufacturers marketed their opioids to physicians through a variety of avenues, including with an aggressive direct salesforce that targeted elite medical centers for direct influence throughout their systems and, in the process, expanded their influence on other physicians in the region.³⁷ Many physicians, hoping for better solutions to chronic pain management, believed the manufacturers' marketing about safety and addiction, in addition to facing other incentives in the U.S. healthcare system to prescribe opioids.³⁸

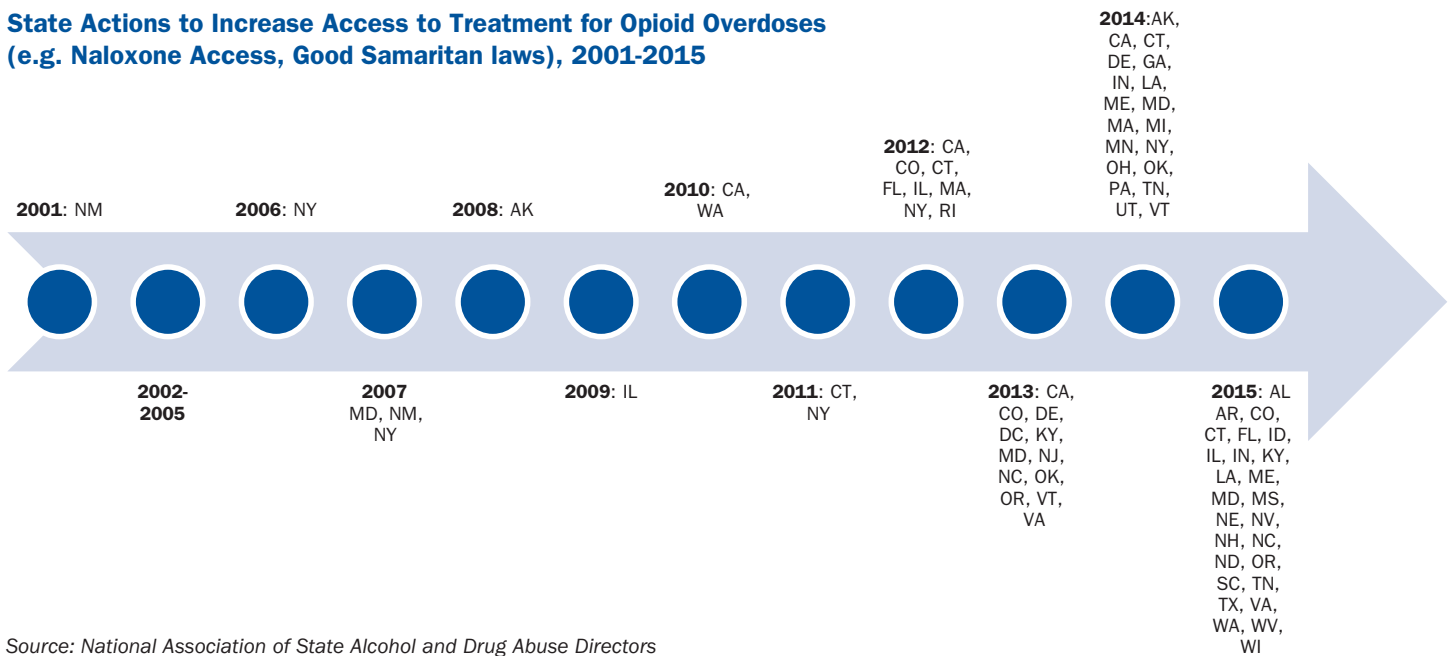
Over the next two decades, opioid prescriptions soared—peaking at 81.3 prescriptions dispensed per 100 people in 2012.³⁹ Opioid use, dependence, addiction, and overdoses increased as well—centering first in economically depressed rural areas with high levels of unemployment and poverty, like West Virginia, Ohio, Kentucky, and New Hampshire.⁴⁰ As of 2020, West Virginia, Ohio, and Kentucky still have among the highest drug overdose death rates in the country.⁴¹ Other research looking at individual-level factors found a divergence in mortality overall and mortality from alcohol, drugs, and suicide tied to educational attainment, a proxy for economic opportunity and prosperity. Between 2010 and 2018, Americans without a college degree experienced declines in expected years lived between ages 25 and 75 while Americans with a college degree continued to see increases.⁴²

As the safety and addiction issues from prescription opioids became clearer and overdose deaths rose, many initial policy responses focused on reducing inappropriate prescriptions. Federal funding for state prescription drug monitoring programs began in 2002.⁴³ A number of physician groups and states issued prescription guidelines, including the American Pain Society/American Academy of Pain Medicine in 2009 and CDC's national Guidelines for Prescribing Opioids for Chronic Pain in 2016.⁴⁴

Federal and state governments implemented other prevention strategies as well, though often belatedly. New Mexico was the first state to pass legislation expanding access to naloxone, an emergency medication to reverse opioid overdoses, in 2001. Several states followed in the next decade, but most states did not take legislative action to improve access to naloxone and emergency medical care (e.g., Good Samaritan laws) until 2012 to 2015.⁴⁵ Other policies have revolved around

improving availability and access to substance use treatment, including medication-assisted treatment for opioid use disorder, community education, early screening for substance use disorders, additional harm-reduction efforts, and more recently, primary prevention interventions, like CDC's 2020 Preventing Adverse Childhood Experiences cooperative agreement grants, which aim to reduce risk factors for substance use among children and to improve life-long health and well-being.^{46,47,48}

State Actions to Increase Access to Treatment for Opioid Overdoses (e.g. Naloxone Access, Good Samaritan laws), 2001-2015



Source: National Association of State Alcohol and Drug Abuse Directors

Throughout this time period, some individuals with opioid addiction turned to illicit opioids, particularly after prescriptions began to decline and heroin became less expensive and more available in the drug supply in the early 2010s.⁴⁹ This change in the drug supply also likely increased opioids in communities that mostly missed the first wave of prescription opioid addiction, including individuals with limited access to healthcare or those, like Black

Americans, who the medical community has largely under-treated for pain.^{50,51}

Around 2013 to 2014, the makeup of the illicit drug market shifted toward synthetic opioids. Synthetic opioids, such as fentanyl, are many times more potent than heroin or other natural or semi-synthetic opioids and are less expensive and simpler to produce. Synthetic opioids are also often laced into other more expensive drugs.⁵²

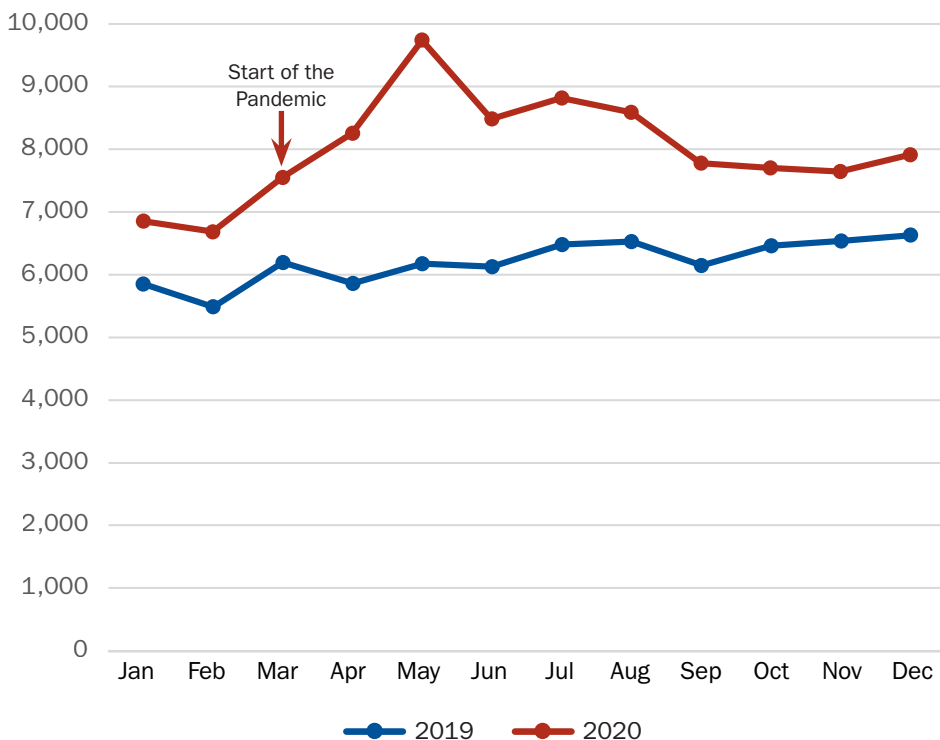
Currently, the primary source of synthetic opioids in the United States are drug cartels that manufacture the drugs in laboratories in Mexico with ingredients from China. The manufacturers then smuggle the drugs across the U.S.–Mexico border. Since fentanyl and other synthetic opioids are incredibly powerful, the physical size of the smuggled product is small and very hard to detect.⁵³

This shift toward a more potent illicit drug supply makes overdose more likely for all who use drugs, though not equally. Researchers suggest Black communities may be more affected by these changes as their communities are disproportionately targeted with a riskier drug supply generally and have more barriers to treatment and recovery due to longstanding healthcare inequities and higher rates of incarceration.⁵⁴

Another possible contribution to the disproportionate increase in drug deaths among communities of color in recent years is that policy and program responses have focused on the white communities affected in earlier waves of the epidemic and have not reached all populations affected by the later waves.⁵⁵

The COVID-19 pandemic is the latest exacerbating event in the drug overdose crises. Although the pandemic caused huge amounts of direct and indirect harm to all Americans, the drug mortality rate, in particular, jumped an astounding 30 percent in 2020, the highest one-year increase ever recorded. In March 2020—the beginning of the pandemic—monthly overdose deaths surpassed 7,000 for the first time. The remainder of 2020 was worse, with overdose deaths peaking in May 2020 at 9,746 deaths that month.

Number of Drug-Induced Deaths, by Month, 2019–2020



Source: TFAH and WBT analysis of National Center for Health Statistics data

Rethinking Strategies to Match the Crisis

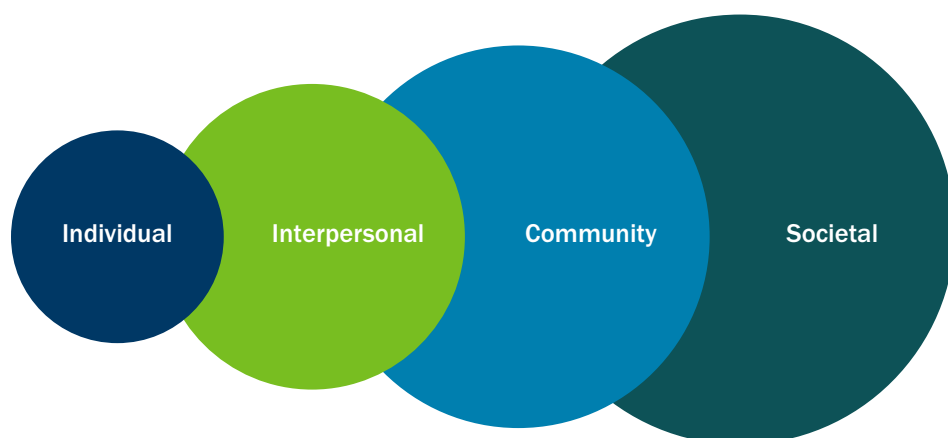
The current situation is untenable: drug overdose deaths increasing each year, high-potency drugs proliferating, new regions and populations increasingly affected, and the resiliency of the nation being continually tested by the COVID-19 pandemic and persistent systemic inequities. Action across sectors and government at the local, state, and national levels must match this crisis with coordinated and comprehensive action. Potential approaches include renewed support for evidence-based policies and programs, larger and longer-term investments, solutions that reach diverse populations, and a commitment to research and funding of innovative strategies. In Section III of this report, TFAH and WBT offer specific and evidence-based policy recommendations. Here we discuss a few gaps worthy of additional consideration.

The drug overdose crisis has been worsening for decades and the measures taken—much around inappropriate prescription and emergency medications— while important, have

proven insufficient. Many critical solutions that target underlying causes are long-term undertakings that require time and sustained support to be effective. Social, economic, and environmental factors—often called social determinants of health (SDOH)—have a major impact on health and well-being at the population level.⁵⁶ SDOH conditions shape daily life around jobs, housing, education, neighborhood, and healthcare access, which, in turn, systematically affect people’s health—including through a higher risk for developing a substance use disorder (SUD) and overdosing, and less access to treatment for SUD and overdose.^{57,58,59,60,61} These conditions are tied closely to equity issues, including structural racism, poverty, and community context.^{62,63,64}

Addressing SDOH requires working across sectors and leveraging data and resources to address the conditions that affect health and health equity.⁶⁵ With appropriate resources, public health can play key roles in addressing SDOH: public health officials can

Social-Ecological Model of Substance Use and Overdose Prevention



Source: Minnesota Department of Health

provide the evidence base for effective policies and interventions, offer best practices, analyze and share data across sectors, convene different governmental and community-based organizations to identify and address barriers to health, and collaborate across sectors to prioritize and implement evidence-based strategies.⁶⁶ One example of a new initiative in this area is the Improving Social Determinants of Health Act of 2021, which would authorize a program at CDC to lead the agency's SDOH work and award grants to state, local, territorial, and tribal health agencies and organizations to address SDOHs. The president's FY 2023 budget request for CDC included a \$153 million request to support implementation of SDOH work at CDC and across the country.⁶⁷

New strategies must also account for the important connection between adverse childhood experiences (ACEs) and negative health outcomes. ACEs are potentially traumatic events—such as abuse, neglect, and high rates of violence, crime, or poverty in a community—that occur in childhood and can have long-lasting effects on an individual's lifelong health and opportunity. As the number of ACEs an individual experiences increases, so does the risk for negative outcomes, such as asthma, diabetes, cancer, substance use, and suicide in adulthood. The CDC estimates that 61 percent of adults report having experienced at least one ACE in their lifetime, and the prevention of ACEs could reduce cases of depression in adults by 44 percent.⁶⁸ CDC has also noted that economic insecurity resulting from the COVID-19 pandemic can lead to ACEs by increasing the risk of violence and inconsistent access to food, transportation, and housing.⁶⁹

Strategies that promote relationships and environments that help children thrive can prevent ACEs, and intervention measures like enhanced primary care and family-centered substance use disorder treatment can mitigate their impact.

All substance use and overdose policies and programs also need to reflect recent changes in the drug overdose epidemic, and policymakers need to ensure that populations most affected now are getting help. In the past few years, the demographics of who is dying from drugs has changed substantially. For example, in 2015, white Americans had a drug-induced mortality rate 52 percent higher than Black Americans. By 2020, that relationship inverted: Black Americans now have a drug-induced mortality rate 15 percent higher than white Americans. Another big shift is geographic: drug deaths increased markedly in the South and West of the country recently after years of lower rates in these regions. In planning policies, programs, and funding grants within such a dynamic situation, it is important to consider what programs and policies are relevant and effective in a wide variety of communities and what kinds of flexibilities would be helpful to add in order to facilitate adjustment as needed in years to come.

Finally, the nation needs to support innovation and new ideas in this field, particularly considering the added burden of the COVID-19 pandemic and 2020 overdose rate. In addition to supporting research into a wide variety of existing solutions, the United States needs to develop new proactive systems for creating, identifying, and researching solutions, such as dedicated research centers and initiatives, and funding for a wider variety of research efforts.

RESPONDING IN AN EMERGENCY: REDUCING FATAL OVERDOSES NOW

In the past five years, drug overdose deaths have skyrocketed, driven primarily through increases in overdoses involving synthetic opioids, cocaine, and other psychostimulants. In 2020, 80 percent of fatal drug overdoses involved at least one of these three drugs.⁷⁰ Expanding policies that can have an immediate impact on reducing fatal overdoses from these three potent drugs is essential to saving lives now.

Harm reduction is an injury prevention strategy aimed at minimizing the negative consequences resulting from an injurious action or incident. For this approach, shifting the level of harm is the primary goal, rather than primary prevention. Harm-reduction policies are complementary to policies focused on long-term prevention or treatment and include measures such as requiring seat belts and air bags in cars to minimize injuries during a motor vehicle crash, as well as a number of overdose reduction policies. Harm-reduction policies that reduce overdoses do not endorse, enable, or encourage drug use but meet those struggling with substance abuse where they are.

Overdose reduction policies engage in two main tactics. The first is to shift fatal overdoses to nonfatal overdoses by reversing more overdoses while they are in progress. This effort includes policies like ensuring access to currently available overdose reversal medications (e.g., naloxone for opioid overdoses); increasing the number of

laypeople who can identify a person who is overdosing and provide assistance; providing safe injection sites where there is medical support available in case of overdose; and improving overdose reversal medications and medical treatments currently available. Another tactic to reduce overdoses is to encourage testing of all drugs for fentanyl in order to reduce the consumption of laced drugs that may lead to unintended fatal and nonfatal overdoses. One study from Canada estimated that more than 3,000 lives were saved in British Columbia between April 2016 and December 2017 due to three harm-reduction policies: (1) 1,580 lives saved from take-home naloxone kits, (2) 230 lives saved from supervised injection sites, and (3) another 590 lives saved from medication-assisted treatment.⁷¹

Another major overdose reduction tactic is to make the illicit drug supply less dangerous. While there are types of synthetic opioids and psychostimulant drugs that have medical uses (e.g., fentanyl is a synthetic opioid used to treat cancer pain, and Adderall is a psychostimulant used to treat attention deficit hyperactivity disorder), most overdose cases involve illicit versions.^{72,73} Specifically aiming to reduce the availability of the most potent drugs—like synthetic opioids, cocaine, and other psychostimulants, plus any mixing of drugs—means the remaining drug supply is less dangerous.

Biden Administration Mental Health and Substance Abuse Prevention Initiatives

The Biden Administration, has announced that it is expanding numerous initiatives to improve Americans' mental health and prevent substance misuse, including the following:

Biden Strategy to Address the National Mental Health Crisis

As part of his first State of the Union speech, in March 2022, President Biden, saying the country faced an unprecedented mental health crisis among people of all ages, announced a strategy to strengthen system capacity and ensure a continuum of care. The end goal is the transformation of the current healthcare and social services systems to address mental health issues holistically and equitably.⁷⁴

The pillars of the Biden plan are:

- Strengthen System Capacity by investing in proven programs that bring providers into behavioral health and piloting approaches to train diverse groups of paraprofessionals. Expand the availability of evidence-based community mental health services, and invest in research on new practice models.
- Connect Americans to Care by expanding and strengthening mental healthcare coverage parity, by integrating mental health and substance use treatment into primary care, by improving veterans' access to same-day mental healthcare, and by expanding access to telehealth mental health services. The Biden plan also calls for expanded access to mental health support in schools and colleges and universities and for embedding and co-locating mental health and substance use providers into community-based settings.

Additional parts of the Biden plan include increased mental health resources for justice-involved individuals, expanded early childhood and school-based intervention services and supports, and additional research on social media's mental health impact, particularly on youth mental health.

Surgeon General Advisory on Protecting Youth Mental Health

In December 2021, U.S. Surgeon General Dr. Vivek Murthy issued the *Surgeon General's Advisory on Protecting Youth Mental Health* to call attention to the nation's youth mental health crisis. The advisory addressed youth mental health issues that were exacerbated by COVID-19 but were serious issues before the pandemic. It called for "a swift and coordinated response" to the nation's youth mental health crisis and demonstrated the need for all sectors of society to be part of the solution, with recommendations for what individuals, families, community organizations, technology companies, and government can do to improve and protect young people's mental health.⁷⁵

The Advisory's topline recommendations included:

- Recognize that mental health is an essential part of overall health.
- Empower youth and their families to recognize, manage, and learn from difficult emotions.
- Ensure that every child has access to high-quality, affordable, and culturally competent mental healthcare.
- Ensure that children's and youth mental health is supported in educational, community, and childcare settings. Expand and support the early childhood and education workforce.
- Address the economic and social barriers that contribute to poor mental health for young people, families, and caregivers.

- Increase timely data collection and research to identify and respond to youth mental health needs more rapidly, including research on the relationship between technology and youth mental health.

Office of National Drug Control Policy

The U.S. Office of National Drug Control Policy develops and implements a national drug-control strategy. In March 2022, it released the Model Law Enforcement and Other First Responders Deflection Act. Deflection programs are critical tools to allow police and other first responders to deflect people with substance abuse or mental health disorders away from the traditional criminal justice system and instead connect them to evidence-based treatment programs.⁷⁶

Recent HHS Primary Prevention and Harm Reduction Initiatives

CDC launched four complementary education campaigns that provide information about the prevalence and dangers of fentanyl, the risks and consequences of mixing drugs, the life-saving power of naloxone, and the importance of reducing stigma around drug use to support treatment and recovery.⁷⁷

- CDC and the Substance Abuse and Mental Health Services Administration (SAMHSA) announced that federal funding may now be used to purchase fentanyl test strips in an effort to help curb the dramatic spike in drug overdose deaths.⁷⁸

- CDC and SAMSHA established a \$3 million partnership to leverage CDC's National Harm Reduction Technical Assistance Center to support the implementation of effective, evidence-based harm-reduction programs, practices, and policies in diverse settings to decrease health disparities.⁷⁹

- CDC and ONDCP invested in communities by expanding their investment in the Combating Opioid Overdoses through Community Level Intervention initiative to fund eight new projects to implement innovative, evidence-based, and scalable solutions—like the Merrimack Valley, Massachusetts Wheels of Hope program for those with a substance use disorder to receive rides to treatment appointments.⁸⁰

- CDC provided more than \$300 million per year through Overdose Data to Action to support 47 states, the District of Columbia, two territories, and 16 high-burden cities and counties in collecting high-quality, comprehensive, and timely data on nonfatal and fatal overdoses. The Overdose Data to Action grants will also support recipients by using these data to inform prevention and response efforts, such as ensuring people are connected with the care they need; supporting healthcare providers and systems with overdose response efforts; and developing partnerships with public safety and first-responders to improve data-sharing and response.⁸¹

Q&A with Author Sam Quinones: Healing Communities in Order to Deal with the Addictions Crisis

Sam Quinones is a journalist and the author of two acclaimed books on the opioid crisis: *Dreamland: The True Tale of America's Opiate Epidemic* (2015) and *The Least of Us: True Tales of America and Hope in the Time of Fentanyl and Meth* (2021). *The Least of Us* was nominated for a National Book Critics Circle award for Best Nonfiction Book of 2021. *Dreamland* won a National Book Critics Circle award for the Best Nonfiction Book of 2015.



TFAH: How has the opioid crisis evolved over time?

Sam Quinones: There have been two sources of drug supply. The first was prescription pain pills from doctors. All over the country, doctors were badgered and pressured into prescribing these pills. Some of them embraced it eagerly and some never did, but a lot did, and this was happening coast to coast. The prescribing data looks like an airplane taking off from the tarmac—going up and up, raising every year—covering the country in this very potent stuff and sold as if it was not addictive for anyone. Then a second source emerged, Mexican drug traffic, which has covered the entire country with two synthetic drugs—illicit fentanyl and very potent methamphetamine. The overprescribing of prescription medications set the stage for the illicit drug overdose crisis. Many people were helped by prescribed pain medications, but there was catastrophic collateral damage. The root of it all is in the massive supply and wanton prescribing.

This is really a supply story overlaid on a culture that is vulnerable because so many of the things that bind us have been thrown away as if they don't matter. Today we can afford to live

alone, but people die in isolation. This is a story that's getting repeated all over the country—ghastly unending supplies of these drugs in towns, communities, and cities where a lot of people are alone in many ways.

Two things were extraordinary kindling to this fire. One was addiction. People don't like to talk about addiction; the silence I encountered when I was writing my first book about on the topic, *Dreamland*, was remarkable. We have to acknowledge addiction. The other thing I hope the overdose crisis forces us to look at is a deep reservoir of trauma all across the country in the course of, you name it: abuse, neglect, rape, two wars fought by the same very small portion of Americans who come back with their own forms of trauma from war. All of that is part of the mix and difficult to untangle.

TFAH: You've spent a lot of time in communities experiencing the opioid crisis. Are there common factors among them?

Quinones: What strikes me is that the opioid crisis has hit every community in America. I think that's because as a culture we have done so much to shred the feelings of community, the things

that link us together and bind us. This has happened in poor areas, in working-class areas, in upper-class areas.

Within the communities I studied for my books early in the crisis, during the prescribing overdose phase, it was a remarkably white phenomenon—which I don't have a good explanation for. Now that has changed. Fentanyl changes everything. Now we are seeing, in the Black community in particular, people using cocaine mixed with fentanyl. They have no tolerance for fentanyl, and they die. Dealers figured out early on that if they put fentanyl in cocaine, they'll create opioid addicts. They also got people dying, too.

In addition, we have a consumer culture in which we are constantly bombarded; our brain chemistry is constantly being fished by companies that make products designed to prod us into impulse buying, impulse spending, and impulse use. Social media, sugar, gambling, pornography, alcohol, and drugs—there's a very long list all on the same continuum.

TFAH: It's obvious there's a crisis. What is the solution? What needs to be done?

Quinones: What seems to work best is when people get together and work in the smallest of ways. This is the theme of my book *The Least of Us*. I write about the town of Portsmouth, Ohio. In Portsmouth, I found that the smallest, little responses were sparks of a bigger way of moving forward. It takes people coming together, people who are sick of the dope, the smoking, the obesity, and other signs of ill-health that are rampant in southern Ohio. These people came together to find productive ways to move forward. Some started small businesses; some worked to rehab vacant buildings. Little

synergies. No big factory came to town. It was in the smallest, little ways that progress was being made. It's the daily showing up, the daily working, people connecting. Now there are a few cafés in Portsmouth where people can do that kind of connecting organically. It's about personalities with energy coming together, finding each other, and the sparks that fly from that. It's not sexy, and it's not going to make the news. It's not saving the world—it's small, daily efforts to bring people together in ways that we've lost as a culture.

TFAH: Is addiction a cause of what is happening in many lower socioeconomic communities or is it a symptom of what's happening?

Quinones: There's a circular phenomenon at work, both contribute. In rural areas I visited, the jobs are gone, the businesses are gone, the mom-and-pop stores are gone, a lot of the population has departed as well. That's a town that is poorly prepared for a lot of issues and then along comes the overprescribing of pain pills and those communities become consumed. If there had been a more connected, a more economically vibrant community, would they have been able to ward it off? Perhaps. It does seem to me that the overdose crisis starts in those places experiencing economic distress. However, it then moves—out of Appalachia, out of the Rust Belt, and into the most well-off communities around the country. You would think that those better-off communities would have had the ability to fend off the crisis, but that's where I came to the conclusion that this wasn't an economic story; it was a story of isolation. Cultural isolation combined with these isolating drugs, which these opioids are. It's a catastrophe in the making.

TFAH: You talk in your books about the notion of community repair. Can you say more about that?

Quinones: We've done a lot in this country to destroy communities. In the last 40 years, we've decided that the thing that has kept us alive and allowed us to prosper, which is the feeling of needing other people, we didn't need that anymore. The problem is, throughout history, people die in isolation. In many ways—you can die before your time because you're all alone.

How do we defend ourselves against these potent drugs out of Mexico and the mass marketing of fast food, for example? The way to defend yourself is to band together. That's why when I wrote *The Least of Us*, I filled it with stories of people who in small, non-sexy ways were working to repair community. I'm not trying to give everyone a prescription of how to solve the opioid problem in their town, but maybe we need to give these ideas a chance—work in the smallest way to begin repairing your neighborhood. Bring people out to work together after being alone for so long. We need to get back to repairing that which we have always needed as human beings. We learned this again in COVID. We learned how important it was to be around other people, how devastating it was to be all alone. Screens are an impoverished substitute for real, human, face-to-face interaction. This is all part of the addiction problem—it has grown out of our lack of connectivity with each other.

TFAH: What's your advice to policymakers about how to end the country's addiction crisis?

Quinones: I'm somewhat reluctant to talk about this because I'm not the expert. The experts are on the ground, they work in schools and ERs, etc. But

there are two things that I think are very important.

First, we really need to rethink how we do jail. Jail for a lot of people has been a huge boon. For some people being arrested—saved their life, it began their sobriety. But overall, jail in the way it's done in America is a real disaster and it's part of the problem. Jail is the moment we need to make special use of. People come off the street completely commandeered by dope. They detox, and all of a sudden, they view the world a little differently. But at that moment we put them in a jail that's boring, negative, and predatory.

Jail can be an investment in recovery, and we're seeing this in many counties hardest hit by the opioid epidemic. They are experimenting with pods of recovery. These are voluntary pods where everyone is working on recovery. To me, this is a momentously positive thing. It is not, however, a panacea. It's one small step—as they all must be—toward a community that is prepared to help people succeed in recovery from addiction. I'd like to see a national jail conference on how to do it differently. The point is that we need to try different things in criminal justice, try new programs and compare notes with others.

The other thing that I think is essential and, in many counties, already exists but needs to be everywhere, is drug courts, recovery courts. We need to use the leverage of the criminal justice system to pry people away—little by little by little—from dope and nurture a readiness that will not develop on the street. To suggest that people need to be ready before they come to treatment with the drugs on the street today means a death sentence for too many people. That's been proven over and over again all across the country.

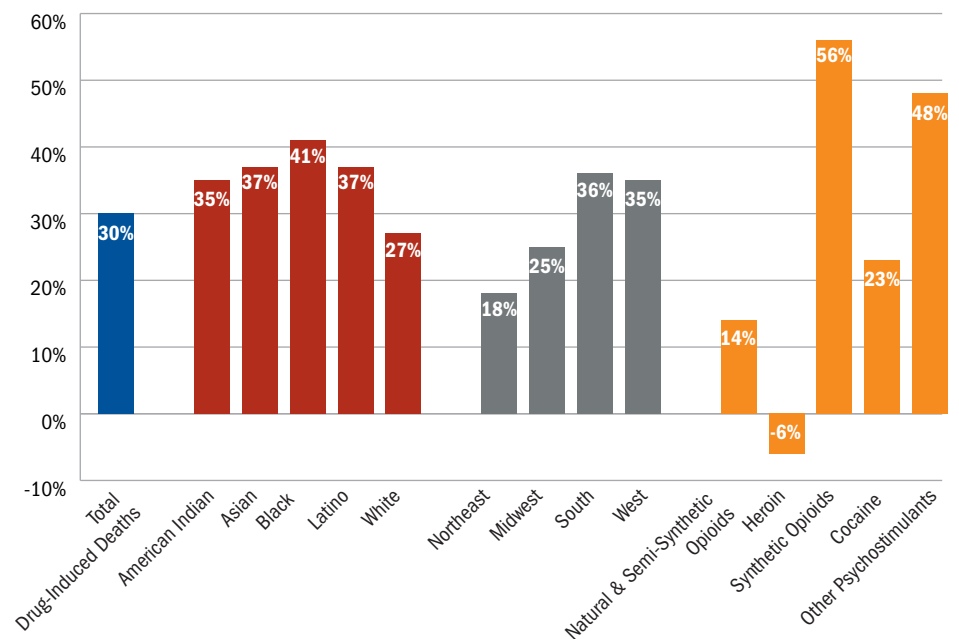
Pain in the Nation: *The Epidemics of Alcohol, Drug, and Suicide Deaths*

Mortality Data and Trends

The United States has seen decades of alarming trends in deaths from alcohol, drugs, and suicide. The year 2020 was even worse: it had the highest number of combined deaths and the biggest rise in the mortality rate ever recorded—and provisional data suggest 2021 will be worse.⁸² The 2020 increase in combined alcohol, drug, and suicide deaths spanned age, racial/ethnic, and geographic groups—though the increases disproportionately harmed certain groups. To understand changing trends fully, it is important to disaggregate causes of deaths, demographic groups, and geography:

1. Drug-induced mortality increased by 30 percent, with large increases across populations. There were particularly large increases across all communities of color, among youth and young adults, those living in the South and West, and in overdoses involving synthetic opioids and psychostimulants.
2. Alcohol-induced death rates increased 27 percent in 2020, and spanned demographic groups and geography—including increases in all 50 states and the District of Columbia. The increases were particularly high among young adults (ages 18–34), American Indian/Alaska Native and Asian communities, and those living in the Midwest.

Percent Change in Age-Adjusted Rates of Drug-Induced and Drug-Specific Overdose Mortality, 2019–2020



Source: TFAH and WBT analysis of National Center for Health Statistics data

3. Overall suicide mortality declined slightly, though progress was not universal. While suicide declined among white populations, it remained the same among Asian populations and increased among American Indian, Black, and Latino populations. There were also differences by age: suicide rates for adults ages 35 to 74 declined, and suicide rates increased among youth and young adults.

Other trends in deaths from alcohol, drugs, and suicide are summarized below, followed by a state-by-state analysis. Additional data (including by demographic and state) and methodology (including sources and definitions) can be found in the appendices starting on page 38.

WHAT ARE OPIOIDS AND PSYCHOSTIMULANTS?

Opioids are a class of drug that have chemical structures similar to those found in opium poppies and that interact with nerve cells to reduce pain and produce feelings of euphoria.⁸³ Natural opioids are sourced from opium poppies, semisynthetic opioids are synthesized from naturally occurring opium, and synthetic opioids are made entirely in a lab.⁸⁴

Common side effects of opioid use include sedation, dizziness, nausea, vomiting, and constipation. Regular opioid use can lead to physical dependence, and misuse can lead to addiction and overdose.^{85,86} Due to increased prescribing, common prescription opioid drugs were the primary drivers of the opioid epidemic when it began in the late 1990s. In 2010, the crisis centered on more potent and illicit opioids: first heroin and then, starting around 2013, synthetic opioids.⁸⁷

The most common types of opioids include:

- **Natural/semisynthetic opioids.** The most common prescription opioids, like codeine, hydrocodone (including Vicodin), oxycodone (including OxyContin and Percocet), and morphine.
- **Heroin.** An illicit semisynthetic opioid that is twice as potent as morphine.
- **Synthetic opioids.** Extremely potent opioids, including fentanyl and carfentanil. Fentanyl is a medication that is 50 to 100 times as potent as morphine and most frequently used in

anesthesia. Carfentanil is 10,000 times as potent as morphine and is used as a tranquilizer for large animals (e.g., elephants). Fentanyl and carfentanil, as well as their analogs, are also produced illicitly for nonmedical purposes and are extremely dangerous, proving deadly in just miniscule amounts.^{88,89}

- **Methadone.** A medication used for pain management and to treat individuals with opioid use disorders; it reduces withdrawal symptoms and cravings, and blocks highs from other opioids. Methadone is a type of synthetic opioid, but it is typically grouped separately from other synthetic opioids (including in this report) because it is an effective treatment for opioid use disorder.
- **Psychostimulants** include a wide variety of substances that stimulate the central nervous system and elevate mood and alertness. Psychostimulants can be addictive. Some have important medicinal uses (e.g., for attention deficit hyperactivity disorder), and some have the potential for misuse and serious health effects, including overdose death.⁹⁰ The psychostimulants most often involved in overdose deaths are **cocaine** (which has its own category) and a combined category called *other psychostimulants with abuse potential*, referred to in this report as **other psychostimulants**. They include methamphetamine, ecstasy, amphetamine, and prescription stimulants.⁹¹

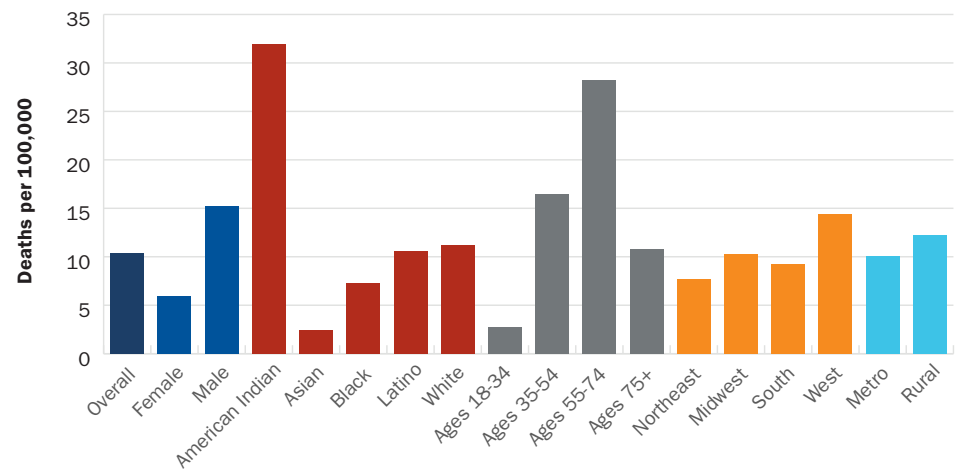
Overall National Data and Trends

In total, there were 186,763 alcohol-induced, drug-induced, and suicide deaths—or an age-adjusted rate of 54.8 deaths per 100,000 people—in the United States in 2020; this is a 20 percent increase over 2019 and a 77 percent increase over 2010. Additional alcohol, drug, and suicide trends are below.

Trends in Alcohol-Induced Deaths

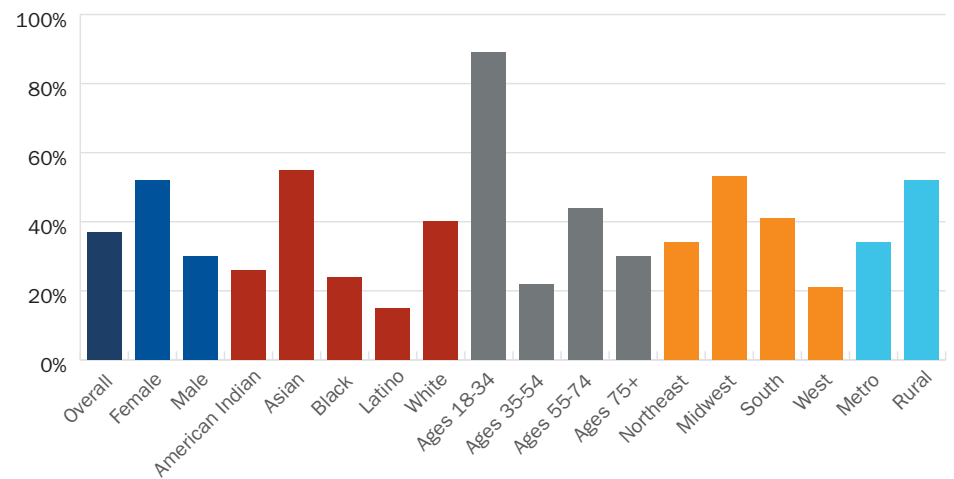
- In 2020, 49,061 Americans died from alcohol-induced causes, and 350,883 Americans died from alcohol-induced causes in the decade from 2011 to 2020. *Note:* Alcohol-induced deaths include alcohol poisoning, liver diseases, and other diseases; it does not include alcohol-attributable deaths, such as alcohol-related violence, accidents, or vehicle fatalities. In this report, alcohol deaths include alcohol-induced causes only.
- The rate of American deaths from alcohol-induced causes was 27 percent higher in 2020 compared with 2019, increasing from 10.4 to 13.1 deaths per 100,000 (age-adjusted rates). It was the 11th year of increases, and, in total, the alcohol death rate grew 73 percent since 2010.
- Alcohol-induced death rates in 2020 were highest among American Indians and Alaska Native peoples (42.4 per 100,000), adults ages 55 to 74 (34.0 per 100,000), males (19.2 per 100,000), those living in the West (17.5 per 100,000), and those living in non-metro areas (15.8 per 100,000).
- All groups had higher rates of alcohol deaths in 2020 compared with 2019, except for youth ages 0 to 17, who held steady.

Age-Adjusted Alcohol-Induced Mortality Rate (Deaths per 100,000), Overall and by Select Demographics and Region, 2020



Source: TFAH and WBT analysis of National Center for Health Statistics data

Percent Change in Alcohol-Induced Mortality Rates by Select Demographics and Region, 2010–2020



Source: TFAH and WBT analysis of National Center for Health Statistics data

Trends in Drug-Induced Deaths

- In 2020, 96,096 Americans died from drug-induced causes, and 621,960 Americans died from drug-induced causes during the decade from 2011 to 2020. *Note:* Drug-induced deaths is a slightly wider category than drug *overdose* deaths and is used because it allows for combining total alcohol, drug, and suicide deaths.
- The rate at which Americans died from drug-induced causes was 30 percent higher in 2020 compared with 2019, up from 22.8 to 29.5 deaths per 100,000 (age-adjusted rates). Since 2010, the drug death rate has more than doubled.
- The increase was largely driven by deaths from synthetic opioids, cocaine, and psychostimulants. Synthetic opioid overdoses increased 56 percent, cocaine overdoses increased 23 percent, and other psychostimulants overdoses increased by 48 percent from 2019 to 2020.
- Drug death rates in 2020 were highest among adults ages 35 to 54 (52.5 per 100,000), males (41.1 per 100,000), young adults ages 18 to 34 (38.4 per 100,000), Black people (35.4 per 100,000), and those living in the Northeast (34.0 per 100,000).
- All groups had higher rates of drug-induced deaths in 2020 compared with 2019, except for ages 75 and older. The size of the increase varied by community. All communities of color saw disproportionate increases—with Black people experiencing the largest increase (41 percent) between 2019 and 2020—as well as people living in the South and West.

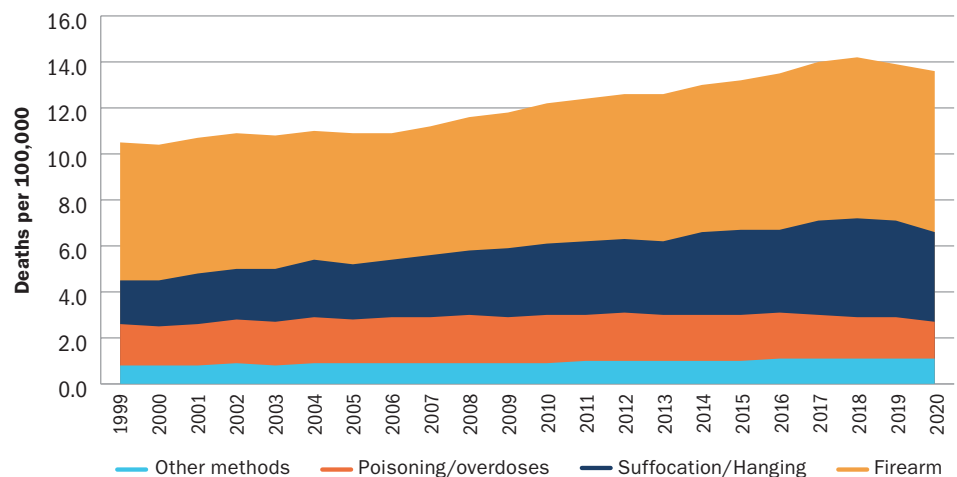
Trends in Deaths by Suicide

- In 2020, 45,979 Americans died from suicide, and 442,258 Americans died from suicide during the decade from 2011 to 2020.
- The overall suicide rate decreased 3 percent in 2020 compared with 2019. This was the second year in a row with declines in the overall suicide rate, though the rate is still 30 percent higher than in 2000.
- These decreases in suicide rates were not universal—trends varied by demographic.
 - Suicide rate declines were focused among adults ages 35 to 74, while suicide rates among youth and older adults were unchanged, and rates among young adults ages 18 to 34 increased.
 - Suicide rates declined among white Americans, remained the same among Asian Americans, and increased

among American Indians/Alaska Natives, Black, and Latino Americans.

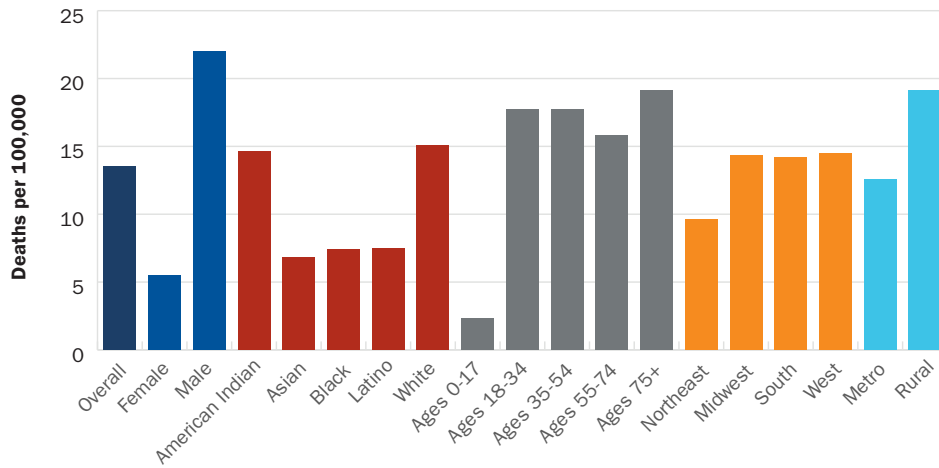
- Longer-term trends differ based on method of suicide. Suicide by firearm and suffocation/hanging have both increased substantially over the last 10 years. Between 2010 and 2020, rates of firearm suicides increased 14 percent and rates of suffocation/hanging suicides increased 26 percent. All other methods, including poisoning/overdose, decreased by 10 percent over the same time period.
- Deaths by suicide in 2020 were highest among males (22.0 per 100,000), those living in non-metro areas (19.1 per 100,000), whites (15.1 per 100,000), and American Indians/Alaska Natives (14.6 per 100,000). In 2020, just over half of suicides were by firearm, 27 percent were by suffocation/hanging, 12 percent were by poisoning/overdose, and 8 percent were by other methods.

Annual Age-Adjusted Suicide Rate (Deaths Per 100,000) By Suicide Method, 1999–2020



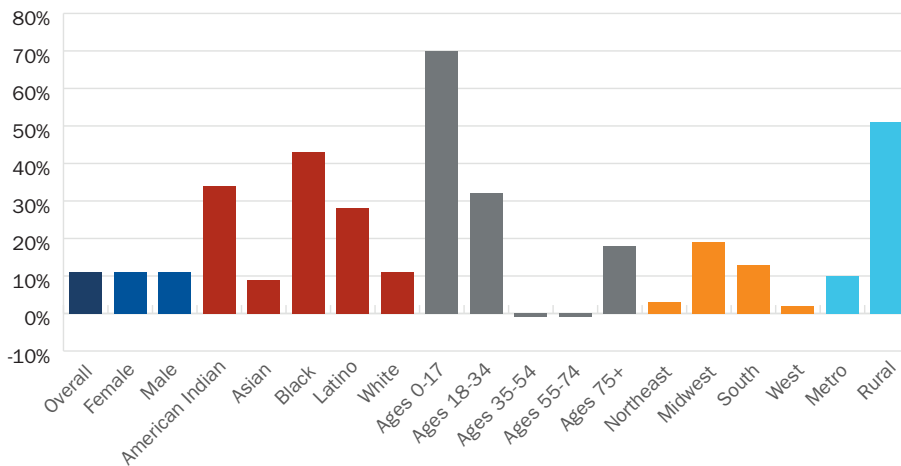
Source: TFAH and WBT analysis of National Center for Health Statistics data

Age-Adjusted Suicide Mortality Rate (Deaths per 100,000) Overall and by Select Demographics and Region, 2020



TFAH and WBT analysis of National Center for Health Statistics data

Percent Change in Suicide Mortality Rates by Select Demographics and Region, 2010–2020



TFAH and WBT analysis of National Center for Health Statistics data

DATA LIMITATIONS: WHAT THIS DATA DOES NOT SAY

This section focuses on mortality from alcohol, drugs, and suicide in 2020 and other recent trends. It does not capture local trends, what’s happened in 2021 or 2022 (as complete mortality data from those years were not available at the time of the report issuance), nor the full burden of these epidemics beyond mortality, such as nonfatal overdoses, suicide attempts, injury deaths attributable to alcohol, or substance use disorders. Other factors to consider when reviewing the overdose data are:

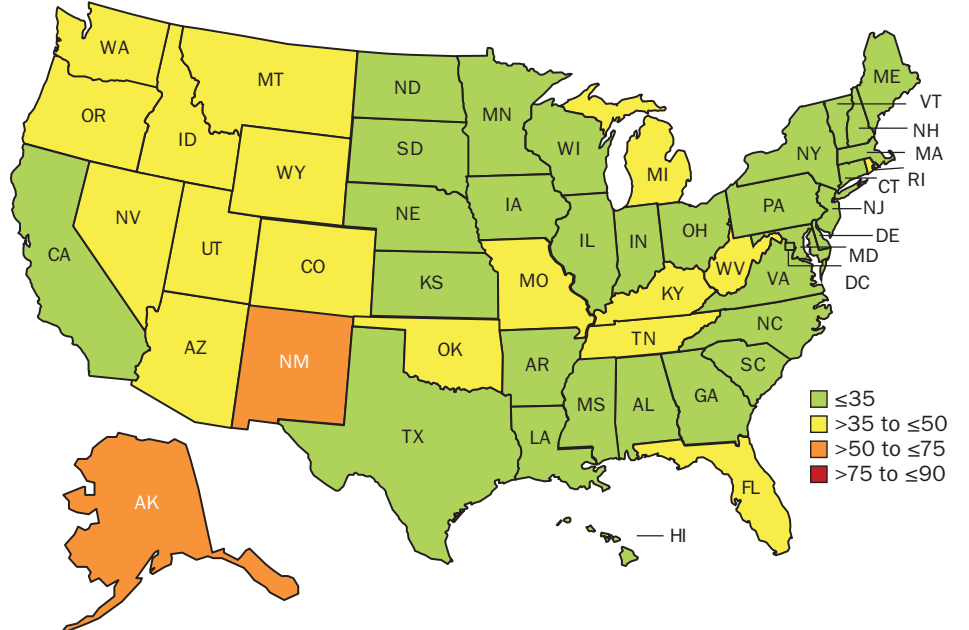
- A reduction in fatalities may indicate a successful harm-reduction strategy (e.g., naloxone is reversing more overdoses) but not an improvement in root causes.
- Mortality reporting policies and capacity, particularly regarding identifying drug type in overdoses, vary by state and could artificially lower mortality rates for synthetic opioids and other specific drug types.
- A particularly lethal or adulterated batch of illicit drugs may cause a cluster of deaths and drive overdose rates in states with small populations. For example, roughly half of the synthetic-opioid overdose deaths in Alaska in 2017 occurred in Anchorage over a three-week period.⁹²

State Analysis

The rates and trends for deaths caused by alcohol, drugs, and suicide combined vary across regions and states. A state-level analysis follows, and charts on page 40 in Appendix C have state-level data on alcohol, drug, suicide, opioid, and synthetic-opioid deaths and death rates.

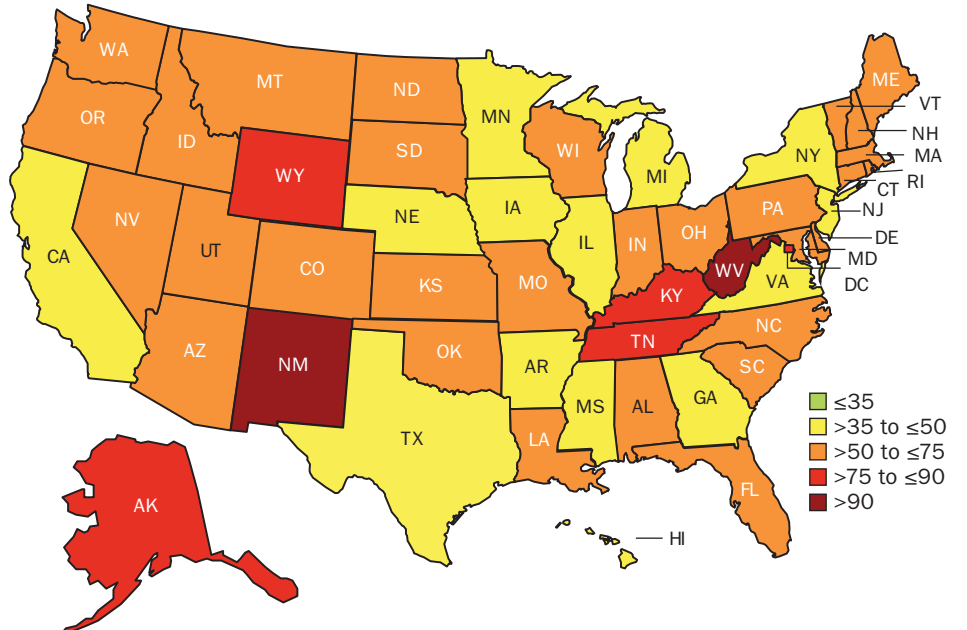
- **Deaths from alcohol, drugs, and suicides.** In 2020, 49 states and the District of Columbia saw higher rates of death from alcohol, drugs, and suicide combined compared with 2019. (The one exception was New Hampshire.)
 - States with the highest age-adjusted death rates from alcohol, drugs, and suicide in 2020 were West Virginia (116.8 per 100,000) and New Mexico (106.8 per 100,000). This is the first year that any state's mortality rate rose above 100 deaths per 100,000.
 - States with the lowest age-adjusted death rates from alcohol, drugs, and suicide in 2020 were Texas (37.8 per 100,000) and Hawaii (40.4 per 100,000).
- **Alcohol-induced deaths.** In 2020, every state and the District of Columbia had higher alcohol death rates compared with 2019.
 - States with the highest age-adjusted alcohol death rates in 2020 were New Mexico (43.2 per 100,000) and Wyoming (35.6 per 100,000).
 - States with the lowest age-adjusted alcohol death rates in 2020 were Hawaii (8.0 per 100,000) and Pennsylvania (8.3 per 100,000).
- **Drug-induced deaths.** In 2020, 47 states plus the District of Columbia had higher drug-induced drug rates compared with 2019. (Delaware, New Hampshire, and South Dakota were the exceptions.)
 - States with the highest age-adjusted drug death rates in 2020 were West Virginia (85.4 per 100,000) and Kentucky (51.5 per 100,000) plus the District of Columbia (59.2 per 100,000).
 - States with the lowest age-adjusted drug death rates in 2020 were South Dakota (10.6 per 100,000) and Nebraska (12.3 per 100,000).
- **Deaths by suicide.** In 2020, 18 states had higher suicide death rates compared with 2019, including seven states with statistically significant increases.⁹³
 - States with the highest age-adjusted suicide rates in 2020 were Wyoming (30.5 per 100,000) and Alaska (27.5 per 100,000).
 - States with the lowest age-adjusted suicide rates in 2020 were New Jersey (7.1 per 100,000) and New York (8.0 per 100,000), plus the District of Columbia (5.5 per 100,000).

Age-Adjusted Rate of Alcohol, Drug, and Suicide Deaths (per 100,000), 2010



Source: TFAH and WBT analysis of National Center for Health Statistics Data

Age-Adjusted Rate of Alcohol, Drug, and Suicide Deaths (per 100,000), 2020



Source: TFAH and WBT analysis of National Center for Health Statistics Data

Research Roundup: New Insights and Analysis

New research continues to illuminate experts' understanding of the causes and consequences of mental health and substance use issues, as well as the alcohol, drug, and suicide epidemic. They are also discovering programs and policies that can have a preventive impact.

Mental Health and Substance Use Considerations Among Children During the COVID-19 Pandemic

Kaiser Family Foundation, May 2021

This Kaiser Family Foundation report reviews how the COVID-19 pandemic has caused social disruptions in children's daily routines and stability, and the negative consequences on mental health, especially in vulnerable children like adolescents, young children, LGBTQ youth, and children of color. Some pandemic-related factors with implications on children's mental health include parents' mental health status and social isolation. Mental health services also declined during the pandemic due to barriers to access, interruptions to school-based health centers, and decreased availability and capacity of mental health facilities. The Kaiser Family Foundation report also reviews federal and state action, as well as proposed policies related to mental health, youth, and the COVID-19 pandemic.⁹⁴

Pediatric Mental, Emotional, and Behavioral Health

Nemours Children's Health and Mental Health America, September 2021

This brief offers federal policy recommendations to promote the mental health and well-being of children in the United States in light of the disruption and trauma of the COVID-19 pandemic. The Nemours recommendations are for both Congress and the Executive Branch and fall into five buckets: (1) expanding the provider workforce for all youth patients;

(2) integrating and boosting coverage and reimbursement of mental health services; (3) prioritizing prevention and early intervention integration; (4) elevating the needs and well-being of children within the federal government administration and structure; and (5) promoting innovative healthcare payment and delivery models.⁹⁵

Social Justice Context for Suicide Prevention

International Journal for Equity in Health, May 2020

In May 2020, researchers writing in the *International Journal for Equity in Health* proposed a new, social justice framework that examines how individual risk factors and social inequity can affect and inform existing suicide-prevention strategies.⁹⁶ Despite the official prevention efforts in the United States beginning in the late 1950s and growing since then, suicide rates have increased even more in recent decades. Causes of suicide, and therefore its prevention strategies, have traditionally been linked to mental health conditions; however, mental health status is only one of many factors associated with suicide, and in 2015, 54 percent of people who died by suicide in the United States did not have a known mental health condition. A clinical-psychiatric approach to suicide interventions addresses individual risk factors but does not appreciate the context of community- or society-level influence on suicidal behavior. A social justice framework acts on environmental conditions associated with higher rates of suicide by minimizing risk factors and increasing protective factors in communities and society. Crisis interventions and healthcare should integrate treatment and therapy techniques that appreciate the varying risk factors for different groups of people,

especially people in high-risk groups for suicide, including LGBTQ, American Indian and Alaska Native people, people with substance use disorders, people with mental health issues, active military and veterans, older white men, middle-age men, and people in welfare systems. Limited access to culturally competent care can reinforce institutional discrimination, biases, and prejudices. If properly enacted, a social justice framework (a) acknowledges inequality and the effect of social injustice on suicidal behavior through educational tools, (b) assumes the involvement of the person in need through both privilege and disadvantage, and (c) requires policy work, implementation, and evaluation.⁹⁷

Harm Reduction Treatment for Alcohol Use Disorder

International Journal of Drug Policy, May 2019

Harm-reduction treatment for alcohol is a treatment method that focuses on improving quality of life and minimizing substance-related harm without requiring abstinence or focusing on use reduction, unlike many other methods. Researchers conducted a randomized controlled trial to compare harm-reduction-based treatment with traditional, abstinence-based treatment for alcohol use disorder in individuals experiencing homelessness, a hard-to-reach group in need that is disproportionately impacted by alcohol use disorder but also has lower rates of success, engagement, and retention in abstinence-based treatment programs. They found that participants became more confident in their ability to engage in alcohol harm reduction

and showed statistically significant improvements in reducing peak alcohol quantity, alcohol-related harm, alcohol use disorder symptoms, and alcohol-positive urine tests.⁹⁸

Zoning as a Public Health Tool for Alcohol Outlets

Journal of Urban Health, July 2020

In 2016, Baltimore, Maryland, passed the TransForm Baltimore zoning law to help government and residents regulate land usage to avoid oversaturation of alcohol outlets (retail establishments that sell alcoholic beverages) while not interfering with the existing local, state, and federal laws on alcohol policy. One section of the law focuses on businesses that hold an alcohol license for on-premise consumption (e.g., a restaurant or bar) but also operate as off-premise sellers (i.e., selling liquor to go) to relocate, close, or repurpose themselves. Another part of the law requires off-premise outlets to all be at least 300 feet from each other. A 2020 evaluation was conducted to assess the impacts of the policy on neighborhoods and found that nonconforming liquor stores and taverns were more likely to be in residential areas that had lower incomes, more racial segregation, a higher proportion of Black residents, and greater community disadvantage or resource deprivation than those outside of residential zones. The law has the potential to reduce land availability for alcohol outlets by 27 percent and thereby curb harm and inequity associated with high alcohol outlet density or oversaturation, but the initiative needs enforcement and oversight.⁹⁹

Pain in the Nation: *The Epidemics of Alcohol, Drug, and Suicide Deaths*

Policy Recommendations

Without significant, transformative action, the impact of the pandemic on the nation's mental health and well-being will be felt for years to come. The residual effects of COVID-19 will continue to exacerbate a crisis of preventable deaths unless policymakers heed the call to action. Trust for America's Health and Well Being Trust continue to call for a multipronged policy approach to stem the alcohol, drug, and suicide epidemics, including implementation of the following actionable recommendations.

Note: Many of the recommendations discussed in this report focus primarily on prevention and early intervention around mental health and substance misuse concerns, although treatment and crisis response are critical components as well.

1. Invest in Prevention and Conditions that Promote Health

- Promote policies and programs to address SDOH.** Social and economic conditions—such as housing instability, limited employment opportunities, food insecurity, community violence, and lack of transportation options—have a major influence on health, including the rates of substance use disorder. To address this connection, Congress should approve increased funding for CDC's Social Determinants of Health Program and pass the Improving Social Determinants of Health Act, which would create federal infrastructure to plan, coordinate, and measure activities to improve social determinants. Screening for SDOH in the healthcare system is an important intervention to identify individual patient non-medical, health-related social needs, but a public health approach is also necessary to ensure implementation of evidence-based and cost-effective changes at a community and population level.
- Support policies and programs that reduce ACEs and the impact of trauma.** ACEs can have a long-term bearing on physical and mental health, but they are preventable through multisectoral efforts:
 - Congress should increase funding for CDC's Adverse Childhood Experiences program, which researches and disseminates effective strategies to reduce and mitigate ACEs. Federal, state, and local governments should adopt these evidence-based strategies, including strengthening economic supports to families, improving access to quality childcare, and teaching parenting skills.¹⁰⁰ Congress should also promote safer communities by investing in CDC's Core State Violence and Injury Prevention Program. These successful state programs create the infrastructure to reduce domestic violence, child trauma, and suicide.

- Congress should pass and CDC should implement the Improving Data Collection for ACES Act, which would authorize ACEs research with a strong focus on equity and community factors.
- Congress should pass the RISE from Trauma Act¹⁰¹ and increase funding for community-based efforts to coordinate services and prevent and mitigate the impact of trauma.
- Centers for Medicare and Medicaid Services (CMS) and health insurers should expand coverage and training for screening of ACEs and suicide risk in primary care, pregnancy care, and other settings.
- **Expand comprehensive suicide-prevention efforts.** Congress should greatly increase funding for CDC's suicide-prevention program, which promotes strategies to deter suicide risk by strengthening economic supports, promoting connectedness, creating protective environments, and teaching coping skills, among other measures. These primary prevention efforts include the Comprehensive Suicide Prevention Program, which helps communities implement a multisectoral, public health approach to suicide prevention, as well as targeted prevention efforts among veterans and tribal nations. The Comprehensive Suicide Prevention Program is implementing and evaluating the best available evidence for suicide prevention, but the program currently only reaches 11 funding recipients.¹⁰²
- **Increase support for substance use prevention, mental health, and resiliency programs in schools.** Schools are an ideal location for prevention and early intervention, but they need the resources to perform

these functions. Specifically, schools need support to increase: (1) staff training in screening and responding to childhood trauma and recognizing the emotional and mental health needs of children; (2) social and emotional learning programs that yield a robust return on investment and promote lifelong health;^{103,104} and (3) culturally and linguistically appropriate mental health services and screenings:

- Congress should increase funding for federal programs that support evidence-based prevention programs in schools, promote protective factors, and reduce risk behaviors, including CDC's Division of Adolescent and School Health and social-emotional learning programs through the U.S. Department of Education.
- Congress should expand funding for the Substance Abuse and Mental Health Services Administration's (SAMHSA) Project Advancing Wellness and Resiliency in Education, which empowers education agencies, increases awareness and detection of mental health issues, and connects youth and their families to needed services. States should require schools to have comprehensive suicide-prevention policies and training in place to help teachers and students recognize the signs of suicide risk.¹⁰⁵
- Congress should invest in SAMHSA and the U.S. Department of Education's school-based mental health services to support the hiring of school mental health providers. As part of this effort, Congress should also increase the Medicaid federal medical assistance percentage to 100 percent for all children's mental health and supportive services. CMS and state Medicaid agencies should

work with education agencies to expand the establishment of school-based health centers, including comprehensive mental health services for children.¹⁰⁶ Ratios between on-site mental health providers and students should ensure that any student who needs services can access them in a timely manner.

- Congress should support comprehensive mental health programs for college-age young people, such as the Garrett Lee Smith Suicide Prevention Program, and it should pass the Campus Prevention and Recovery Services for Students Act to establish evidence-based programs on college campuses to prevent alcohol and substance misuse and to integrate campus health services.
- The U.S. Department of Education and state and local education agencies should set accountability standards for racial and ethnic disparities in discipline practices. Punitive discipline practices in schools should be revisited and revised to support social and emotional learning, especially in early childhood.
- **Boost access to early prevention and family support programs.** Congress should increase funding and reimbursement for the Maternal, Infant, and Early Childhood Home Visiting Program, Head Start, and other federal programs that provide access to and coordination of social and mental health services for families.¹⁰⁷ Specifically, Congress should pass the Early Childhood Mental Health Support Act, which would provide grants to implement mental health interventions for children in Head Start programs.¹⁰⁸

The U.S. Department of Health and Human Services (HHS) should also work with states and insurers to ensure equitable access and uptake of evidence-based mental health preventive interventions.¹⁰⁹

- HHS should continue to provide flexibility in the use of Medicaid, the Children’s Health Insurance Program (CHIP), and the Temporary Assistance for Needy Families funds for states to use toward early prevention and family support programs.

• **Bolster the continuum of crisis-intervention programs and supports.**

In addition to prevention, Congress and states should increase funding for comprehensive crisis-intervention services and supports for at-risk populations, with ready linkages to services, including the newly established 988 lifeline. In addition, Congress should pass the Behavioral Health Crisis Services Expansion Act, which would help sustain an effective crisis care system, including insurance coverage for a range of crisis response services. Congress should also ensure sustainable funding for crisis services by braiding and blending grants and reimbursements from Medicaid.

• **Adopt trauma-informed and culturally competent policies and practices for youth-serving programs and agencies.**

Congress should support programs that disseminate technical assistance and training for trauma, like the National Child Traumatic Stress Network. The juvenile justice system should adopt approaches that recognize that substance abuse and serious emotional disturbances are health issues—not criminal justice issues—and ensure access to diversion and care for young people.

988: THE NEW NATIONAL CRISIS HOTLINE

In July 2022, the National Suicide Prevention Lifeline will be changing from its current 10-digit 800-number to the three-digit code 988—the result of the 2020 National Suicide Hotline Designation Act. The 988 crisis line will take the place of both the national suicide-prevention hotline administered by SAMSHA and a Veterans Crisis Line administered by the U.S. Department of Veterans Affairs. The act requires SAMSHA to support training and services for high-risk populations, including LGBTQ youth, American Indians/Alaska Native peoples, and individuals living in rural areas.¹¹⁰

As SAMHSA implements the crisis line, it should also develop plans to effectively communicate the available resources to those who have been underserved or may be at higher risk—including people with limited English proficiency, racial and ethnic minority populations, LGBTQ+ people, and other communities—and should provide access to services and supports for these populations. SAMHSA should also ensure the 988 line promotes safe, non-traumatizing, and evidence-based crisis responses that can avoid criminal justice approaches to mental health issues and help ensure law enforcement officers respond appropriately when present.

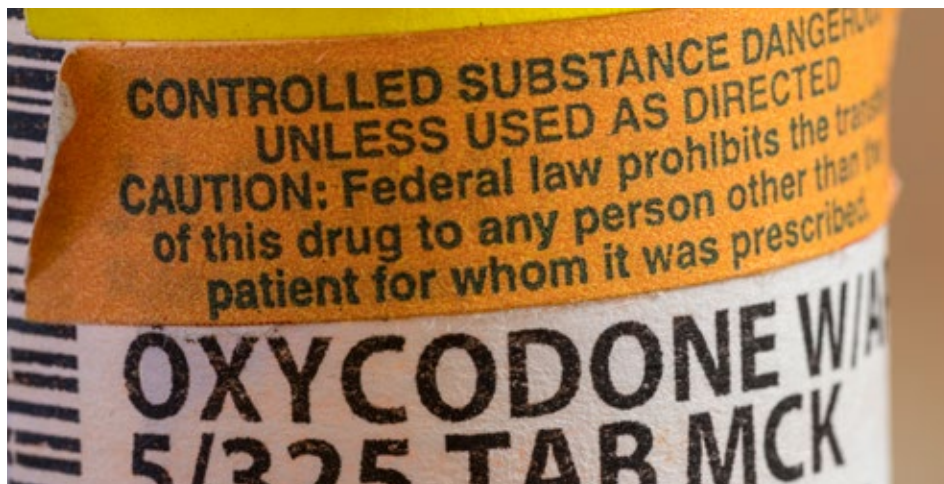
- **Limit access to lethal means of suicide** by promoting safe storage of medications and firearms through public education and laws; restricting access to firearms for children and individuals in crisis or at risk of suicide; and providing education and creating protocols for healthcare providers, counselors, and first-responders on how to interact with and counsel patients and families to create safe environments:

- Congress should consider legislation to allow for extreme risk protection orders or other methods for preventing individuals who pose a risk to themselves or others from obtaining firearms on a temporary basis.
- Congress should also provide additional funding for foundational research related to lethal-means use and suicide-prevention efforts suited to diverse populations.¹¹¹

- Healthcare providers should be trained in lethal-means counseling. The Counseling on Access to Lethal Means model improves medication and firearms storage behavior—with one study, focusing on parental counseling for suicidal youth in the emergency department, finding a 100 percent lock-up rate for firearms at follow-up.¹¹² CDC’s Comprehensive Suicide Prevention Program also includes a focus on lethal-means safety. Federal agencies like SAMHSA should also work to incorporate lethal-means assessments and counseling into standard procedures for their mental health crisis lines.¹¹³

2. Prevent Substance Misuse and Overdose

- **Reduce the availability of illicit opioids and unnecessary prescriptions** through responsible opioid prescribing practices, including compliance with the upcoming CDC Guideline for Prescribing Opioids and support for high-functioning Prescription Drug Monitoring Programs. After multifaceted initiatives to promote appropriate prescribing, the rate of opioid prescriptions declined each year from 2012 to 2019—and in 2019, the prescribing rate fell to the lowest in 14 years.¹¹⁴ States should expand public education about misuse and safe disposal of unused drugs, including through support for the Drug Enforcement Administration’s National Prescription Drug Take Back Day. Federal officials should maintain support for hotspot monitoring, like the Overdose Detection Mapping Application Program, as well as interventions and anti-trafficking strategies focused on heroin, fentanyl, and other illicit drugs.
- **Target prevention of substance misuse among youth.** Congress should increase funding for the Drug-Free Communities Support Program, managed through a partnership between the ONDCP and CDC. ONDCP should also build on its 2021 model law concerning opioid litigation settlement funds by helping state governments ensure these funds are specifically directed, in part, toward the primary prevention of youth substance misuse.
- **Lower excessive alcohol use through evidence-based policies.** States and communities can reduce harms from alcohol by increasing pricing, reducing sales hours, and limiting the



density of alcohol outlets; enforcing underage drinking laws; and holding sellers and hosts liable for serving minors or overserving adults.¹¹⁵ CDC has recently awarded grants to expand technical assistance and training on strategies to reduce excessive alcohol use.¹¹⁶ Congress should support these efforts with continued funding for CDC’s Alcohol Program, which focuses on improving surveillance and prevention in this area.

- **Implement policies targeting psychostimulant use** that complement current opioid-focused policies. Congress and/or federal agencies should enable additional flexibility in federal overdose prevention grants to allow states to address substances other than opioids based on local needs.
- **Promote harm-reduction policies to reduce overdose and blood-borne infections.** Congress should increase funding for comprehensive syringe service programs and remove barriers to purchasing supplies with federal funds. States should adopt model laws to ensure the effective establishment of comprehensive syringe service

programs and naloxone access, as outlined by the ONDCP.¹¹⁷ ONDCP and SAMHSA should continue to provide technical assistance and strategies to state and local governments to reduce barriers to accessing overdose-prevention medications, such as naloxone.¹¹⁸ Federal agencies should also provide technical assistance to state legislators seeking to remove legal barriers to the use of fentanyl test strips.

- **Continue enhanced flexibilities in access to and rules for substance use treatment.** In response to the COVID-19 pandemic, the U.S. Department of Justice and HHS allowed physicians to prescribe buprenorphine, a medicine used to treat opioid use disorder, to new patients via telemedicine, provide certain patients 28 days of at-home medication, and allow alternative methods for the delivery of methadone, another medication for opioid use disorder. As policymakers continue these methods or expand on them, they should account for documented disparities in telehealth access by race, ethnicity, income, age, and insurance status.

3. Transform the Mental Health and Substance Use Prevention System

- **Expand efforts to combat stigma and improve social attitudes toward mental healthcare.** The federal government should incorporate positive messaging around mental health screening and treatment across a variety of federal programs that reach underserved populations to increase screening and reduce stigma for those seeking help, including through culturally and linguistically appropriate communications. These messages should come from trusted, salient messengers and should educate a range of stakeholders, including educators, healthcare professionals, justice system officials, and the media.¹¹⁹

- **Improve data accuracy, completeness, and timeliness.** Gaps in data, including regarding nonfatal suicide and overdose incidents, mask the extent of these crises. Near real-time data can provide public health officials with a system for detecting, understanding, and monitoring health events like overdoses and suicide, serve as an early warning system for emerging issues, identify inequities, and guide government responses. SAMHSA should continue to improve data collection and reporting to ensure individuals of all races, ethnicities, sexual orientation, disability status, and gender have access to appropriate preventive services, treatment, and recovery supports.¹²⁰ HHS should promote standardized categories and collection of racial/ethnic and other demographic data that aid

in identification of disparities and improvements to death investigation systems. Additional investments are necessary to expand current programs like CDC's National Syndromic Surveillance Program (currently covering 71 percent of the nation's emergency departments) and the surveillance of nonfatal suicide-related outcomes (which allows states to turn syndromic data into preventive action). Congress should also invest in innovative data-science methods that can provide the forecasting of mortality data and bridge the gap in the availability of official mortality data.

- **Promote equity in mental health, including through workforce diversity and culturally appropriate services.** Congress should increase the diversity of mental health and substance use practitioners by supporting programs like SAMHSA's Minority Fellowship Program and the Health Resources and Services Administration's Behavioral Health Workforce Education and Training grants. Congress should pass and fund the Pursuing Equity in Mental Health Act, which would establish grants to incentivize a more diverse pipeline of professionals, expand research into racial and ethnic mental health disparities, improve training and best practices in culturally and linguistically appropriate care, and engage in outreach to communities of color to promote mental health and reduce stigma.

INVESTING IN DATA MODERNIZATION AND REAL-TIME SURVEILLANCE

Since drug overdoses are an escalating and evolving issue across the country, a surveillance system that can offer granular data is an essential element in understanding the problem, identifying who is affected, recognizing new trends, establishing and tailoring policy decisions, providing public awareness and education, and evaluating interventions. For example, the 2020 data from the National Center for Health Statistics showed large increases in overdoses in the South and West regions, which signals the need for additional policy measures to state and local governments.

Surveillance requires more than modern data systems that facilitate sharing across jurisdictions. For fatal overdoses, surveillance also depends on adequate systems, capacity, and personnel in the coroner or medical examiner's office and in drug-testing labs at the state and local levels to determine and submit the cause of death, including specific drug types involved, in a timely manner.¹²¹ In fact, tracking both fatal and nonfatal overdoses requires the capacity for hospitals to report overdose cases and drug type information.

In recent years, major improvements in systems for tracking fatal and nonfatal drug overdoses have brought surveillance closer to real time. The National Syndromic Surveillance Program is a collaboration among CDC, federal partners, local and state health departments, and academic and private-sector partners who gather electronic patient data from a variety of healthcare settings into a shared software platform. These data are added within 24 hours of a patient visit, and cover 6,000 healthcare facilities in 49 states and the District of Columbia,

including 71 percent of U.S. emergency departments. These data are used to track visits for drug overdose as well as a variety of other injury and illness.¹²²

The National Center for Health Statistics also has made provisional mortality data for drug overdoses available starting in 2015. These data are updated monthly and provide overall state and national data on drug overdose deaths and, more recently, by drug type.¹²³ The data available had been on a six-month delay but improved to a four-month delay in February 2022.¹²⁴ Final, granular mortality data that includes essential demographic data (e.g., race/ethnicity, sex, age, metro/non-metro) involves a longer delay despite being critical for understanding trends. For example, the final national 2020 mortality data was released in late December 2021.¹²⁵

CDC also provides technical support, training, and grants around overdose data. The National Syndromic Surveillance Program, for example, provides funding for health departments.¹²⁶ In 2019, CDC also provided Overdose Data to Action grants to health departments in 66 states, territories, counties, and cities to collect data on nonfatal and fatal drug overdoses and then use those data to inform prevention and response efforts.¹²⁷

Further progress on the timeliness, accuracy, completeness, and granularity of these data—through investing in systems, capacity, and personnel at all levels to collect data and provide technical assistance and funding to use the data—will strengthen an understanding of the overdose issue and assist in tailoring responses and evaluating results.

- **Modernize mental health and substance use services** by aligning healthcare provider payment, quality measures, service delivery, and training toward clinical models focused on the whole health of individuals, including individual determinants of health, and prioritizing integrated delivery models. To aid in this effort, Congress could direct HHS to define the key elements of mental health integration and develop measures to simplify related metrics and reporting, especially those targeted at disparities in health outcomes.¹²⁸ Expanding comprehensive health insurance to all Americans and ensuring parity in covered mental health and substance use services and provider networks should also be a priority for Congress.
- **Increase access to mental health and substance use healthcare** through full enforcement of the Mental Health Parity and Addiction Equity Act to ensure patient access to essential services. Congress should strengthen enforcement efforts by providing the U.S. Department of Labor the authority to levy monetary penalties against health insurers and health plan sponsors who violate the Parity Act; expand the scope of entities subject to Parity Act enforcement to include Medicare, Medicaid fee-for-service, and TRICARE; and allow participants and beneficiaries to recover amounts lost through wrongfully denied claims. Congress should also define mental health and substance use disorder benefits based on nationally recognized standards.
- **Expand the mental health and substance use treatment workforce.** The existing supply of behavioral

health providers is inadequate to meet the growing demand for services. Congress must increase investments in mental health workforce development programs, such as the Graduate Medical Education and Graduate Psychology Education programs. CMS and private insurers should also increase reimbursement for mental health and substance use treatment to address financial barriers that prevent the integration of mental healthcare and primary care. Specifically, Congress should pass the Strengthen Kids' Mental Health Now Act, which would raise Medicaid reimbursement rates for pediatric mental health services to match Medicare levels and implement other measures to enhance the pediatric behavioral workforce and infrastructure.¹³⁰ CMS and Congress should also provide a definition of recovery support services under Medicaid to help standardize coverage for these services within the program and should institute other standardized procedures to reduce administrative burdens for the behavioral health workforce. Training and continuing education curricula for all mental health providers and primary care practitioners should include suicide-prevention and evidence-based services.

- **Build community capacity for bringing mental health and substance use disorder treatment to the places where people are.** SAMHSA, CDC, and other federal agencies should identify trends and gaps in mental health utilization to better determine local needs and the populations requiring care, including needs in community-based or nontraditional settings. Congress can support these efforts by funding competitive grant programs for

BOOSTING COMMUNITY-BASED CARE

More high-quality, affordable mental health, substance use, and addiction treatment services are needed to help all those with substance use disorders. In addition to long-term changes, policymakers and community leaders should consider other ways to provide immediate support and build sustainable and affordable capacity within communities. One concept that does this is the Community Initiated Care model, which focuses on training and supporting community members to deliver high-quality evidence-informed programs for prevention

and early intervention of mental health and substance use concerns. Through the task-sharing approach, health promotion, prevention, and low-intensity interventions can be delivered by a range of both lay members of the community and professionals, including but not limited to barbers and beauticians, teachers, faith-based and spiritual leaders, community health workers, peer support specialists, first-responders, safety net providers, and many others regularly engaged in community settings.¹²⁹

state, local, and other governmental entities to enhance their community healthcare workforces, including through trained peer support specialists and lay community members. Guidance from CDC can also assist in training these workers, and experts should establish uniform standards for recovery support and other services. Health insurers should cover and adequately pay for these services, and CMS should continue to allow community health workers to bill for services directly. Congress should also consider providing sustainable funding for a corps of federal community health workers focused on primary prevention, trained in core competencies, and employing culturally sensitive approaches. By equipping this augmented workforce with tools to intervene on issues of mental health and addiction, policymakers can create a new first-line mental health response for communities.

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Appendix A: Data Methodology

Unless otherwise referenced, data in this report are from the National Center for Health Statistics' Multiple Cause of Death Files, 1999–2020, accessed via the CDC Wide-ranging ONline Data for Epidemiologic Research (WONDER) Database (wonder.cdc.gov/mcd-icd10.html).

For alcohol and drug deaths, TFAH used CDC's underlying cause-of-death categories, "Drug/Alcohol Induced Causes," and, for deaths by suicide, the "Injury Intent and Mechanisms" category. Because a small number of deaths are categorized as both alcohol- or drug-induced and as suicide, TFAH removed duplicates (ICD-10 underlying causes of death codes X60–65) when determining combined death totals. Age-adjusted death rates (deaths per 100,000) are used for all categories save age categories.

For deaths related to specific drugs, TFAH used ICD-10 codes as follows:

- All opioid deaths: X40–44, X60–64, X85, and Y10–14 "underlying causes of death" codes plus T40.0–40.4 and T40.6 "multiple causes of death" codes.
- Synthetic-opioid deaths: X40–44, X60–64, X85, and Y10–14 "underlying causes of death" codes plus T40.4 "multiple causes of death" code.
- Heroin deaths: X40–44, X60–64, X85, and Y10–14 "underlying causes of death" codes plus T40.1 "multiple causes of death" code.

- Common prescription opioid deaths: X40–44, X60–64, X85, and Y10–14 "underlying causes of death" codes plus T40.2 "multiple causes of death" code.
- Cocaine deaths: X40–44, X60–64, X85, and Y10–14 "underlying causes of death" codes plus T40.5 "multiple causes of death" code.
- Other psychostimulant deaths: X40–44, X60–64, X85, and Y10–14 "underlying causes of death" codes plus T43.6 "multiple causes of death" code.

For simplicity, TFAH uses slightly different terminology than CDC when describing racial/ethnic groups. TFAH uses Latinos to include individuals of Hispanic ethnicity, and, unless noted, American Indian/Alaska Natives, Asians, Blacks, and whites are non-Hispanic.

Note: CDC and other analyses of drug deaths may use a slightly narrower drug-overdose category compared with the "drug-induced cause" category used in this brief.

Appendix B: Demographic Data

DEATHS, DEATH RATES, AND ONE-YEAR PERCENT CHANGE IN DEATH RATE BY SELECT DEMOGRAPHICS, 2020												
	Combined Alcohol, Drug, and Suicide			Alcohol-Induced			Drug-Induced			Suicide		
	2020 Deaths	Deaths per 100,000 (Age-Adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-Adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-Adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-Adjusted)	Change 2019 to 2020
Overall	186,763	54.8	20%	49,061	13.1	27%	96,096	29.5	30%	45,979	13.5	-3%
Female	50,596	29.6	19%	14,059	7.5	27%	29,489	17.9	24%	9,428	5.5	-8%
Male	136,167	81.1	20%	35,002	19.2	26%	66,607	41.1	32%	36,551	22.0	-2%
American Indian	3,923	83.9	29%	1,935	42.4	33%	1,333	28.1	35%	714	14.6	7%
Asian	3,577	15.4	16%	746	3.2	32%	1,406	6.0	37%	1,569	6.8	-4%
Black	24,492	51.6	33%	4,485	9.3	28%	16,724	35.4	41%	3,541	7.4	5%
Latino	22,031	37.9	24%	6,737	12.6	19%	11,059	18.4	37%	4,571	7.5	4%
White	154,771	58.7	18%	41,895	14.1	26%	76,633	30.9	27%	40,155	15.1	-4%
0-17	2,302	3.2	17%	<20	<0.1	-	721	1.0	78%	1,679	2.3	2%
18-34	44,710	58.8	25%	2,921	3.8	41%	29,230	38.4	35%	13,438	17.7	4%
35-54	74,091	89.8	22%	17,832	21.6	31%	43,308	52.5	29%	14,563	17.7	-6%
55-74	57,599	76.9	13%	25,503	34.0	20%	21,682	28.9	20%	11,876	15.8	-11%
75+	8,039	34.8	5%	2,792	12.1	12%	1,139	4.9	-1%	4,421	19.1	0%
Northeast	31,820	49.3	8%	6,417	9.9	29%	18,775	34.0	18%	5,676	9.6	-8%
Midwest	38,310	60.7	26%	10,557	13.7	33%	20,433	31.0	25%	9,910	14.3	-2%
South	70,685	54.4	23%	16,807	11.6	26%	36,915	29.8	36%	18,480	14.2	-2%
West	45,948	55.4	19%	15,280	17.5	21%	19,973	24.8	35%	11,913	14.5	-5%
Metro	158,421	53.9	20%	40,601	12.7	26%	84,442	29.8	29%	37,139	12.6	-4%
Non-Metro	28,342	61.3	21%	8,460	15.8	29%	11,654	27.8	32%	8,840	19.1	1%

	Opioid Overdose			Synthetic Opioid Overdose			Cocaine Overdose			Other Psychostimulants Overdose		
	2020 Deaths	Deaths per 100,000 (Age-Adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-Adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-Adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-Adjusted)	Change 2019 to 2020
Overall	68,630	21.4	38%	56,516	17.8	56%	19,447	6.0	23%	23,837	7.5	48%
Female	19,970	12.3	32%	15,250	9.6	53%	5,245	3.2	21%	6,890	4.3	47%
Male	48,660	30.4	40%	41,266	25.9	57%	14,202	8.7	23%	16,947	10.6	49%
American Indian	829	17.3	55%	637	13.2	97%	154	3.2	34%	520	11.3	36%
Asian	725	3.1	69%	601	2.6	108%	251	1.1	43%	500	2.1	31%
Black	11,949	25.3	52%	10,790	22.9	66%	6,364	13.5	30%	2,268	5.0	72%
Latino	7,966	13.1	48%	6,567	10.7	69%	2,624	4.4	29%	2,791	4.7	51%
White	55,127	22.7	35%	44,488	18.6	52%	12,678	5.2	18%	20,549	8.4	47%
0-17	496	0.7	110%	422	0.6	148%	41	0.1	33%	85	0.1	40%
18-34	23,872	31.4	41%	20,928	27.5	55%	5,419	7.1	22%	6,970	9.2	53%
35-54	30,924	37.5	38%	25,640	31.1	56%	9,283	11.3	22%	11,895	14.4	48%
55-74	12,999	17.3	29%	9,400	12.5	51%	4,649	6.2	23%	4,835	6.5	37%
75+	330	1.4	-4%	119	0.5	37%	53	0.2	36%	43	0.2	27%
Northeast	15,242	27.9	22%	13,823	25.4	26%	5,702	10.3	16%	2,003	3.8	65%
Midwest	15,410	23.7	33%	13,471	20.9	46%	4,086	6.1	12%	4,301	6.8	38%
South	25,881	21.1	46%	21,237	17.5	69%	7,500	6.0	29%	9,083	7.5	55%
West	12,097	15.3	55%	7,985	10.3	121%	2,159	2.7	40%	8,450	10.5	42%
Metro	61,216	21.9	37%	50,772	18.3	54%	18,225	6.4	22%	19,997	7.2	49%
Non-Metro	7,414	18.1	48%	5,744	14.3	73%	1,222	3.0	22%	3,840	9.4	40%

Source: TFAH and WBT analysis of NCHS data

Appendix C: State Data

DEATHS, DEATH RATES, AND ONE-YEAR CHANGE IN DEATH RATE FROM ALCOHOL, DRUG, AND SUICIDE, OVERALL AND BY DRUG TYPE, 2020

	Combined Alcohol, Drug, and Suicide			Alcohol-Induced			Drug-Induced			Suicide		
	2020 Deaths	Deaths per 100,000 (Age-adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-adjusted)	Change 2019 to 2020
Overall	186,763	54.8	20%	49,061	13.1	27%	96,096	29.5	30%	45,979	13.5	-3%
Alabama	2,531	50.6	22%	569	10.0	34%	1,213	25.5	36%	793	16.0	-2%
Alaska	614	83.8	19%	242	32.1	34%	179	24.2	21%	204	27.5	-4%
Arizona	5,492	73.1	20%	1,578	19.7	22%	2,675	37.3	32%	1,363	17.6	-5%
Arkansas	1,498	49.2	20%	382	11.4	11%	585	20.4	45%	583	19.0	6%
California	19,372	46.3	23%	6,193	14.2	17%	9,452	23.1	44%	4,144	10.0	-6%
Colorado	4,240	68.9	21%	1,568	24.4	30%	1,536	25.6	37%	1,302	21.5	-2%
Connecticut	2,290	62.3	14%	552	13.5	47%	1,434	40.9	14%	364	9.3	-18%
Delaware	695	70.2	4%	133	11.2	26%	448	47.7	-2%	124	12.3	9%
DC	551	75.8	28%	87	12.1	25%	432	59.2	33%	38	5.5	-12%
Florida	13,684	60.4	21%	3,419	12.6	24%	7,480	36.2	35%	3,135	13.2	-9%
Georgia	4,610	41.9	19%	1,186	10.0	28%	2,024	19.0	36%	1,491	13.7	-6%
Hawaii	602	40.4	8%	131	8.0	36%	307	20.6	18%	184	12.9	-17%
Idaho	1,025	54.7	12%	349	17.2	19%	295	16.3	3%	419	23.2	14%
Illinois	6,388	49.0	23%	1,543	11.0	39%	3,629	28.7	28%	1,362	10.5	-3%
Indiana	4,343	65.0	28%	1,027	13.7	31%	2,369	37.4	36%	1,024	15.0	6%
Iowa	1,457	45.6	18%	524	15.1	30%	450	14.8	22%	552	18.0	8%
Kansas	1,493	51.0	19%	489	15.9	43%	521	18.4	22%	531	18.4	1%
Kentucky	3,680	82.8	36%	738	14.6	37%	2,187	51.5	47%	801	17.7	7%
Louisiana	2,993	65.2	30%	443	8.5	23%	1,953	43.9	49%	642	13.7	-9%
Maine	1,001	72.0	20%	286	16.7	50%	513	41.0	30%	234	16.4	-16%
Maryland	3,937	62.1	15%	600	8.6	40%	2,814	45.2	16%	585	9.2	-10%
Massachusetts	3,989	56.0	11%	1,006	12.8	40%	2,449	35.9	7%	618	8.4	-3%
Michigan	5,861	57.5	17%	1,610	14.3	40%	2,957	30.7	17%	1,444	14.0	-2%
Minnesota	2,903	49.0	20%	1,065	16.6	29%	1,173	20.8	33%	758	13.1	-9%
Mississippi	1,398	47.0	31%	395	11.8	67%	611	22.0	48%	410	13.9	-3%
Missouri	3,790	62.0	16%	791	11.7	33%	1,951	33.3	19%	1,125	18.2	0%
Montana	745	65.1	10%	299	24.8	22%	172	16.5	10%	300	26.1	0%
Nebraska	869	43.4	18%	383	18.0	38%	237	12.3	29%	283	14.9	-8%
Nevada	2,128	63.3	18%	714	19.7	30%	866	26.9	26%	603	18.2	-8%
New Hampshire	828	58.8	-4%	226	13.6	11%	402	31.0	-6%	234	16.4	-6%
New Jersey	4,376	47.6	3%	861	8.5	26%	2,921	32.9	2%	679	7.1	-12%
New Mexico	2,231	106.8	21%	925	43.2	26%	836	41.5	31%	516	24.2	1%
New York	8,477	42.0	25%	1,883	8.7	23%	5,165	26.4	37%	1,642	8.0	-3%
North Carolina	5,986	55.5	26%	1,392	11.3	18%	3,290	32.1	38%	1,441	13.2	5%
North Dakota	430	58.2	17%	178	24.1	22%	124	16.8	28%	135	18.2	1%
Ohio	8,483	72.9	16%	1,599	11.6	29%	5,376	48.6	22%	1,644	13.8	-9%
Oklahoma	2,356	58.3	13%	737	17.4	15%	801	20.3	16%	869	21.9	7%
Oregon	2,879	61.1	14%	1,134	22.1	21%	997	22.6	34%	833	18.3	-10%
Pennsylvania	8,077	62.7	14%	1,272	8.3	24%	5,284	43.2	19%	1,694	12.6	-11%
Rhode Island	692	62.6	24%	205	16.4	42%	407	39.0	29%	94	8.5	-20%
South Carolina	3,484	65.1	34%	878	13.9	40%	1,804	36.1	53%	868	16.3	1%
South Dakota	533	60.7	17%	271	30.2	43%	86	10.6	-3%	186	21.0	0%
Tennessee	5,538	79.2	30%	1,250	15.9	35%	3,161	47.5	44%	1,220	17.2	0%
Texas	11,305	37.8	16%	3,298	10.7	23%	4,384	14.8	29%	3,924	13.3	0%
Utah	1,638	53.2	9%	414	13.5	39%	658	21.7	6%	651	20.8	-2%
Vermont	432	67.3	23%	126	16.3	9%	200	34.6	37%	117	18.1	13%
Virginia	4,411	49.8	29%	996	10.1	29%	2,331	27.5	44%	1,202	13.5	5%
Washington	4,481	54.6	18%	1,506	17.1	20%	1,896	23.9	35%	1,212	15.2	-4%
West Virginia	2,028	116.8	37%	304	13.4	15%	1,397	85.4	51%	354	19.4	5%
Wisconsin	3,418	56.6	21%	1,077	15.3	22%	1,560	28.2	31%	866	14.5	4%
Wyoming	501	82.3	17%	277	35.6	25%	104	18.4	26%	182	30.5	4%

DEATHS, DEATH RATES, AND ONE-YEAR CHANGE IN DEATH RATE FROM ALCOHOL, DRUG, AND SUICIDE, OVERALL AND BY DRUG TYPE, 2020

	Opioid Overdose			Synthetic Opioid Overdose			Cocaine Overdose			Other Psychostimulants Overdose		
	2020 Deaths	Deaths per 100,000 (Age-adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-adjusted)	Change 2019 to 2020	2020 Deaths	Deaths per 100,000 (Age-adjusted)	Change 2019 to 2020
Overall	68,630	21.4	38%	56,516	17.8	56%	19,447	6.0	23%	23,837	7.5	48%
Alabama	611	13.3	50%	442	9.8	111%	147	3.1	52%	297	6.6	31%
Alaska	112	15.2	40%	69	9.7	199%	22	3.0	n/a	70	9.7	14%
Arizona	1,884	26.8	45%	1,476	21.3	83%	185	2.6	12%	1,015	14.3	41%
Arkansas	284	9.9	42%	195	7.1	73%	31	1.1	42%	232	8.5	87%
California	5,508	13.7	73%	4,009	10.1	142%	1,195	2.9	42%	4,411	10.7	55%
Colorado	978	16.4	55%	590	10.1	132%	220	3.6	59%	535	9.0	53%
Connecticut	1,250	35.9	13%	1,142	33.1	19%	419	12.2	15%	94	2.8	25%
Delaware	407	43.9	2%	361	39.3	2%	146	15.8	-16%	52	5.9	90%
DC	337	45.3	35%	315	42.3	40%	143	19.6	13%	<20	-	-
Florida	5,470	26.9	44%	4,734	23.6	64%	1,896	9.2	34%	1,329	6.7	59%
Georgia	1,305	12.4	52%	896	8.6	115%	344	3.2	13%	591	5.7	37%
Hawaii	74	5.3	51%	37	2.8	116%	<20	-	-	198	13.2	21%
Idaho	160	8.9	17%	59	3.4	80%	<20	-	-	101	5.7	14%
Illinois	2,948	23.4	34%	2,471	19.7	46%	1,104	8.7	25%	431	3.6	70%
Indiana	1,877	30.0	50%	1,647	26.4	82%	305	4.7	11%	719	11.7	40%
Iowa	224	7.6	42%	172	5.9	67%	27	0.8	23%	166	5.4	5%
Kansas	262	9.4	41%	165	6.0	115%	39	1.3	15%	194	6.9	19%
Kentucky	1,688	40.2	63%	1,498	36.0	81%	187	4.4	50%	746	18.2	64%
Louisiana	945	21.5	71%	706	16.2	119%	222	4.9	119%	382	8.8	79%
Maine	420	34.0	29%	365	30.0	29%	121	10.0	13%	118	10.2	85%
Maryland	2,504	40.4	19%	2,326	37.5	21%	759	12.2	6%	137	2.4	73%
Massachusetts	2,065	30.6	6%	1,943	28.9	5%	918	13.7	19%	176	2.7	73%
Michigan	2,190	22.9	24%	1,926	20.3	34%	671	7.0	-1%	390	4.3	76%
Minnesota	678	12.5	60%	560	10.4	83%	85	1.5	38%	338	6.3	44%
Mississippi	405	14.6	71%	314	11.5	129%	65	2.4	50%	229	8.6	87%
Missouri	1,377	23.8	26%	1,205	21.1	37%	194	3.1	32%	568	9.9	25%
Montana	86	8.6	20%	30	3.2	n/a	<20	-	-	66	6.6	11%
Nebraska	101	5.3	47%	73	3.8	168%	<20	-	-	68	3.7	33%
Nevada	559	17.8	52%	291	9.8	166%	90	2.9	68%	373	11.6	22%
New Hampshire	341	26.9	-7%	318	25.4	-8%	51	4.0	-37%	66	5.6	20%
New Jersey	2,538	28.9	2%	2,331	26.7	5%	853	9.7	-4%	263	3.2	32%
New Mexico	535	26.9	35%	323	16.7	118%	120	5.7	50%	325	16.3	13%
New York	4,233	21.8	46%	3,721	19.2	61%	1,765	9.0	36%	432	2.3	82%
North Carolina	2,634	26.2	45%	2,279	22.9	66%	1,000	9.9	29%	593	6.0	74%
North Dakota	71	9.6	64%	32	4.2	n/a	<20	n/a	n/a	32	4.5	45%
Ohio	4,385	40.1	28%	4,110	37.7	32%	1,241	11.0	2%	1,083	10.1	27%
Oklahoma	320	8.3	20%	150	4.0	92%	55	1.3	15%	408	10.4	23%
Oregon	499	11.9	55%	243	6.0	167%	62	1.5	-4%	360	8.3	28%
Pennsylvania	3,907	32.4	29%	3,574	29.9	34%	1,320	10.7	12%	794	6.8	78%
Rhode Island	331	32.0	38%	292	28.3	41%	186	17.8	26%	38	3.7	60%
South Carolina	1,409	28.6	63%	1,149	23.6	101%	357	7.1	55%	529	11.0	57%
South Dakota	46	5.9	31%	34	4.5	61%	<20	-	-	31	3.9	-2%
Tennessee	2,412	36.7	57%	2,104	32.3	82%	428	6.3	30%	998	15.4	54%
Texas	2,124	7.2	41%	1,050	3.6	146%	1,040	3.5	36%	1,520	5.2	40%
Utah	447	14.7	11%	157	5.1	62%	49	1.6	12%	235	7.8	5%
Vermont	157	27.4	32%	137	24.3	31%	69	11.9	21%	22	4	n/a
Virginia	1,897	22.7	50%	1,675	20.2	70%	556	6.6	35%	417	5.0	99%
Washington	1,195	15.4	47%	674	8.9	102%	187	2.3	38%	728	9.2	34%
West Virginia	1,129	70.0	69%	1,043	65.1	81%	124	7.5	-5%	613	38.4	57%
Wisconsin	1,251	23.0	38%	1,076	20.0	66%	400	7.2	33%	281	5.3	63%
Wyoming	60	10.6	28%	27	4.8	n/a	<20	-	-	33	6.1	37%

Note: Some data unavailable due to insufficient reporting of type of drug involved in overdose or for privacy reasons.

References

- 1 Segal, Laura M., Anne De Biasi, Jennifer L. Mueller, et al. "Pain in the Nation: The Drug, Alcohol, and Suicide Crises and the Need for a National Resilience Strategy." *Trust for America's Health and Well Being Trust*, November 2017. <https://www.tfah.org/report-details/pain-in-the-nation/>. Accessed March 1, 2022.
- 2 Ahmad, F.B., L.M. Rossen, and P. Sutton. "Provisional drug overdose death counts." National Center for Health Statistics, March 2022. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>. Accessed March 15, 2022.
- 3 *The New York Times*. "Coronavirus in the U.S.: Latest Map and Case Count." Updated March 1, 2022. <https://www.nytimes.com/interactive/2021/us/covid-cases.html>. Accessed March 1, 2022.
- 4 Centers for Disease Control and Prevention. "Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity." Updated March 25, 2022. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>. Accessed April 10, 2022.
- 5 Centers for Disease Control and Prevention. "COVID-19: Older Adults." Updated August 2, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html>. Accessed April 10, 2022.
- 6 Centers for Disease Control and Prevention. "COVID-19: People at Increased Risk." Updated March 25, 2022. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/index.html>. Accessed April 10, 2022.
- 7 Stevenson, Betsey. "The Initial Impact of COVID-19 on Labor Market Outcomes Across Groups and the Potential for Permanent Scarring." *The Hamilton Project*, July 2020. https://www.hamiltonproject.org/assets/files/Stevenson_LO_FINAL.pdf. Accessed April 15, 2021.
- 8 Kearney, Audrey, and Cailey Muñana. "Taking Stock of Essential Workers." *Kaiser Family Foundation*, May 2020. <https://www.kff.org/policy-watch/taking-stock-of-essential-workers/>. Accessed April 4, 2022.
- 9 Schanzenbach, Diane, and Natalie Tomeh. "Seven Key Economic Indicators." *Northwestern Institute for Policy Research News*, December 21, 2020. <https://www.ipr.northwestern.edu/apps/economicindicators.html>. Accessed April 10, 2022.
- 10 Romero Starke, Karla, David Reissig, Gabriela Petereit-Haack, et al. "The Isolated Effect of Age on the Risk of COVID-19 Severe Outcomes: A Systematic Review with Meta-Analysis." *British Medical Journal Global Health*, 6: e006434, December 2021. <https://gh.bmj.com/content/6/12/e006434>. Accessed April 10, 2022.
- 11 Centers for Disease Control and Prevention. "Risk for COVID-19 Infection, Hospitalization, and Death By Age Group." Updated March 28, 2022. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-age.html>. Accessed April 10, 2022.
- 12 Decker, Stacey, Holly Peele, and Maya Riser-Kositsky. "The Coronavirus Spring: The Historic Closing of U.S. Schools (A Timeline)." *Education Week*, July 1, 2020. <https://www.edweek.org/leadership/the-coronavirus-spring-the-historic-closing-of-u-s-schools-a-timeline/2020/07>. Accessed March 1, 2022.
- 13 Dorn, Emma, Bryan Hancock, Jimmy Sarakatsannis, et al. "COVID-19 and Education: The Lingering Effects of Unfinished Learning." *McKinsey & Company*, July 27, 2021. <https://www.mckinsey.com/industries/education/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning>. Accessed March 1, 2022.
- 14 Krause, Kathleen H., Jorge V. Verlenden, Leigh E. Szucs, et al. "Disruptions to School and Home Life Among High School Students During the COVID-19 Pandemic—Adolescent Behaviors and Experiences Survey, United States, January–June 2021." *Morbidity and Mortality Weekly Report*, Supplemental-3:28–34, April 2022. <https://www.cdc.gov/mmwr/volumes/71/su/su7103a5.htm>. Accessed April 14, 2022.
- 15 "Education in a Pandemic: The Disparate Impacts of COVID-19 on America's Students." U.S. Department of Education, June 2021. <https://www2.ed.gov/about/offices/list/ocr/docs/20210608-impacts-of-covid19.pdf>. Accessed March 1, 2022.
- 16 Oster, Emily, Rebecca Jack, Clare Halloran, et al. "Disparities in Learning Mode Access Among K–12 Students During the COVID-19 Pandemic, by Race/Ethnicity, Geography, and Grade Level—United States, September 2020–April 2021." *Morbidity and Mortality Weekly Report*, 70: 953–958, July 2021. <https://www.cdc.gov/mmwr/volumes/70/wr/mm7026e2.htm>. Accessed March 1, 2022.
- 17 Dorn, Emma, Bryan Hancock, Jimmy Sarakatsannis, et al. "COVID-19 and Learning Loss—Disparities Grow and Students Need Help." *McKinsey & Company*, December 8, 2020. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-learning-loss-disparities-grow-and-students-need-help>. Accessed March 1, 2022.
- 18 Smith, Ember, and Richard V. Reeves. "Students of Color Most Likely to be Learning Online: Districts must Work Even Hard on Race Equity." *Brookings Institution*, September 2020. <https://www.brookings.edu/blog/how-we-rise/2020/09/23/students-of-color-most-likely-to-be-learning-online-districts-must-work-even-harder-on-race-equity/>. Accessed March 1, 2022.
- 19 Guldin, Mai-Britt, Jiong Li, Henrik Søndergaard Pedersen, et al. "Incidence of Suicide Among Persons Who Had a Parent Who Died During Their Childhood: A Population-Based Cohort Study." *JAMA Psychiatry*, 72(12): 1227–1234, December 2015. <https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2469106>. Accessed March 1, 2022.
- 20 Luecken, Linda J., and Danielle S. Roubinov. "Pathways to Lifespan Health Following Childhood Parental Death." *Social and Personality Psychology Compass*, 6(3): 243–257, March 2012. <https://compass.onlinelibrary.wiley.com/doi/abs/10.1111/j.1751-9004.2011.00422.x>. Accessed March 1, 2022.
- 21 Pham, Steven, Giovanna Porta, Candice Biernesser, et al. "The Burden of Bereavement: Early-Onset Depression and Impairment in Youths Bereaved by Sudden Parental Death in a 7-Year Prospective Study." *American Journal of Psychiatry*, 175(9): 887–896, September 2018. <https://ajpp.psychiatryonline.org/doi/full/10.1176/appi.ajp.2018.17070792>. Accessed March 1, 2022.

- 22 Hulsey, Eric G., Yuan Li, Karen Hacker, et al. "Potential Emerging Risks Among Children Following Parental Opioid-Related Overdose Death." *JAMA Pediatrics*, 174(5): 503-504, May 2020. <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2764076>. Accessed March 1, 2022.
- 23 Hillis Susan D., Alexandra Blenkinsop, Andrés Villaveces, et al. "COVID-19-Associated Orphanhood and Caregiver Death in the United States." *Pediatrics*, 148 (6): e2021053760, December 2021. <https://publications.aap.org/pediatrics/article/148/6/e2021053760/183446/COVID-19-Associated-Orphanhood-and-Caregiver-Death>. Accessed March 1, 2022.
- 24 National Institutes of Health. "More than 140,000 U.S. Children Lost a Primary or Secondary Caregiver due to the COVID-19 Pandemic." October 2021. <https://www.nih.gov/news-events/news-releases/more-140000-us-children-lost-primary-or-secondary-caregiver-due-covid-19-pandemic>. Accessed March 1, 2022.
- 25 Leeb, Rebecca T., Rebecca H. Bitsko, Lakshmi Radhakrishnan, et al. "Mental Health-Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic—United States, January 1–October 17, 2020." *Morbidity and Mortality Weekly Report*, 69(45): 1675-1680, November 2020. <https://www.cdc.gov/mmwr/volumes/69/wr/mm6945a3.htm>. Accessed March 1, 2022.
- 26 Krass, Polina, Evan Dalton, Stephanie K. Douppnik, et al. "US Pediatric Emergency Department Visits for Mental Health Conditions During the COVID-19 Pandemic." *Journal of the American Medical Association*, 4(4): e218533, April 2021. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779380>. Accessed March 1, 2022.
- 27 Hausmann, Jena. "Why We've Declared a State of Emergency for Children's Mental Health." *U.S. News and World Report*, June 15, 2021. <https://www.usnews.com/news/health-news/articles/2021-06-15/why-weve-declared-a-state-of-emergency-for-childrens-mental-health>. Accessed April 6, 2022.
- 28 Centers for Disease Control and Prevention. "The Social-Ecological Model: A Framework for Prevention." Updated January 28, 2021. <https://www.cdc.gov/violenceprevention/about/social-ecologicalmodel.html>. Accessed April 15, 2021.
- 29 Lee, Ju-Yeon, Sung-Wan Kim, and Jae-Min Kim. "The Impact of Community Disaster Trauma: A Focus on Emerging Research of PTSD and Other Mental Health Outcomes." *Chonnam Medical Journal*, 56(2): 99-107, 2020. <https://cmj.ac.kr/DOIx.php?id=10.4068/cmj.2020.56.2.99>. Accessed April 10, 2022.
- 30 Thompson, Martie P., J.B. Kingree, and Dorian Lamis. "Associations of Adverse Childhood Experiences and Suicidal Behaviors in Adulthood in a U.S. Nationally Representative Sample." *Child: Care, Health and Development*, 45: 121-128, 2019. <https://onlinelibrary.wiley.com/doi/abs/10.1111/cch.12617>. Accessed April 10, 2022.
- 31 Matthew, Dayna Bowen. "Un-Burying the Lead: Public Health Tools Are the Key to Beating the Opioid Epidemic." *USC-Brookings Schaeffer Initiative for Health Policy*, January 2018. https://www.brookings.edu/wp-content/uploads/2018/01/es_20180123_un-burying-the-lead-final.pdf. Accessed April 6, 2022.
- 32 Pew Research Center. "After Decades Of Sharp Growth, Incarceration in U.S. Has Waned." August 2021. https://www.pewresearch.org/fact-tank/2021/08/16/americas-incarceration-rate-lowest-since-1995/ft_21-08-12_incarceration_1/. Accessed March 1, 2022.
- 33 Rouhani, Saba, and Ju Nyeong Park. "Situating the Continuum of Overdose Risk in the Social Determinants of Health." *Harvard Medical School Primary Care Review*, October 2020. <http://info.primarycare.hms.harvard.edu/review/continuum-of-overdose>. Accessed March 1, 2022.
- 34 Drug Policy Alliance. "A History of the Drug War." <https://drugpolicy.org/issues/brief-history-drug-war>. Accessed March 1, 2022.
- 35 "Commission on Combating Synthetic Opioid Trafficking: Final Report." *Commission on Combating Synthetic Opioid Trafficking*, February 2022. <https://www.rand.org/hsrd/hsoac/commission-combating-synthetic-opioid-trafficking.html>. Accessed March 1, 2022.
- 36 Kelvey, Jon. "How Advertising Shaped the First Opioid Epidemic" *Smithsonian Magazine*, April 3, 2018. <https://www.smithsonianmag.com/science-nature/how-advertising-shaped-first-opioid-epidemic-180968444/>. Accessed March 1, 2022.
- 37 Joseph, Andrew. "A Blizzard of Prescriptions': Documents Reveal New Details About Purdue's Marketing of OxyContin." *Stat News*, January 15, 2019. <https://www.statnews.com/2019/01/15/massachusetts-purdue-lawsuit-new-details/>. Accessed March 1, 2022.
- 38 DeWeerd, Sarah. "Tracing the US Opioid Crisis to its Roots." *Nature*, September 11, 2019. <https://www.nature.com/articles/d41586-019-02686-2>. Accessed March 1, 2022.
- 39 Centers for Disease Control and Prevention. "U.S. Opioid Dispensing Rate Maps." <https://www.cdc.gov/drugoverdose/rxrate-maps/index.html>. Accessed March 1, 2022.
- 40 DeWeerd, Sarah. "Tracing the US Opioid Crisis to its Roots." *Nature*, September 11, 2019. <https://www.nature.com/articles/d41586-019-02686-2>. Accessed March 1, 2022.
- 41 TFAH analysis of NCHS data.
- 42 Case, Anne and Angus Deaton. "Life expectancy in adulthood is falling for those without a BA degree, but as educational gaps have widened, racial gaps have narrowed." *Proceedings of the National Academy of Sciences*, 118:11 (e2024777118), March 2021. <https://www.pnas.org/doi/full/10.1073/pnas.2024777118>. Accessed April 15, 2022.
- 43 Sacco, Lisa N., Johnathan H. Duff, and Amanda K. Sarata. "Prescription Drug Monitoring Programs." *Congressional Research Service*: 7-5700 R42593, May 2018. <https://sgp.fas.org/crs/misc/R42593.pdf>. March 1, 2022.
- 44 Dowell, Deborah, Tamara M. Haegerich, and Roger Chou. "CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016." *Morbidity and Mortality Weekly Report*, 65(1): 1-49, March 2016. <https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm>. Accessed March 1, 2022.
- 45 Haller, Colleen, and Henrick Harwood. "Overview of State Legislation to Increase Access to Treatment for Opioid Overdose." *National Association of State Alcohol and Drug Abuse Directors*, September 2015. <https://nasadad.org/wp-content/uploads/2015/09/Opioid-Overdose-Policy-Brief-2015-Update-FINAL1.pdf>. Accessed March 1, 2022.

- 46 U.S. Department of Health and Human Services. "SAMHSA Awards \$123 Million in Grants for Multifront Approach to Combat the Nation's Overdose Epidemic." Press Release, September 13, 2021. <https://www.hhs.gov/about/news/2021/09/13/samhsa-awards-123-million-in-grants-for-multifront-approach-to-combat-the-nations-overdose-epidemic.html>. Accessed March 1, 2022.
- 47 Moss, Kellie, Adam Wexler, Lindsey Dawson, et al. "The Coronavirus Aid, Relief, and Economic Security Act: Summary of Key Health Provision." *Kaiser Family Foundation*, April 2020. <https://www.kff.org/coronavirus-covid-19/issue-brief/the-coronavirus-aid-relief-and-economic-security-act-summary-of-key-health-provisions>. Accessed March 1, 2022.
- 48 Centers for Disease Control and Prevention. "Preventing Adverse Childhood Experiences: Data to Action." August 2021. <https://www.cdc.gov/violenceprevention/aces/preventingace-datatoaction.html>. Accessed March 1, 2022.
- 49 Eisenstein, Michael. "Treading the Tightrope of Opioid Restrictions." *Nature*, September 11, 2019. <https://www.nature.com/articles/d41586-019-02687-1>. Accessed March 1, 2022.
- 50 Meghani, Salimah H., Eeeseung Byun, and Rollin M. Gallagher. "Time to Take Stock: A Meta-Analysis and Systematic Review of Analgesic Treatment Disparities for Pain in the United States." *Pain Medicine*, 13(2): 150-74, February 2012. <https://pubmed.ncbi.nlm.nih.gov/22239747/>. Accessed March 1, 2022.
- 51 Hoffman, Kelly M., Sophie Trawalter, Jordan R. Axt, et al. "Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites." *Proceedings of the National Academy of Sciences of the United States of America*, 113(16): 4296-4301, April 2016. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4843483/>. Accessed March 1, 2022.
- 52 Commission on Combating Synthetic Opioid Trafficking. "Commission on Combating Synthetic Opioid Trafficking: Final Report." February 2022. <https://www.rand.org/hsrd/hsoac/commission-combating-synthetic-opioid-trafficking.html>. Accessed March 1, 2022.
- 53 Ibid.
- 54 Mann, Brian. "Black Americans Are Now Dying from Drug Overdoses at a Higher Rate Than Whites." *NPR*, March 2, 2022. <https://www.npr.org/2022/03/02/1083838947/black-americans-dying-drug-overdoses>. Accessed March 5, 2022.
- 55 Weerasinghe, Isha, Yesenia Jimenez, and Bruce Wilson. "Between the Lines: Understanding Our Country's Racialized Response to the Opioid Overdose Epidemic." *Center for Law and Social Policy*, February 2020. <https://www.clasp.org/sites/default/files/publications/2020/02/2020betweenthelines.pdf>. Accessed April 10, 2022.
- 56 U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. "Healthy People 2030: Social Determinants of Health." <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>. Accessed April 10, 2022.
- 57 Substance Abuse and Mental Health Services Administration. "Risk and Protective Factors." July 2017. <https://www.samhsa.gov/sites/default/files/20190718-samhsa-risk-protective-factors.pdf>. Accessed March 1, 2022.
- 58 Minnesota Department of Health. "Opioids: Social Determinants of Substance Use and Overdose Prevention." <https://www.health.state.mn.us/communities/opioids/prevention/socialdeterminants.html>. Accessed March 1, 2022.
- 59 Sulley, Saanie, and Memory Ndanga. "Inpatient Opioid Use Disorder and Social Determinants of Health: A Nationwide Analysis of the National Inpatient Sample (2012-2014 and 2016-2017)." *Cureus*, 12(11): e11311, November 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7714736/>. Accessed March 1, 2022.
- 60 Stein, Bradley D., Andrew W. Dick, Mark Sorbero, et al. "A Population-Based Examination of Trends and Disparities in Medication Treatment for Opioid Use Disorders Among Medicaid Enrollees." *Substance Abuse*, 39(4): 419-425, 2018. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6309581/>. Accessed March 1, 2022.
- 61 Abbas, B., P.L. Marotta, D. Goddard-Eckrich, et al. "Socio-Ecological and Pharmacy-Level Factors Associated With Naloxone Stocking at Standing-Order Naloxone Pharmacies in New York City." *Drug and Alcohol Dependence*, 218: 108388, 2021. <https://www.recoveryanswers.org/research-post/likely-get-naloxone-pharmacy-socioeconomic-factors-naloxone-availability/>. Accessed March 1, 2022.
- 62 Pear, Veronica A, William R. Ponicki, Andrew Gaidus, et al. "Urban-Rural Variation in the Socioeconomic Determinants of Opioid Overdose." *Drug Alcohol Dependence*, 1(195): 66-73, February 2019. <https://pubmed.ncbi.nlm.nih.gov/30592998/>. Accessed March 1, 2022.
- 63 Yamamoto, Ayae, Jack Needleman, Lillian Gelberg, et al. "Association Between Homelessness and Opioid Overdose and Opioid-Related Hospital Admissions/ Emergency Department Visits." *Social Science & Medicine*, 242: 112585, December 2019. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7023863/>. Accessed March 1, 2022.
- 64 Altekruse, Sean F., Candace M. Cosgrove, William C. Altekruse, et al. "Socioeconomic Risk Factors for Fatal Opioid Overdoses in the United States: Findings from the Mortality Disparities in American Communities Study (MDAC)." *PLOS One*, 15(1): e0227966, January 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6968850/>. Accessed March 1, 2022.
- 65 DeSalvo, Karen B., Y. Claire Wang, Andrea Harris, et al. "Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century." *Preventing Chronic Disease*, 14: 170017, September 7, 2017. <http://dx.doi.org/10.5888/pcd14.170017>. Accessed April 10, 2022.
- 66 Ong, Ai Rene, Sunghye Lee, and Erin E. Bonar. "Understanding Disparities in Access to Naloxone Among People Who Inject Drugs in Southeast Michigan Using Respondent Driven Sampling." *Drug Alcohol Dependence*, 206: 107743, January 2020. <https://pubmed.ncbi.nlm.nih.gov/31801107/>. Accessed March 1, 2022.
- 67 Centers for Disease Control and Prevention. "FY 2023 President's Budget." <https://www.cdc.gov/budget/documents/fy2023/FY-2023-CDC-Budget-Detail.pdf>. Accessed April 5, 2022.

- 68 Centers for Disease Control and Prevention. "Justification of Estimates for Appropriation Committees." May 2021. <https://www.cdc.gov/budget/documents/fy2022/FY-2022-CDC-congressional-justification.pdf>. Accessed April 6, 2022.
- 69 Centers for Disease Control and Prevention. "COVID-19 Parental Resources Kit – Early Childhood." Updated December 13, 2021. <https://www.cdc.gov/mentalhealth/stress-coping/parental-resources/index.html>. Accessed April 10, 2022.
- 70 TFAH analysis of NCHS data.
- 71 Irvine, Michael A., Margot Kuo, Jane A. Buxton, et al. "Modelling the Combined Impact of Interventions in Averting Deaths During a Synthetic-Opioid Overdose Epidemic." *Addiction*, 114(9): 1602-1613, June 2019. <https://doi.org/10.1111/add.14664>. Accessed March 1, 2022.
- 72 Centers for Disease Control and Prevention. "Fentanyl." Updated February 16, 2021. <https://www.cdc.gov/opioids/basics/fentanyl.html>. Accessed March 1, 2022.
- 73 Cleveland Clinic. "Attention Deficit Hyperactivity Disorder (ADHD): Stimulant Therapy." February 23, 2016. <https://my.clevelandclinic.org/health/treatments/11766-attention-deficit-hyperactivity-disorder-adhd-stimulant-therapy>. Accessed April 6, 2022.
- 74 The White House. "Fact Sheet: President Biden to Announce Strategy to Address Our National Mental Health Crisis, As Part of Unity Agenda in his First State of the Union." March 1, 2022. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/01/fact-sheet-president-biden-to-announce-strategy-to-address-our-national-mental-health-crisis-as-part-of-unity-agenda-in-his-first-state-of-the-union/>. Accessed April 10, 2022.
- 75 U.S. Department of Health and Human Services. "U.S. Surgeon General Issues Advisory on Youth Mental Health Crisis Further Exposed by COVID-19 Pandemic." December 7, 2021. <https://www.hhs.gov/about/news/2021/12/07/us-surgeon-general-issues-advisory-on-youth-mental-health-crisis-further-exposed-by-covid-19-pandemic.html>. Accessed April 10, 2022.
- 76 The White House. "White House Announces State Model Law to Expand Programs that Deflect People with Addiction to Care." March 3, 2022. <https://www.whitehouse.gov/ondcp/briefing-room/2022/03/03/white-house-announces-state-model-law-to-expand-programs-that-deflect-people-with-addiction-to-care/>. Accessed April 10, 2022.
- 77 The White House. "Fact Sheet: Addressing Addiction and the Overdose Epidemic." March 01, 2022. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/01/fact-sheet-addressing-addiction-and-the-overdose-epidemic/?msclkid=ea46e76eb67811ecbbf5dcec5734a807>. Accessed April 10, 2022.
- 78 Centers for Disease Control and Prevention. "Federal Grantees May Now Use Funds to Purchase Fentanyl Test Strips." April 7, 2021. <https://www.cdc.gov/media/releases/2021/p0407-Fentanyl-Test-Strips.html>. Accessed April 10, 2022.
- 79 The White House. "Statement from Dr. Rahul Gupta on Today's CDC Overdose Death Data." January 12, 2022. <https://www.whitehouse.gov/ondcp/briefing-room/2022/01/12/statement-from-dr-rahul-gupta-on-todays-cdc-overdose-death-data-2/?msclkid=1dfdb66ab67911eca7f1e47feed74a8d>. Accessed April 10, 2022.
- 80 Gordon-Davis, Christine. "A Ride to Recovery: Wheels of Hope Brings Options to Residents of the Merrimack Valley." *Health Resources in Action*, September 30, 2021. <https://hria.org/2021/09/30/wheelsofhope/>
- 81 Centers of Disease Control and Prevention. "Drug Overdose: About OD2A." Updated September 15, 2021. <https://www.cdc.gov/drugoverdose/od2a/about.html>. Accessed April 10, 2022.
- 82 Stobbe, Mike. "COVID-19, overdoses pushed US to highest death total ever." *Associated Press*, April 12, 2022. <https://apnews.com/article/covid-science-health-centers-for-disease-control-and-prevention-robert-anderson-ff2f01e401abce778bea8ac2e9c6e53e>. Accessed April 14, 2022.
- 83 Substance Abuse and Mental Health Services Administration. "Opioids and Substance Misuse." Updated June 10, 2020. <https://www.samhsa.gov/iecmhc/special-topics/opioids-substance-misuse>. Accessed April 10, 2022.
- 84 U.S. Drug Enforcement Administration. "Narcotics (Opioids)." <https://www.dea.gov/taxonomy/term/331>. Accessed April 10, 2022.
- 85 Benjamin, Ramsin, Andrea M. Trescot, Sukdeb Datta, et al. "Opioid Complications and Side Effects." *Pain Physician*, 11(2 Suppl): S105-20, March 2008. <https://pubmed.ncbi.nlm.nih.gov/18443635/>. Accessed April 10, 2022.
- 86 National Institute on Drug Abuse. "Opioids." <https://www.drugabuse.gov/drugs-abuse/opioids>. Accessed April 10, 2022.
- 87 Centers for Disease Control and Prevention. "Understanding the Epidemic." Updated March 17, 2021. <https://www.cdc.gov/drugoverdose/epidemic/index.html>. Accessed April 10, 2022.
- 88 U.S. Drug Enforcement Administration. "Press Release: DEA Issues Carfentanil Warning to Police and Public." September 22, 2016. <https://www.dea.gov/press-releases/2016/09/22/dea-issues-carfentanil-warning-police-and-public>. Accessed April 10, 2022.
- 89 Sanburn, Josh. "Heroin Is Being Laced With a Terrifying New Substance: What to Know About Carfentanil." *Time*, September 12, 2016. <http://time.com/4485792/heroin-carfentanil-drugs-ohio/>. Accessed April 10, 2022.
- 90 Favrod-Coune, Theierry, and Barbara Broers. "The Health Effect of Psychostimulants: A Literature Review." *Pharmaceuticals*, 3(7): 2333-2361, July 2010. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4036656/>. Accessed April 10, 2022.
- 91 Centers for Disease Control and Prevention. "Opioid Overdose: Other Drugs." Updated November 18, 2021. <https://www.cdc.gov/drugoverdose/data/otherdrugs.html>. Accessed April 10, 2022.
- 92 Email correspondence with Dr. Jay Butler, previously chief medical officer for the Alaska Department of Health and Social Services, January 11, 2019.
- 93 Ehlman, Daniel C., Deborah M. Stone, Christopher M. Jones, et al. "Changes in Suicide Rates — United States, 2019 and 2020." *Morbidity and Mortality Weekly Report*, 71: 306-312, February 2022. <https://www.cdc.gov/mmwr/volumes/71/wr/mm7108a5.htm>. Accessed April 6, 2022.

- 94 Panchal, Nirmita, Rabah Kamal, Cynthia Cox, et al. "Mental Health and Substance Use Considerations Among Children During the COVID-19 Pandemic." *Kaiser Family Foundations*, May 2021. <https://www.kff.org/coronavirus-covid-19/issue-brief/mental-health-and-substance-use-considerations-among-children-during-the-covid-19-pandemic/>. Accessed April 4, 2022.
- 95 Ogburn, Joshua, Daniella Gratale, Nathaniel Counts, et al. "Pediatric Mental, Emotional and Behavioral Health: Federal Policy Recommendations for Congress and the Executive Branch." *Nemours Children's Health and Mental Health America*, September 2021. <https://www.nemours.org/content/dam/nemours/nemours-org/en/documents/pediatric-mental-emotional-and-behavioral-health-policy-recommendations-for-congress.pdf>. Accessed April 4, 2022.
- 96 Hochhauser, Shirley, Satya Rao, Elizabeth England-Kennedy, et al. "Why Social Justice Matters: A Context for Suicide Prevention Efforts." *International Journal for Equity in Health*, 19: 76, May 2020. <https://doi.org/10.1186/s12939-020-01173-9>. Accessed April 10, 2022.
- 97 Ibid.
- 98 Collins, Susan E., Seema L. Clifasefi, Lonnie A. Nelson, et al. "Randomized Controlled Trial of Harm Reduction Treatment for Alcohol (Hart-A) for People Experiencing Homelessness and Alcohol Use Disorder." *International Journal of Drug Policy*, 67: 24-33, May 2019. <https://doi.org/10.1016/j.drugpo.2019.01.002>. Accessed April 10, 2022.
- 99 Furr-Holden, C., Debra M., Adam J. Milam, et al. "Using Zoning as a Public Health Tool to Reduce Alcohol Outlet Oversaturation, Promote Compliance, and Guide Future Enforcement: A Preliminary Analysis of Transform Baltimore." *Journal of Urban Health*, 97: 568-582, July 2020. <https://doi.org/10.1007/s11524-020-00453-7>. Accessed April 10, 2022.
- 100 Centers for Disease Control and Prevention. "Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence." National Center for Injury Prevention and Control, 2019. <https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf>. Accessed March 1, 2022.
- 101 Office of U.S. Representative Shelley Moore Capito. "Capito, Durbin Introduce Bipartisan Bill to Address Childhood Trauma." June 17, 2021. https://www.capito.senate.gov/news/press-releases/capito-durbin-introduce-bipartisan-bill_to-address-childhood-trauma. Accessed March 1, 2022.
- 102 Centers for Disease Control and Prevention. "Comprehensive Suicide Prevention." Updated August 19, 2021. www.cdc.gov/suicide/programs/csp/index.html. Accessed March 1, 2022.
- 103 Lustig, Adam, and Marilyn Cabrera. "Leveraging Evidence-Based Policies to Improve Health, Control Costs, and Create Health Equity." *Trust for America's Health*, July 2021. https://www.tfah.org/wp-content/uploads/2021/07/2021_LeveragingReport_Fnl.pdf. Accessed March 1, 2022.
- 104 "Protecting Youth Mental Health." Office of the Surgeon General, 2021. <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>. Accessed March 1, 2022.
- 105 American Foundation for Suicide Prevention. "K-12 School Suicide Prevention." <https://afsp.org/suicide-prevention-in-k-12-schools>. Accessed April 4, 2022.
- 106 Lustig, Adam, and Marilyn Cabrera. "Leveraging Evidence-Based Policies to Improve Health, Control Costs, and Create Health Equity." *Trust for America's Health*, July 2021. https://www.tfah.org/wp-content/uploads/2021/07/2021_LeveragingReport_Fnl.pdf. Accessed April 4, 2022.
- 107 Counts, Nathaniel Z., Leslie R. Walker-Harding, and Benjamin F. Miller. "Enforcing Legal Compliance for Covering of Services Promoting Family Mental Health." *American Journal of Preventive Medicine*, January 8, 2022. <https://doi.org/10.1016/j.amepre.2021.10.021>. Accessed March 1, 2022.
- 108 Office of Congressman Mark DeSaulnier. "Representatives DeSaulnier, Matsui, and Kennedy Announce Legislation to Improve Mental Health Supports for Young Children and Families." January 10, 2020. <https://desaulnier.house.gov/media-center/press-releases/representatives-desaulnier-matsui-and-kennedy-announce-legislation>. Accessed April 4, 2022.
- 109 Counts, Nathaniel Z., Leslie R. Walker-Harding, and Benjamin F. Miller. "Enforcing Legal Compliance for Covering of Services Promoting Family Mental Health." *American Journal of Preventive Medicine*, January 8, 2022. <https://doi.org/10.1016/j.amepre.2021.10.021>. Accessed March 1, 2022.
- 110 National Suicide Hotline Designation Act of 2020: Public Law No: 116-172. <https://www.congress.gov/bill/116th-congress/senate-bill/2661/actions>. Accessed April 10, 2022.
- 111 "The Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention." *Office of the U.S. Surgeon General and the National Action Alliance for Suicide Prevention*, January 2021. <https://www.hhs.gov/sites/default/files/sprc-call-to-action.pdf>. Accessed April 10, 2022.
- 112 Runyan, Carol W., Amy Becker, Sara Brandspiegel, et al. "Lethal Means Counseling for Parents of Youth Seeking Emergency Care for Suicidality." *West Journal Emergency Medicine*, 17(1):8-14, 2016. <https://escholarship.org/uc/item/0td33354>. Accessed April 21, 2021.
- 113 "The Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention." *Office of the U.S. Surgeon General and the National Action Alliance for Suicide Prevention*, January 2021. <https://www.hhs.gov/sites/default/files/sprc-call-to-action.pdf>. Accessed April 10, 2022.
- 114 Centers for Disease Control and Prevention. "U.S. Opioid Dispensing Rate Maps." Updated November 10, 2021. <https://www.cdc.gov/drugoverdose/maps/rxrate-maps.html>. Accessed April 10, 2022.
- 115 "Promoting Health and Cost Control in States: How States Can Improve Community Health and Well-Being Through Policy Change." *Trust for America's Health*, July 2019. TFAH-2019-PHACCS-AlcPrice-Fnl.pdf. Accessed April 4, 2022.
- 116 Centers for Disease Control and Prevention. "Grant Opportunity CDC-RFA-DP21-2105: Promoting Population Health through Increased Capacity in Alcohol Epidemiology & the Prevention of Excessive Alcohol Use." March 24, 2021. <https://www.grants.gov/web/grants/view-opportunity.html?popId=328583>. Accessed April 10, 2022.

- 117 The White House. “White House Releases Model Law to Help States Ensure Access to ‘Safe, Effective, and Cost-Saving’ Syringe Services Programs.” December 8, 2021. <https://www.whitehouse.gov/ondcp/briefing-room/2021/12/08/white-house-releases-model-law-to-help-states-ensure-access-to-safe-effective-and-cost-saving-syringe-services-programs/>. Accessed March 1, 2022.
- 118 Substance Abuse and Mental Health Services Administration. “Expansion of Naloxone in the Prevention of Opioid Overdose FAQs.” https://www.samhsa.gov/sites/default/files/programs_campaigns/medication_assisted/expansion-of-naloxone-faq.pdf. Accessed March 1, 2022.
- 119 “Protecting Youth Mental Health: The U.S. Surgeon General’s Advisory.” *Office of the U.S. Surgeon General*, December 2021. <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>. Accessed April 4, 2022.
- 120 “Substance Use Disorder: Reliable Data Needed For Substance Abuse Prevention and Treatment Block Grant Program.” *U.S. Government Accountability Office, GAO-21-58*, December 2020. <https://www.gao.gov/assets/gao-21-58.pdf>. Accessed March 1, 2022.
- 121 Minnesota Department of Health. “Drug Overdose Death Reporting.” <https://www.health.state.mn.us/communities/opioids/data/deathreporting.html>. Accessed March 1, 2022.
- 122 Centers for Disease Control and Prevention. “What Is Syndromic Surveillance?” Updated September 24, 2021. <https://www.cdc.gov/nssp/overview.html>. Accessed March 1, 2022.
- 123 Centers for Disease Control and Prevention, National Center for Health Statistics. “Provisional Drug Overdose Death Counts.” Updated March 16, 2022. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>. Accessed April 10, 2022.
- 124 Ibid.
- 125 Centers for Disease Control and Prevention, National Center for Health Statistics. “2021 Schedule of NCHS Statistical Products and Report.” Updated December 31, 2021. https://www.cdc.gov/nchs/pressroom/calendar/2021_schedule.htm. Accessed March 1, 2022.
- 126 Centers for Disease Control and Prevention. “How We Conduct Syndromic Surveillance.” Updated September 24, 2021. <https://www.cdc.gov/nssp/how-sys.html>. Accessed March 1, 2022.
- 127 Centers for Disease Control and Prevention. “About OD2A.” Updated September 15, 2021. <https://www.cdc.gov/drugoverdose/od2a/about.html>. Accessed March 1, 2022.
- 128 “Tackling America’s Mental Health and Addiction Crisis Through Primary Care Integration: Task Force Recommendations.” *Bipartisan Policy Center*, March 2021. https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2021/03/BPC_Behavioral-Health-Integration-report_R03.pdf. Accessed March 1, 2022.
- 129 Shield, Amy. “Community Initiated Care: Building Skills to Improve Mental Health.” *Well Being Trust and EMPOWER*, September 11, 2021. <https://wellbeingtrust.org/news/community-initiated-care-building-skills-to-improve-mental-health/>. Accessed April 10, 2022.
- 130 Mauch, Danna, Cori Kautz, and Shelagh Smith. “Reimbursement of Mental Health Services in Primary Care Settings.” *Substance Abuse and Mental Health Services Administration*, February 2008. <https://store.samhsa.gov/sites/default/files/d7/priv/sma08-4324.pdf>. Accessed April 6, 2022.



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