



PRESCRIPTION NATION 2018

Facing America's opioid epidemic

- Defining the issues
- Grading states' progress
- Recommending
life-saving actions

Eliminating Preventable Deaths™



STEMMING THE TIDE OF AN EPIDEMIC

The numbers don't lie, and they are terrifying. Over 42,000 Americans lost their lives to an overdose involving opioids in 2016 alone: 115 people a day. That means hundreds of thousands of family members, friends, neighbors and co-workers are left to pick up the pieces of these lost lives. The heartbreaking truth is that every one of these deaths was preventable.

Highly addictive opioid medications—Vicodin, Percocet, OxyContin and others—have been improperly marketed to the medical community as the most effective method for treating pain. Since the 1990s, opioids have been liberally prescribed, setting the stage for a flood of people suffering from opioid use disorder, overdose and death.

Prescription opioids are a gateway drug to heroin, which is nearly identical chemically and may be cheaper and easier to get. Increasingly, heroin and other drugs are being combined with illicitly made fentanyl, a synthetic opioid that is 50 to 100 times more potent than morphine. This trend has led to a spike in opioid overdoses in every single state in the nation. The crisis now is an epidemic that has taken a greater toll than AIDS at the height of that epidemic. Without strong action, increased funding and dedicated resources, we face a grim future.

The National Safety Council is committed to eliminating preventable deaths in our lifetime, and we go where the data tell us to go. For years, the data on opioid-related deaths predicted the reality we face today. The Council is responding by creating public education campaigns, providing resources for employers and partnering with the medical community, survivor advocates and committed corporate partners. However, legislation and policy are needed if we want to fundamentally change behaviors.

As the death toll increases, addressing the crisis becomes even more urgent. The federal government declared the opioid epidemic a public health emergency in 2017, shining a spotlight on the problem without dedicating needed funds. More federal resources are essential, but states play a significant role in implementing programs that will stem the loss of life. Decision makers must continue to challenge the status quo, to think differently moving forward, and to implement more effective solutions.

We can prevent deaths, provide adequate treatment to people suffering from opioid use disorder and help those in recovery to have productive, healthy lives. We must face this crisis head-on. We cannot afford further delay.



DEBORAH A. P. HERSMAN

President and CEO of the National Safety Council

This report provides government officials with the blueprint they need to address this emergency and save lives. On pages 4 and 5, we have graded the states on actions taken. While there has been improvement since our *Prescription Nation 2016* report, the scope of the problem has outpaced interventions. Overdose deaths are still rising. This report shows that with the right actions, reversing the opioid overdose trend is possible: it just hasn't been done yet.

EXECUTIVE SUMMARY

It's time to face the facts. Our nation is confronting the most fatal drug crisis in U.S. history.

Our friends and family members are dying in unprecedented numbers. One in 10 Americans knows someone who has died from an opioid overdose (National Safety Council, 2017).

- Eleven million Americans misused an opioid pain reliever in the past year (SAMHSA, 2017)
- More than 2.1 million people suffer from an opioid use disorder (SAMHSA, 2017)
- More than 63,600 families lost loved ones to a drug overdose in 2016 (Kochanek, Murphy, Xu, & Arias, 2017)
- Opioids such as Vicodin (hydrocodone), OxyContin (oxycodone), heroin and fentanyl accounted for 42,000 deaths in 2016 (Kochanek, Murphy, Xu, & Arias, 2017)
- U.S. lifespan estimates declined for the second year in a row, primarily due to deaths from drug overdose (Dowell, Arias, Kochanek, Anderson, & al, 2017)

The opioid epidemic is affecting our economy.

- Opioid over-prescribing is shrinking the number of eligible workers (Krueger, 2017)
- Labor force participation among prime-age workers 25–54 is more likely to be lower in areas with high opioid prescribing rates; this age group has been hardest hit by the opioid epidemic (Krueger, 2017)

- Seven in 10 companies report being directly impacted by prescription drug misuse (National Safety Council, 2017)

This report discusses the major dimensions of the opioid crisis, and identifies six key actions every state should take to save lives:

- Mandating prescriber education
- Implementing opioid prescribing guidelines
- Integrating prescription drug monitoring programs into clinical settings
- Improving data collection and sharing
- Treating opioid overdose
- Increasing availability of opioid use disorder treatment

The recommendations listed on pages 28-29 will guide states in developing and strengthening laws and regulations to achieve these key actions, improve their state grade and save lives.



HOW DOES THIS CRISIS COMPARE TO OTHERS?

- ◆ **63,632** people died from drug overdose in 2016; of those, over 42,000 deaths were from opioids (Hedegaard, Warner, & Miniño, 2017)
- ◆ **47,000** American soldiers died in battle in the Vietnam War 1964–1975 (U.S. Department of Veterans Affairs, 2017)
- ◆ **351,602** Americans have died from opioid overdose since 1999 (National Center for Health Statistics, 2016)
- ◆ **291,000** American soldiers died in battle in World War II 1941–1945 (U.S. Department of Veterans Affairs, 2017)
- ◆ **50,000** Americans died from HIV in 1995, the peak year for HIV deaths: HIV was the number one cause of death for Americans age 25 to 44 (CDC, February 28, 1997)
- ◆ **6,700** Americans died from HIV in 2014 (Kochanek K. , Murphy, Xu, & Tejada-Vera, 2016)

Public education, treatment and prevention measures do work. For example, the spread of HIV has been dramatically curtailed and deaths have decreased since its identification and public health response in the 1980s.

The National Safety Council is committed to working with federal and state leaders and other organizations to end opioid overdose.

STATE PROGRESS

Results on achieving six key actions for ending the opioid crisis.

Two states met all six key actions and no state met zero key actions. State progress based on best available data as of Dec. 31, 2017.



13 states and District of Columbia are IMPROVING: meeting five or six key actions































29 states are LAGGING: meeting three or four key actions



8 states are FAILING: meeting one or two key actions

STATE	PRESCRIBER ED	PRESC GUIDELINES	PDMP	DATA SHARING	TREATING OVERDOSE	OUD TREATMENT	STATE TOTAL
Alabama	✓	✓	✓		✓		4
Alaska	✓		✓		✓	✓	4
Arizona	✓	✓	✓	✓		✓	5
Arkansas			✓		✓		2
California	✓	✓			✓	✓	4
Colorado		✓	✓		✓	✓	4
Connecticut	✓	✓	✓		✓	✓	5
Delaware	✓	✓	✓		✓	✓	5
District of Columbia	✓	✓	✓		✓	✓	5
Florida	✓	✓			✓	✓	4
Georgia	✓	✓	✓		✓	✓	5
Hawaii		✓			✓	✓	3
Idaho	✓	✓	✓				3
Illinois			✓		✓	✓	3
Indiana		✓	✓		✓		3
Iowa	✓	✓					2
Kansas			✓			✓	2
Kentucky	✓	✓	✓		✓		4
Louisiana	✓	✓	✓		✓		4
Maine	✓	✓	✓			✓	4
Maryland	✓		✓		✓	✓	4
Massachusetts	✓		✓			✓	3
Michigan	✓	✓	✓		✓	✓	5

STATE	PRESCRIBER ED	PRESC GUIDELINES	PDMP	DATA SHARING	TREATING OVERDOSE	OUD TREATMENT	STATE TOTAL
Minnesota 			✓		✓	✓	3
Mississippi 	✓				✓	✓	3
Missouri 						✓	1
Montana 					✓	✓	2
Nebraska 		✓	✓		✓		3
Nevada 	✓	✓	✓	✓	✓	✓	6
New Hampshire 	✓	✓	✓		✓	✓	5
New Jersey 	✓				✓	✓	3
New Mexico 	✓	✓	✓	✓	✓	✓	6
New York 	✓		✓			✓	3
North Carolina 	✓	✓	✓		✓	✓	5
North Dakota 			✓		✓		2
Ohio 	✓	✓	✓		✓	✓	5
Oklahoma 	✓	✓	✓			✓	4
Oregon 	✓					✓	2
Pennsylvania 	✓		✓		✓	✓	4
Rhode Island 	✓	✓	✓	✓	✓		5
South Carolina 	✓	✓	✓			✓	4
South Dakota 			✓		✓	✓	3
Tennessee 	✓	✓	✓		✓		4
Texas 	✓	✓	✓	✓			4
Utah 		✓	✓		✓	✓	4
Vermont 	✓	✓			✓	✓	4
Virginia 	✓	✓	✓		✓	✓	5
Washington 		✓			✓	✓	3
West Virginia 	✓	✓	✓	✓	✓		5
Wisconsin 			✓	✓	✓	✓	4
Wyoming 		✓	✓				2
TOTALS	35	34	40	7	38	37	

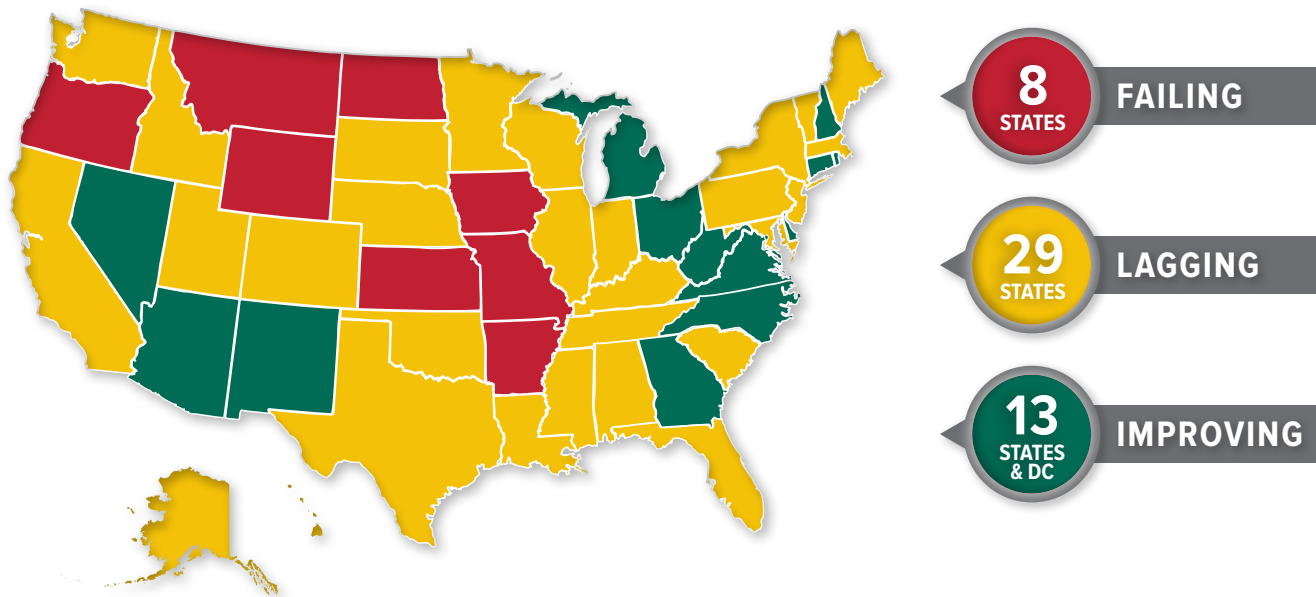
STATE-BY-STATE PROGRESS ON STRENGTHENING LAWS AND REGULATIONS

Multiple key actions will be needed to end this drug epidemic and reduce the loss of life. Concentrated state focus is needed to reduce opioid over-prescribing, and to improve the ability to identify and offer help to those at risk. By ensuring that effective and coordinated substance abuse treatment is readily available to those with opioid use disorder, we can reduce the loss of life to opioid overdose.

The six key actions every state should take to save lives are:

- Mandating prescriber education
- Implementing opioid prescribing guidelines
- Integrating prescription drug monitoring programs (PDMPs) into clinical settings
- Improving data collection and sharing
- Treating opioid overdose
- Increasing availability of opioid use disorder treatment

This report provides a road map for strengthening laws and regulations. NSC provides a variety of tools and resources to assist states as they navigate this epidemic.



FAILING		LAGGING		IMPROVING	
MEETS 1 INDICATOR	MEETS 2 INDICATORS	MEETS 3 INDICATORS	MEETS 4 INDICATORS	MEETS 5 INDICATORS	MEETS 6 INDICATORS
MO	AR, IA, KS, MT, ND, OR, WY	HI, ID, IL, IN, MA, MN, MS, NE, NJ, NY, SD, WA	AL, AK, CA, CO, FL, KY, LA, ME, MD, OK, PA, SC, TN, TX, UT, VT, WI	AZ, CT, DE, DC, GA, MI, NH, NC, OH, RI, VA, WV	NV, NM

REPORT METHODOLOGY

Prescription Nation evaluates six key actions that can help states prevent and address opioid misuse, addiction and overdose. Each section is comprised of one or more indicators identified by NSC subject matter experts as policies, programs or practices that can impact the U.S. opioid epidemic.

The final selection of indicators was based on the availability of state-level data from trustworthy public entities including nonprofit organizations, associations and government agencies. See the reference section for the complete list of referenced data sources. A total of 16 indicators are included in the *Prescription Nation 2018* report. Every attempt was made to provide the most recent data available, reflecting state laws enacted as of Dec. 31, 2017.

This report is intended as a communication tool to highlight best practices and state-level actions, but it is not an exhaustive scientific study. NSC was careful to evaluate states only on indicators for which comparable data is available, on actions being taken at the state level. No single indicator should be considered a proxy for how well any given state is performing in addressing the opioid epidemic.

States continue to make progress in addressing the opioid epidemic

Prescription Nation 2018 examines the progress of states in facing the opioid epidemic. Since our 2016 report, significant progress has been made by states:

- Fifty states and District of Columbia have established prescription drug monitoring programs, with many states moving to bring their PDMP in line with model or best practice program guidance
- Fifty states and District of Columbia have implemented programs and enacted laws to expand access to naloxone, a drug to treat opioid overdose, saving tens of thousands since 1996

Key actions and indicators examined in prior reports have changed. These changes include:

- Additional indicators have been added for key actions to improve PDMPs and provide access to naloxone. It is no longer enough for each state to

have a PDMP and provide access to naloxone. States must strengthen these programs and move to best practices in order to stop the epidemic.

- A key action related to data collection and data sharing has been added to the 2018 report. With a rapidly changing epidemic and entry of newer and deadlier opioids such as fentanyl and its analogs, data are needed to understand these changes and how key populations have been most impacted by the epidemic.
- The key action regarding laws to eliminate pill mills has been removed in the 2018 report. Laws to regulate pill mills and pain clinics and bring them under the purview of state licensing officials continue to be a promising practice.
- State enhancements to PDMPs and implementation of opioid prescribing guidelines are reducing the need for separate laws to eliminate pill mills.

DEFINING MISUSE, DEPENDENCE, DISORDERS AND ADDICTION

MISUSE: Using medication saved from a previous medical condition or surgery for a non-prescribed purpose, using another person's prescription and using medication without a prescription.

DEPENDENCE: Physical need for medication or a substance, leading to tolerance—taking more to get the same response—or leading to physical withdrawal when the substance is not supplied.

SUBSTANCE USE DISORDER (SUD): A diagnosis meeting criteria for illicit drug or alcohol dependence or abuse as defined in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

OPIOID USE DISORDER (OUD): A substance-specific subset of substance use disorder.

ADDICTION: A chronic brain disease, characterized behaviorally by losing control of drug use and then losing control of life functions due to drug use.

The terms “substance use disorder” and “addiction” are often used interchangeably to describe the same chronic health condition.

OPIOID USE DISORDER IS A CHRONIC BRAIN DISEASE

To mitigate the devastating effects of opioid misuse, we must acknowledge that opioid use disorder is a chronic disease, not a moral failing or lack of willpower, and ensure that treatment is available for all Americans who need it. Evidence-based treatment programs are vital for supporting people with opioid use disorder.

There is some resistance to public and private funding of opioid use disorder (OUD) treatment due to the misconception that those who misuse opioids are doing so for pleasure, as a conscious choice. Too often, OUD sufferers are treated as though they should be ashamed or have a moral failing, leading to policies that set unreasonable requirements to obtain treatment and limit duration or recurrence. In fact, OUD, like other substance use disorders, is a chronic brain disease.

“We don’t tell diabetics that we won’t give them medicine if they don’t follow their diet,” says Kelly Clark, M.D., an addiction expert. “We don’t expect a person with a chronic disease to be 100 percent adherent to their treatment. There is no cure for a chronic disease, so we need to help people with management of that disease. We need to erase the stigma of OUD through public education and by showing people that evidence-based treatment can help those with OUD.”

Successful evidence-based treatment programs address the interdependent aspects of addiction: biological, psychological and social. Understanding the effect of opioids on human biology explains why medication assisted treatment (MAT) is necessary.

“The human brain was not meant to process opioids,” Dr. Clark says. “Opioids permanently change nerve cells in the brain, sometimes within a very short period of use. So, simply taking away opioids doesn’t change the brain’s requirement for them.”

MAT is not substituting one drug for another, contrary to popular belief. Buprenorphine and methadone, the two primary medications used in MAT, satisfy the brain’s pain receptors without the respiratory suppression or addictive euphoria of opioids. Keeping the physical craving at bay allows the patient to address psychological issues and reconnect to social support networks. Many people in recovery using MAT are successfully able to return to school and work.¹

Many drug treatment programs address the psychological and social aspects of addiction but do not include medication as a necessary component. “If people leave rehab without MAT, they are more likely to die than if they hadn’t completed rehab,” Dr. Clark says. “We need to develop a structured, standard model of care and then adapt it for each person. A full assessment and individualized treatment should be a core piece of best practices.”



¹It is important to note that some workers in recovery may not be able to return to safety-sensitive jobs while using MAT. They may need training and other support to successfully re-enter the workforce.

RISK OF ADDICTION IS SERIOUS AND WIDESPREAD

The first opioid prescription may spark an addiction that was never anticipated.

After as few as five days of opioid pain reliever use, one in five opioid users runs the risk of becoming dependent and continuing to use opioids one year later. The risk increases with each additional day of use. A refill or a second opioid prescription doubles the risk of opioid dependence (Shah, Hayes, & Martin, 2017).

It is clear that most people do not understand this risk. A 2017 National Safety Council public opinion poll found nearly 84 percent of opioid users were not worried about addiction, even though 64 percent of respondents reported having a personal or family history of addiction risk factors. Additionally, 53 percent of survey respondents identified a personal (lifestyle) risk factor of addiction. Further, one-third of Americans surveyed did not even realize a medication they had taken was an opioid (National Safety Council, 2017).

THE PATH FROM OPIOID PAIN RELIEVER USE TO HEROIN ADDICTION

In the U.S. in 2016:

97 million people used opioid pain relievers (SAMHSA, 2017)

2.1 million started misusing opioid pain relievers for the first time (SAMHSA, 2017)

4.4 percent of the population over the age of 12—11.5 million people—misused opioid pain relievers, putting them at 40 times greater risk for transitioning to heroin (SAMHSA, 2017)

Of the 948,000 people who used heroin, 170,000 used it for the first time (SAMHSA, 2017)

RISK FACTORS FOR OPIOID ADDICTION

(SAMHSA Center for the Application of Prevention Technologies, 2018)

- ✓ Having depression, anxiety or other mental health illness
- ✓ A personal and/or family history of alcohol or substance misuse
- ✓ A history of physical, mental or sexual abuse
- ✓ Long-term use of opioid pain medications



THE OPIOID CRISIS IS ENDANGERING OUR FUTURE

Shorter lifespans and reduced workforce participation impact American employers.

Opioid overdose is reducing U.S. lifespan estimates

Life expectancy in the U.S. declined for the second year in a row in 2016. A baby born in the U.S. today can expect to live 78.6 years, down from 78.9 years in 2014 (Kochanek, Murphy, Xu, & Arias, 2017). Much of this decrease is due to deaths from opioid overdose, and U.S. lifespan is anticipated to continue to decline as the opioid crisis becomes more deadly (Dowell, Arias, Kochanek, Anderson, & al, 2017).

Unintentional injuries are now the third leading cause of death in the U.S. due to the spike in drug overdose deaths. People die of drug overdose at much younger ages than cardiovascular disease or cancer, the first and second causes of death in the U.S. (National Safety Council Injury Facts, 2017). Overdose mortality rates are highest for people who are 25 to 54 years old, adults in their prime working years (Kochanek, Murphy, Xu, & Arias, 2017).

Opioid over-prescribing is shrinking the U.S. labor force

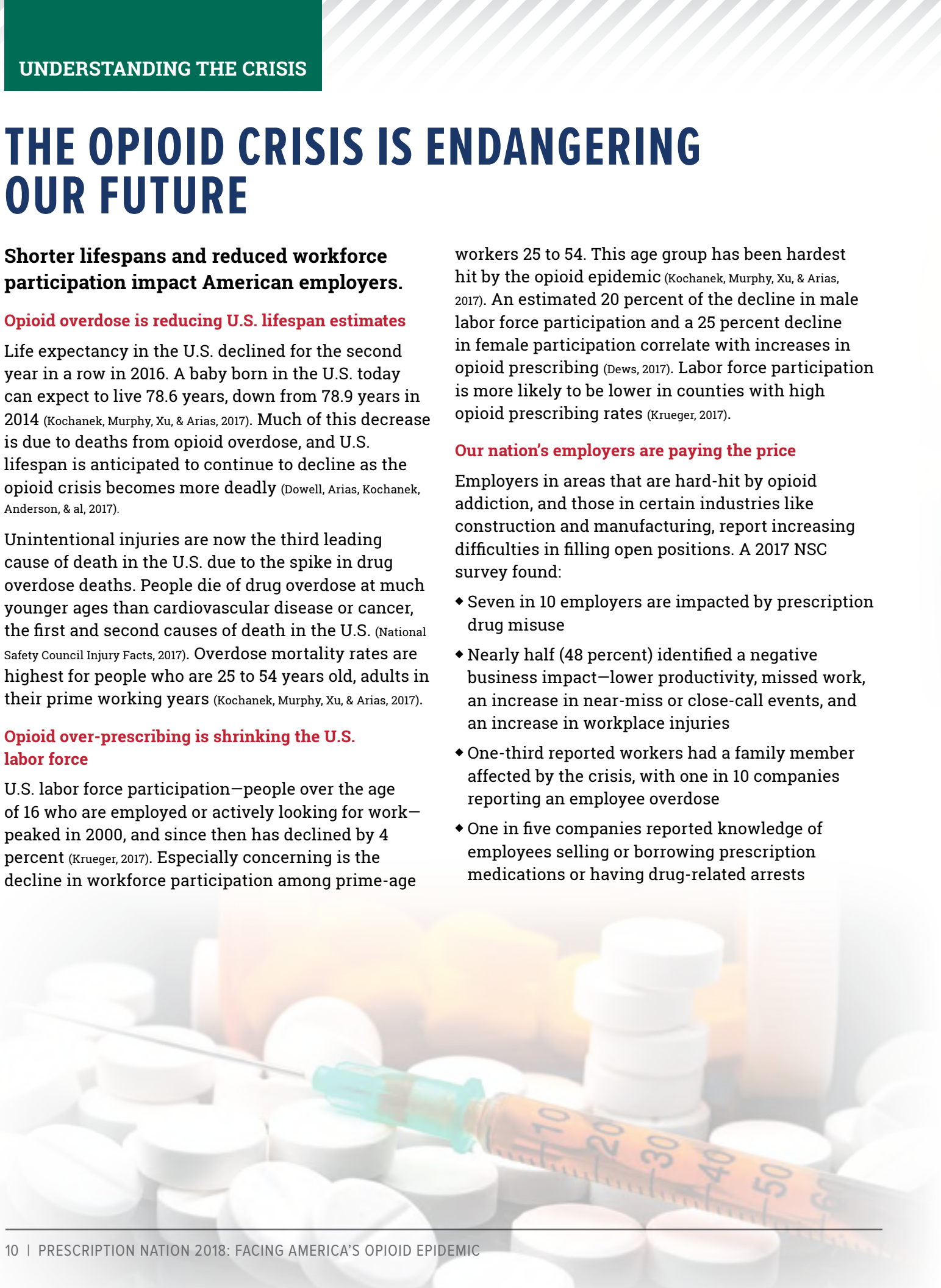
U.S. labor force participation—people over the age of 16 who are employed or actively looking for work—peaked in 2000, and since then has declined by 4 percent (Krueger, 2017). Especially concerning is the decline in workforce participation among prime-age

workers 25 to 54. This age group has been hardest hit by the opioid epidemic (Kochanek, Murphy, Xu, & Arias, 2017). An estimated 20 percent of the decline in male labor force participation and a 25 percent decline in female participation correlate with increases in opioid prescribing (Dews, 2017). Labor force participation is more likely to be lower in counties with high opioid prescribing rates (Krueger, 2017).

Our nation's employers are paying the price

Employers in areas that are hard-hit by opioid addiction, and those in certain industries like construction and manufacturing, report increasing difficulties in filling open positions. A 2017 NSC survey found:

- ◆ Seven in 10 employers are impacted by prescription drug misuse
- ◆ Nearly half (48 percent) identified a negative business impact—lower productivity, missed work, an increase in near-miss or close-call events, and an increase in workplace injuries
- ◆ One-third reported workers had a family member affected by the crisis, with one in 10 companies reporting an employee overdose
- ◆ One in five companies reported knowledge of employees selling or borrowing prescription medications or having drug-related arrests





Opioid Prescription Rates Directly Affect Workforce Participation Rates

A comparison of 2015 county-level opioid prescription rates to individual labor force participation data found that labor force participation fell more in counties with higher opioid prescribing rates (Krueger, 2017).

Employers face mounting costs related to untreated substance use disorder (SUD) among their workforce. Opioid use disorder (OUD) is even more costly.

Workers with OUD miss more work and have higher health care usage than workers with other SUDs. These costs quickly add up. Industries with highly compensated or highly skilled workers will bear a greater burden. The annual cost per worker with an untreated SUD ranges from \$2,600 in agriculture to \$13,000 in information and communications industries (Goplerud, Hodge, & Benham, 2017).



OPIOID EPIDEMIC ENTERS EVEN MORE DEADLY PHASE

The U.S. is facing the deadliest drug crisis on record (CDC, 2017). Drug overdoses—mostly caused by opioids—end far too many lives, too soon. More than 63,600 families lost loved ones to a drug overdose in 2016. Opioids such as Vicodin (hydrocodone), OxyContin (oxycodone), heroin and fentanyl accounted for 42,000 of these deaths in 2016 (CDC, 2017).

Rapid rise in opioid prescriptions mirrors rise in addiction and overdose deaths

The mid-1990s saw changes in prescribing practices and aggressive marketing of prescription opioids as a safe and effective treatment for chronic pain management, resulting in over-prescribing of these addictive medications. Centers for Disease Control and Prevention (CDC) data show that as sales of opioids increased, so did overdose deaths, emergency room visits and treatment admissions (Paulozzi, Jones, Mack, & Rudd, 2011). More than 11 million Americans over the age of 12 misused an opioid pain reliever in the last year (SAMHSA, 2017).

Prescription opioid misuse transitions to heroin use

Heroin deaths more than quadrupled in the six-year period from 2010 to 2016, increasing from 3,300 to more than 15,400 deaths annually (Kochanek, Murphy, Xu, & Arias, 2017). Nearly a million people reported using heroin in 2016 (SAMHSA, 2017). Misuse of prescription opioids often drives an increase in heroin use, with four out of five heroin users reporting that their addiction began with prescription opioids (Jones, 2013). Non-medical users of opioid pain medications were 40 times more likely to use heroin than people reporting no misuse of opioids (Jones, Logan, Gladden, & Bohm, 2015).

Rise in fentanyl deaths

Fentanyl, a synthetic opioid, is 50 times more potent than heroin and 100 times more potent than morphine (CDC, 2016). Pharmaceutical fentanyl is commonly prescribed to manage pain for advanced-stage cancer patients. Illicit fentanyl is manufactured in clandestine labs and is more profitable for drug dealers than heroin (DEA, 2017). Illicit fentanyl has been seized by law enforcement agencies in all 50 states and the District of Columbia (DEA, 2017). Pressed into counterfeit prescription opioids or added to heroin and other drugs, fentanyl in all of its forms—both legitimate and illicit—was involved in more than 20,000 overdose deaths in 2016, twice as many as in 2015 (Kochanek, Murphy, Xu, & Arias, 2017).



BY THE NUMBERS



2000

61.8 opioid prescriptions written per 100 Americans

180 MME¹ prescribed per capita

2,917 prescription opioid deaths

1,842 heroin deaths

2010

81.2 opioid prescriptions written per 100 Americans

782 MME prescribed per capita

10,943 prescription opioid deaths

3,036 heroin deaths

3,007 synthetic opioid² deaths

2012–2016

States begin passing laws to require prescriber education, close pill mills, define prescribing guidelines, start and enhance prescription drug monitoring programs, and increase access to opioid overdose antidotes and treatment.

2016

66.5 opioid prescriptions written per 100 Americans

61 million Americans, 19 percent of the population, received one or more prescriptions, with the average patient receiving 3.5 prescriptions

14,487 prescription opioid deaths

15,469 heroin deaths

19,413 synthetic opioid³ deaths

Opioid pain medications like hydrocodone and oxycodone are chemically similar to heroin, and have a similar effect on minds and bodies. More research is needed to fully understand why people misusing opioid pain medications transition to heroin. It is widely believed that dealers who supply opioids offer heroin as a cost-saving measure (Pollini, et al., 2011).

Overall, opioid exposure has been slightly reduced but still remains high. Opioids are still commonly prescribed at higher doses than needed and for more days than needed, increasing the risk of misuse (Pollini, et al., 2011). However, much more work needs to be done to continue the reduction in prescriptions for opioids.

¹Morphine milligram equivalent (MME, a way to compare potency of different types and dosages of opioid pain relievers); ²Primarily fentanyl; ³Excludes methadone

SIX KEY ACTIONS


Some states have made significant progress in the fight against the opioid epidemic. Others have much more to do. States were given a rating of “Improving,” “Lagging” or “Failing” based on careful evaluation of actions taken in six key areas:



MANDATING PRESCRIBER EDUCATION

Mandatory prescriber education keeps providers up to date on best practices and the latest research in pain treatment and addiction. Academic programs for medical, dental and nursing students should include instruction on effective pain management and identifying and treating addiction. **States should:**

- ◆ Require all medical providers to complete continuing education related to opioid prescribing or chronic pain management

 **34 STATES AND DISTRICT OF COLUMBIA ACHIEVED THIS INDICATOR AND MET THIS KEY ACTION**



IMPLEMENTING OPIOID PRESCRIBING GUIDELINES

Opioid prescribing guidelines are recommendations for pain treatment based on current knowledge of the risks and benefits of opioid use and alternative non-opioid treatments. The 2016 CDC Chronic Pain Guideline should be adopted by states, and states should also take action to reduce the risks for acute pain patients. **States should:**

- ◆ Adopt recommendation that practitioners have a written treatment plan for the treatment of chronic pain
- ◆ Adopt recommendation that practitioners perform a physical examination and substance use disorder assessment prior to prescribing controlled substances


 **33 STATES AND DISTRICT OF COLUMBIA ACHIEVED THESE TWO INDICATORS AND MET THIS KEY ACTION**



INTEGRATING PRESCRIPTION DRUG MONITORING PROGRAMS (PDMPs) INTO CLINICAL SETTINGS

PDMPs curtail doctor shopping and identify providers who prescribe outside of accepted medical practice. **States should:**

- ◆ Have an operational PDMP
- ◆ Require prescriber use of the state PDMP for initial prescriptions
- ◆ Permit delegate access
- ◆ Require collection of prescription information within 24 hours or less
- ◆ Permit interstate sharing of state PDMP data

 **39 STATES AND DISTRICT OF COLUMBIA ACHIEVED AT LEAST FOUR OF THE FIVE INDICATORS AND MET THIS KEY ACTION**



IMPROVING DATA COLLECTION AND SHARING

Improved data collection is vital to fully understand and address the scope of the epidemic. Critical actions include screening for—and identifying—all drugs present in overdose fatalities and the prompt reporting of drug overdoses by hospitals, EMTs, law enforcement, coroners and medical examiners.

States should:

- ◆ Require the reporting of drug overdose cases



7 STATES ACHIEVED THIS INDICATOR AND MET THIS KEY ACTION



TREATING OPIOID OVERDOSE

Naloxone, a lifesaving opioid antidote, should be widely available and covered by all insurance plans. Good Samaritan laws should ensure that people can administer naloxone and call emergency services without fear of criminal penalty. **States should:**

- ◆ Provide immunity to prescribers, dispensers and community members to possess, prescribe, distribute and administer naloxone by a third party with or without a standing order
- ◆ Pass Good Samaritan laws
- ◆ Require insurers and third-party payers to include coverage of naloxone



37 STATES AND DISTRICT OF COLUMBIA ACHIEVED AT LEAST TWO OF THE THREE INDICATORS AND MET THIS KEY ACTION



INCREASING AVAILABILITY OF OPIOID USE DISORDER TREATMENT

States must expand capacity for treatment, requiring both public and private health insurers to cover medication-assisted treatment (MAT) and remove caps on duration of treatment. As the number of treatment centers grows, oversight is needed to address minimum treatment standards and predatory practices.

States should:

- ◆ Require Medicaid formulary to reimburse for all three forms of MAT—methadone, naltrexone and buprenorphine—in combination with counseling and behavioral therapies, to provide a “whole-patient” approach to the treatment of substance use disorders



36 STATES AND DISTRICT OF COLUMBIA ACHIEVED THIS INDICATOR AND MET THIS KEY ACTION


MANDATING PRESCRIBER EDUCATION

The medical community is a vital partner in addressing the opioid epidemic. An Institute of Medicine report recommends that all health care providers keep their knowledge of pain management current through continuing medical education (CME) (National Research Council, 2011). Licensure, certification and recertification examinations should include assessments of providers’ pain management knowledge. Unfortunately, research has shown that practicing physicians received fewer than 12 hours of pain management education in medical school (Mezei & Murinson, 2011).

Addressing this knowledge gap is necessary to reduce dangerous prescribing practices and improve pain treatment. Twenty-five states, an increase of eight since 2016, require education for physicians and other

professionals who prescribe controlled substances to treat pain (Federation of State Medical Boards, 2017). For example, Kentucky doctors are required to take 4.5 hours of training related to KASPER (Kentucky All Schedule Prescription Electronic Reporting), pain management and addiction disorders. In New Mexico, prescribers who are registered with DEA must complete a five-hour CME class on pain and addiction.

Not all prescribers are required to register with DEA—only those who prescribe controlled substances such as opioid pain medications. Therefore, DEA controlled-substance registration and renewal provide a targeted opportunity to address this knowledge gap. In 2015, the National Safety Council called on DEA to require education for opioid prescribers.



34 STATES AND DISTRICT OF COLUMBIA ACHIEVED THIS INDICATOR AND MET THIS KEY ACTION

- Require all medical providers to complete continuing education related to addiction, opioid prescribing or chronic pain management

AL	AK	AZ	AR	CA	CO	CT	DE	DC	FL	GA	HI	ID
IL	IN	IA	KS	KY	LA	ME	MD	MA	MI	MN	MS	MO
MT	NE	NV	NH	NJ	NM	NY	NC	ND	OH	OK	OR	PA
RI	SC	SD	TN	TX	UT	VT	VA	WA	WV	WI	WY	

New Mexico Implements Effective Continuing Education Program

Development and implementation of a mandatory continuing medical education program in New Mexico helped reverse the high overdose death rate and save lives.

In 2011, the New Mexico Medical Board assembled a coalition to develop CME content. The coalition consisted of members from the New Mexico Department of Health; medical, nursing and pharmacy boards; a community health care outcomes group; and a veterans' health care group. Because primary care physicians treat the majority of patients with non-cancer chronic pain, the Board focused on targeting them with education efforts. Guidelines for the CME programs were implemented in August 2012:

- Five hours of CME on chronic pain management, prescribing best practices, non-opioid pain alternatives, addiction education and use of state prescription monitoring program (PMP)
- All prescribers were required to complete the CME between Nov. 1, 2012 and June 30, 2014
- All DEA-registered practitioners were required to take the CME when renewing their licenses—no specialty was exempt

In addition, the rule mandated that all prescribers sign up for the state PMP, query it before writing new opioid prescriptions and query it every six months after a prescription was written

(New Mexico Board of Medicine, 2017).

Measurable Success

Clinicians were surveyed before and after taking the new CME course. They averaged a 17 percent increase in knowledge scores on opioid and addiction topics. In addition, from 2011 to 2012, these improvements were achieved:

- Reduction in total morphine milligram equivalents (MME) prescribed
- Reduction in opioid MME per prescription
- Reduction of 7 percent in total drug overdose death rate (from 25.9 to 24 per 100,000)
- 6.9 percent fewer deaths (521 to 485)

By prioritizing creation and rapid implementation of a CME for all prescribers, New Mexico reduced the amount of opioids prescribed and saved lives (Katzman, et al., 2014).

IMPLEMENTING OPIOID PRESCRIBING GUIDELINES

Opioid prescribing guidelines help medical providers make informed decisions about pain treatment based on risks and benefits of opioid use compared to non-opioid treatments. Medical professional organizations, state licensing agencies, state medical boards and the CDC have published opioid prescribing guidelines.

Forty-one states have adopted their own opioid prescribing guidelines, using regulatory and/or voluntary approaches for development and implementation. Guidelines may cover a variety of clinical settings including chronic pain, emergency medicine and workers' compensation. These prescribing guidelines are crucial to ensure that physicians follow best practices to help legitimate patients receive the pain relief they need and minimize risk of addiction.

CDC 2016 Opioid Prescribing Guideline for Chronic Pain

The guideline includes recommendations on the use of opioids in treating pain that lasts longer than three months, or past the time of normal tissue healing. This guideline informs primary care providers on treatment of chronic, non-cancer pain, including:

- ◆ Dosage recommendations—even relatively low doses (20–50 morphine milligram equivalents (MME) per day) increase risk
- ◆ Risk assessment criteria for all patients, not just those at high risk
- ◆ Specific recommendations on monitoring and discontinuing opioids when risks and harms outweigh benefits

Iowa, Kentucky, North Carolina, Oregon, West Virginia and Wisconsin have adopted the CDC opioid prescribing guideline for chronic pain.



33 STATES AND DISTRICT OF COLUMBIA ACHIEVED TWO INDICATORS AND MET THIS KEY ACTION

- Adopt recommendation that practitioners have a written treatment plan for the treatment of chronic pain
- Adopt recommendation that practitioners perform a physical examination and substance use disorder assessment prior to prescribing controlled substances

AL AK AZ AR CA CO CT DE DC FL GA HI ID
 IL IN IA KS KY LA ME MD MA MI MN MS MO
 MT NE NV NH NJ NM NY NC ND OH OK OR PA
 RI SC SD TN TX UT VT VA WA WV WI WY

West Virginia Adopts CDC Prescribing Guideline

A panel of West Virginia medical and public health experts determined how the CDC guideline would be implemented across the state.

West Virginia had the highest opioid overdose death rate in the nation in 2015 (CDC National Vital Statistics Report, 2017). It needed a solution that would reduce opioid misuse and overdose without restricting legitimate use by acute and chronic pain patients.

In 2017, West Virginia implemented the Safe & Effective Management of Pain (SEMP) guidelines to give both prescribers and patients clear direction on safe practices for the use of prescription opioids in the management of pain. These guidelines are based on the CDC 2016 Opioid Prescribing Guideline for Chronic Pain, with special emphasis on making them easy to incorporate into pain management practice.

The SEMP guidelines offer objective methods to determine whether chronic pain patients can benefit from non-opioid treatments, reducing patient risk of dependence and misuse. Clinical treatment algorithms offer the clinician and patient alike a clear plan for pain treatment. A robust toolkit, available at www.semp.org/handouts, clearly shows how clinicians can incorporate all facets of the CDC guideline into everyday practice.



INTEGRATING PRESCRIPTION DRUG MONITORING PROGRAMS (PDMPs) CLINICAL SETTINGS

PDMPs are state-run electronic databases designed to monitor the prescribing of controlled substances and to identify individuals who are at high risk of using opioids for non-medical purposes. In some states, these are mandatory and require physicians to participate; other states have voluntary programs. At the time of publication, Missouri was the only state that did not have a statewide PDMP.

In states where physicians were required to check an electronic database before writing an opioid prescription, the odds that two or more doctors would be giving pain relievers for non-medical purposes to a single patient were reduced by 80 percent. States that implemented voluntary monitoring programs showed a 56 percent reduction in doctor-shopping (Ali, Dowd, Classen, Mutter, & Novak, 2017).

Mandatory PDMP use is a critical component in the fight against opioid misuse and overdose. A 2015 study found that requiring a PDMP helped reduce numbers of prescriptions and pills per prescription, while moderately increasing prescriptions for non-opioid pain relievers such as ibuprofen and acetaminophen (Rasubala, Pernapati, Velasquez, Burk, & Ren, 2015). A 2016 study found that a mandatory PDMP policy helped significantly reduce overall opioid prescriptions and opioid overdose death rates (Dowell, Zhang, Noonan, & Hockenberry, 2016). States requiring both the use of a PDMP and regulating pain clinics saw opioid prescription rates fall by 10.6 percent and reduced opioid overdose death rates (American Medical Association, 2018).



39 STATES AND DISTRICT OF COLUMBIA ACHIEVED AT LEAST FOUR OF THESE FIVE INDICATORS AND MET THIS KEY ACTION

- Have an operational PDMP
- Require prescriber use of the state PDMP for initial prescriptions
- Permit delegate access
- Require collection of prescription information within 24 hours or less
- Permit interstate sharing of state PDMP data

AL AK AZ AR CA CO CT DE DC FL GA HI ID
 IL IN IA KS KY LA ME MD MA MI MN MS MO
 MT NE NV NH NJ NM NY NC ND OH OK OR PA
 RI SC SD TN TX UT VT VA WA WV WI WY



CDC Opioid Guideline Can Be Integrated at the Point of Care

Ezekiel Fink, M.D., Medical Director of Pain Management at Houston Methodist Hospital, was a member of the advisory panel on developing the CDC 2016 Opioid Prescribing Guideline for Chronic Pain. This standard redefined best practices, including the recommendation that prescribing guidelines be used with all patients instead of only high-risk patients, and recommending lower dosages for fewer days.

Dr. Fink and his colleagues at Houston Methodist, including nursing and pharmacy staff, helped develop opioid guideline technology that advises clinicians on opioid prescribing best practices. The software integrates with patients' electronic health records (EHR) for use at the point of care. When a clinician prescribes opioids outside the CDC guideline, the messaging pops up over the patient's EHR, prompting a conversation between the patient and clinician about options for pain management. The clinician can override the guideline based on the patient's needs.

"Our goal is to transition away from the opioid-centered pain management model and ensure doctors have exhausted all non-opioid options before writing the prescription," Dr. Fink says. "Primary care physicians are the first line in managing patients. They are treating people for chronic pain every day. And they are writing the lion's share of opioid prescriptions."

Future goals include integration with state PDMPs to provide a seamless experience for prescribers.

IMPROVING DATA COLLECTION AND SHARING

Tracking opioid use by making overdose a reportable condition helps medical providers, law enforcement and public health officials understand the scope of the problem.

Months-long lags in the reporting of overdose fatalities delay public health and law enforcement response. Often, critical data is not collected or shared between state and community stakeholders in a timely manner. A better understanding of the circumstances associated with an overdose can improve state response and coordination. States currently require the reporting of a number of infectious diseases and other health conditions within specific time frames in order to mount an appropriate health response. Therefore, states should make overdose and overdose fatalities a reportable health condition, so that stakeholders have accurate, timely and actionable information.

In 21 states, more than 25 percent of overdose death certificates did not specify the drugs involved in the death (Ruhm, 2017). Better mortality data is needed to accurately track the involvement of fentanyl and other drugs in opioid-related deaths. A 2013 study documented variation in how states certify manner of death, including toxicology, and found that death certificates often do not specify the drugs involved in overdose deaths (Warner, Paulozzi, Nolte, Davis, & Nelson, 2013).

A CDC Health Advisory Network (HAN) alert recommends that medical examiners and coroners screen for fentanyl in suspected opioid overdose cases, especially in areas reporting increases in fentanyl seizures or unusually high spikes in heroin or unspecified drug overdose fatalities (CDC HAN Alert, 2016). The HAN alert further recommends that coroners and medical examiners use Substance Abuse and Mental Health Services Administration (SAMHSA) consensus recommendations to report opioid-related deaths (Goldberger, Maxwell, Campbell, & Wildford, 2013). The National Safety Council urges states to adopt these recommendations. Improved data collection is vital to fully understand the scope of the epidemic and react quickly when deadly new drugs are entering the community.



7 STATES ACHIEVED THIS INDICATOR AND MET THIS KEY ACTION:

- Require the reporting of drug overdose cases

AL	AK	AZ	AR	CA	CO	CT	DE	DC	FL	GA	HI	ID
IL	IN	IA	KS	KY	LA	ME	MD	MA	MI	MN	MS	MO
MT	NE	NV	NH	NJ	NM	NY	NC	ND	OH	OK	OR	PA
RI	SC	SD	TN	TX	UT	VT	VA	WA	WV	WI	WY	

A large, red, illuminated sign with the word "EMERGENCY" in bold, capital letters, set against a dark background. The sign is slightly out of focus and appears to be part of a larger scene, possibly a hospital or emergency room.

Arizona Compels Data Collection and Sharing

Arizona opioid overdose deaths increased 74 percent from 2012 to 2016 (2016 Arizona Opioid Report, 2017). **In 2017, the governor declared a state of emergency and issued an executive order mandating real-time reporting of opioid overdoses.**

The emergency declaration allowed immediate dedication of public funds toward fighting the opioid epidemic. In addition to the declaration, the governor also issued an executive order mandating real-time reporting of opioid overdoses. This order allows the Arizona Department of Health Services (ADHS) to put more life-saving resources into the hands of law enforcement, first responders and community partners.

Since the emergency declaration, hospitals and medical providers have been sending data to the state health department. State health officials and other crucial parties can better understand the circumstances surrounding overdoses and deaths, and more effectively respond and allocate state resources. As part of the data reporting requirements, the ADHS created a real-time dashboard listing opioid overdoses and deaths.

ADHS also worked with the Arizona Attorney General's Office to develop emergency rules for continued reporting. The emergency rules went into effect Oct. 9, 2017, ensuring continued reporting of suspected opioid overdoses, suspected opioid deaths, suspected cases of infants experiencing neonatal abstinence syndrome, naloxone dispensed by pharmacists and naloxone administered by first responders.



TREATING OPIOID OVERDOSE

Opioid overdoses are reversible with the timely administration of naloxone, an opioid antagonist that binds to receptors in the brain and blocks the effects of opioids. Administered as a nasal spray or injection, naloxone is not a controlled substance and has no abuse potential. Making naloxone widely available will save lives.

All 50 states and the District of Columbia have passed laws that improve access to naloxone. Some of these laws grant immunity from prosecution to prescribers and dispensers. Others allow licensed health care professionals to prescribe naloxone for use by a third party such as a family member. A naloxone standing order lets pharmacies and community programs dispense naloxone without a prescription. Because of naloxone laws, more than 150,000 people have been trained and more than 26,000 overdoses reversed (Wheeler, Jones, Gilbert, & Davidson, 2015).

The removal of legal barriers, however, may not be enough to increase naloxone access among uninsured and underserved populations. Strong state efforts are needed to improve the affordability of naloxone (Gupta, Shah, & Ross, 2016). The price of naloxone has

increased significantly, part of a larger trend of increasing prices for generic medications, placing a greater burden on organizations that put this lifesaving drug in the hands of first responders and distribute the medication at no cost to opioid users and their families. (Davis & Carr, 2017).

Individuals with insurance may have fewer problems accessing naloxone. Federal regulations require many private insurers and all Medicaid expansion plans to cover the overdose antidote. At the state level, Illinois, New York and Rhode Island require private insurers to cover naloxone, and remove prior approvals and cost sharing requirements (Davis & Carr, 2017).

Friends or family members may be in the best position to save a life by calling emergency services and administering naloxone. However, some overdose bystanders sometimes fail to summon medical assistance for fear of police involvement (Tobin, Davey, & Latkin, 2005). Forty states have passed Good Samaritan laws that protect bystanders from any legal actions. These laws protect individuals from criminal prosecution or parole violations if they contact emergency responders in response to a drug overdose.



37 STATES AND DISTRICT OF COLUMBIA ACHIEVED AT LEAST TWO OF THE THREE INDICATORS AND MET THIS KEY ACTION

- Provide immunity to prescribers, dispensers and community members to possess, prescribe, distribute and administer naloxone by a third party with or without a standing order
- Have a Good Samaritan law*
- Require insurers and third-party payers to include coverage of naloxone

AL AK AZ AR CA CO CT DE DC FL GA HI ID
 IL IN IA KS KY LA ME MD MA MI MN MS MO
 MT NE NV NH NJ NM NY NC ND OH OK OR PA
 RI SC SD TN TX UT VT VA WA WV WI WY

* State achieved this indicator if it has a Good Samaritan law that addresses drug overdoses, though the law might not be comprehensive. For example, the law could apply only to controlled substance possession, paraphernalia or other violations, but not necessarily all three. And it may not apply to arrests or charges, but does apply for prosecution.

Naloxone Is Only the First Step in Saving Lives

Emergency departments can take additional measures with opioid overdose survivors, ensuring access to naloxone and introducing survivors to medication assisted treatment program options before they are released.

“Naloxone is usually administered before an overdose victim even reaches the emergency department—by a family member or emergency medical technician,” says Natalie Kirilichin, M.D., attending emergency medicine physician and assistant professor with the George Washington University Department of Emergency Medicine.

“While these patients are still in the emergency department, we must also capitalize on the opportunity to initiate treatment for opioid use disorder,” Dr. Kirilichin says. “People whose overdose has been reversed are at their most vulnerable. They have been given a second chance at life, and may be more open to hearing about treatment options. ED clinicians need to change their perspective to treating OUD rather than treating an overdose.”

A 2015 clinical trial reported excellent results for patients receiving ED-initiated buprenorphine, with increased engagement in addiction treatment, reduced illicit opioid use and decreased use of inpatient substance abuse treatment programs (D’Onofrio, et al., 2015). Dr. Kirilichin notes that a comprehensive program should include care coordination, counseling and community support. “It’s our responsibility to stay a step ahead and keep people from overdosing again,” she says.



INCREASING AVAILABILITY OF OPIOID USE DISORDER TREATMENT

Opioid use disorder (OUD) occurs when the recurrent use of opioids causes health issues, disability, and the failure to meet major responsibilities at work, school or home. OUD is a brain disease, and a serious chronic health condition like heart disease or diabetes.

As with other chronic conditions, medication and support to make lifestyle changes are necessary to treat and manage OUD. If left untreated, OUD will worsen, often resulting in death. In 2016, more than 2.1 million people had an OUD related to use of opioid pain relievers or heroin (SAMHSA, 2017).

Only one in 10 people with a substance use disorder (SUD) receives any specialized treatment. Medication assisted treatment (MAT)—the combination of psychological and behavioral therapy with FDA-approved medications such as methadone, buprenorphine and naltrexone—is the most effective way to treat OUDs (Volkow, Frieden, Hyde, & Cha, 2014). However, availability of treatment using these medications lags behind the need for OUD treatment in nearly every state (Jones, Campopiano, Baldwin, & McCance-Katz, 2015). Many treatment facilities either do not offer MAT or fail to offer patients all three FDA-approved medications to treat opioid use disorder.

Analysis of more than 12,000 U.S. treatment facilities found that about 40 percent offer at least one form of MAT, with 23 percent offering two forms of MAT (Jones, Honermann, Sharp, & Millet, 2017). Only 319 facilities report offering all three forms of MAT and even fewer, 234 facilities, also accept Medicaid patients. Eight states do not have any treatment facilities that report offering all three forms of MAT (Jones, Honermann, Sharp, & Millet, 2017). Fourteen states do not have facilities offering all three MAT options that also accept Medicaid patients (Jones, Honermann, Sharp, & Millet, 2017).

The American Society of Addiction Medicine (ASAM) developed evidence-based clinical guidance and criteria to ensure that patients suffering from OUD are offered proven treatment options and appropriate levels of care. These guidelines incorporate various forms of MAT, which are needed to address patients in various stages of dependence, withdrawal or relapse. States can require that insurers and managed care organizations (MCOs) use ASAM or other evidence-based guidelines when determining what level of care is needed or covered (ASAM, 2015).



36 STATES AND DISTRICT OF COLUMBIA ACHIEVED THIS INDICATOR AND MET THIS KEY ACTION

- Require Medicaid formulary to reimburse for all three forms of MAT, methadone, naltrexone and buprenorphine, in combination with counseling and behavioral therapies, to provide a “whole-patient” approach to the treatment of substance use disorders

AL	AK	AZ	AR	CA	CO	CT	DE	DC	FL	GA	HI	ID
IL	IN	IA	KS	KY	LA	ME	MD	MA	MI	MN	MS	MO
MT	NE	NV	NH	NJ	NM	NY	NC	ND	OH	OK	OR	PA
RI	SC	SD	TN	TX	UT	VT	VA	WA	WV	WI	WY	

Rhode Island Requires Levels of Care for Opioid Overdose Patients in Emergency Departments

These levels of care were implemented in 2017 to improve emergency department (ED) response to drug overdoses. The act mandates that Rhode Island EDs and hospitals must provide appropriate care and recovery support, and insurers must cover expanded medication assisted treatment (MAT).

Each Rhode Island ED or hospital determines the level of care to be provided by its facility and completes requirements for state certification.

Level Three standards of care are the minimum acceptable:

- Provide comprehensive discharge planning
- Screen all patients for substance use disorder
- Provide safe storage and disposal education to all patients who are prescribed opioids
- Dispense or prescribe naloxone to all patients at risk
- Offer patients peer recovery support services in the ED
- Report all overdoses within 48 hours to state Department of Health
- Perform lab screening on overdose patients, including screening for fentanyl

Level Two takes the requirements a step further by requiring facilities to have addiction specialists on *staff, actively integrating subject matter expertise and implementing infrastructure* to provide a more complex level of care.

Level One represents organizations that have become accredited Centers of Excellence, with the capacity to meet the health care needs of the most complex patients with OUD and overdose.

SOLVING THE CRISIS WITH A PUBLIC HEALTH APPROACH

According to the Association of State and Territorial Health Officials (ASTHO), a public health approach is vital to addressing the societal consequences of opioid misuse and addiction. The public health community is positioned to educate Americans that substance use disorders are chronic brain diseases that require prevention, treatment and intervention to save lives.

The six key actions in this report can be viewed through the ASTHO public health prevention framework: primary prevention actions, secondary treatment-oriented actions and tertiary rescue actions.

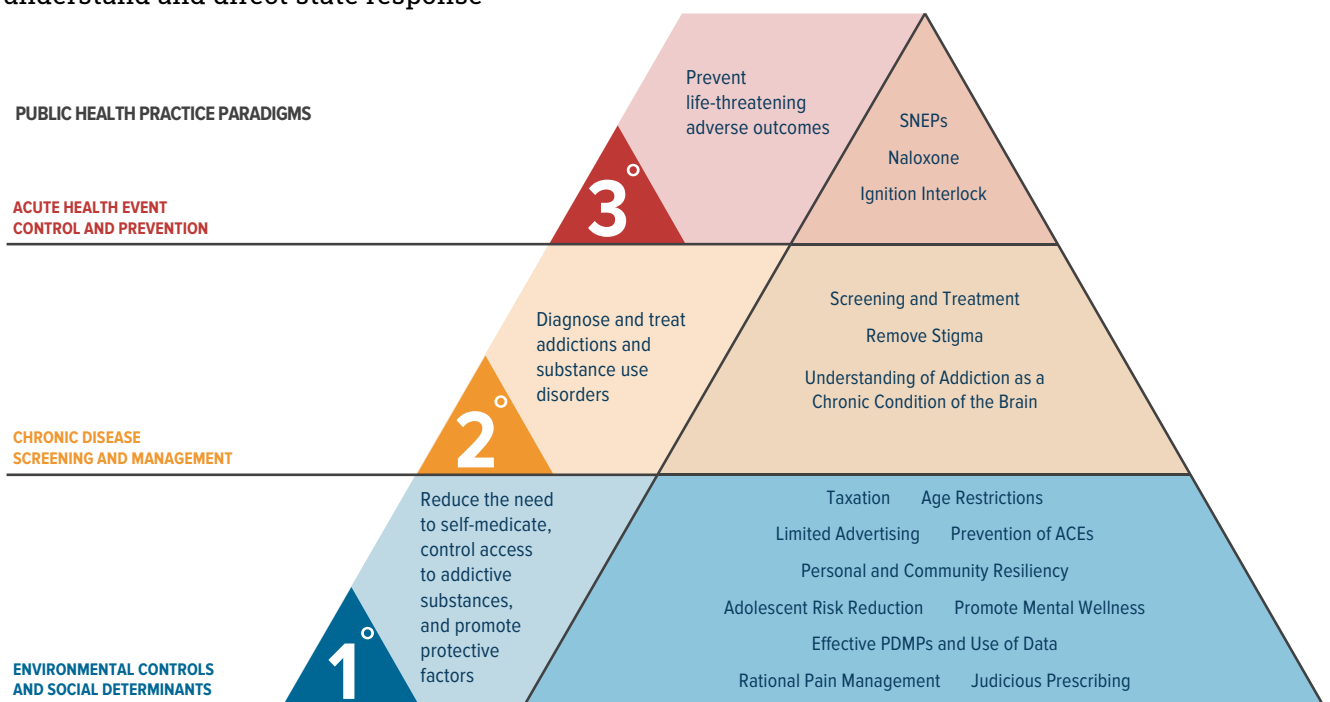
Primary actions (pyramid bottom) focus on personal, community and other risk factors that may lead to opioid misuse and addiction. These preventive actions include:

- Implementing clinical guidelines to optimize opioid prescribing and pain treatment
- Encouraging regular and widespread use of PDMPs to reduce doctor shopping and eliminate pill mills
- Expanding of data collection and data sharing to better understand and direct state response

- Addressing individual risk factors for addiction through programs to promote mental wellness and prevent adverse childhood events (ACEs)

Secondary actions (pyramid center) identify, diagnose and treat addiction and substance use disorders. This report identifies a number of actions that states can implement to remove barriers to effective substance use treatment and expand access to medications to treat opioid use disorders. Equally important is erasing the stigma of substance use disorder, which makes it difficult for people suffering from addiction to seek and receive the treatment and services they need.

Tertiary actions (pyramid top) prevent death and lessen adverse outcomes. This report recommends naloxone best practices that states can implement to widen naloxone access and reverse more opioid overdoses. Other actions include expanding availability of syringe and needle exchange programs (SNEPs) to prevent HIV and hepatitis infections, which are deadly and costly health conditions that result from intravenous drug use.



The following recommendations should be implemented by state leaders to reverse this epidemic and save lives.



KEY ACTION: Mandating prescriber education

Require prescribers to have ongoing medical education on effective pain management and identifying substance use disorders.

Require continuing medical education (CME) for prescribers of controlled substances. The proposed CME should include the following topics:

- Relative efficacy and risks of medications used to treat acute and chronic pain
- Responsible prescribing, including the use of tools such as state Prescription Drug Monitoring Programs (PDMPs)
- Overview of substance use disorders and effective treatments
- Linkage to treatment for those with addiction



KEY ACTION: Implementing opioid prescribing guidelines

State opioid prescribing guidelines should address:

- When opioid treatment is appropriate, the appropriate maximum dose and duration of opioid treatment
- Monitoring treatment to ensure patient safety
- Ownership requirements to ensure that pain and treatment clinic owners can be held accountable by state licensing authorities for prescribing outside the standard of care



KEY ACTION: Integrating Prescription Drug Monitoring Programs (PDMPs) Into Clinical Settings

Make PDMPs easy to use by:

- Requiring prescribers to access PDMP prior to prescribing a controlled substance
- Requiring collection of prescription data within 24 hours
- Allowing physicians and dispensers to appoint delegates or staff to access PDMP data
- Allowing insurer and delegate access
- Upgrading PDMP technology to deliver real-time data into clinical settings
- Integrating PDMP data into physician and hospital electronic health record systems

- Simplifying the PDMP registration process and integrating with other licensing processes
- Allowing interstate sharing of PDMP data



KEY ACTION: Improving Data Collection and Sharing

Improve reporting of drugs involved in drug overdose fatalities:

- Require reporting on overdose, deaths from overdose and neonatal abstinence syndrome within five days
- Encourage medical examiners and coroners to screen for fentanyl for suspected opioid overdose cases
- Require coroners and medical examiners to use SAMHSA consensus recommendations to report opioid-related deaths



KEY ACTION: Treating Opioid Overdose

- Expand access to naloxone and remove barriers to its purchase and use
- Enact laws allowing standing orders and third party prescriptions for naloxone
- Require insurers and other relevant payers to ensure that naloxone is covered by insurance plans, including public plans
- Enact Good Samaritan laws to remove barriers to seeking help for a drug overdose



KEY ACTION: Increasing availability of opioid use disorder (OUD) treatment

Expand use of medication assisted treatment (MAT); ensure it is offered and available at state-funded treatment providers

- Require that level of care determinations be made using ASAM criteria or other evidence-based guidelines
- Assess the adequacy of insurer treatment-provided networks
- Require public and private health insurers to cover all FDA approved medications to treat addiction
- Remove any caps on MAT duration

REFERENCES

- Arizona Department of Health Services (2017). 2016 Arizona Opioid Report. Retrieved Feb. 6, 2018, from azdhs.gov/documents/audiences/clinicians/clinical-guidelines-recommendations/prescribing-guidelines/arizona-opioid-report.pdf
- Ali, M., Dowd, W., Classen, T., Mutter, R., and Novak, S. P. (2017). Prescription drug monitoring programs, nonmedical use of prescription drugs, and heroin use: Evidence from the National Survey of Drug Use and Health. *Addictive Behaviors*, 65-77.
- American Medical Association (2016). Fact sheet: Physicians' progress to reverse nation's opioid epidemic. Retrieved from ama-assn.org/sites/default/files/media-browser/public/physicians/patient-care/task-force-progress-reversing-opioid-epidemic-aug-2016-update.pdf
- ASAM (2015). National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use. Retrieved Feb. 6, 2018, from asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf
- CDC. (2016, March 14). Fentanyl Overdose Data. Retrieved Feb. 6, 2018, from cdc.gov/drugoverdose/data/fentanyl.html
- CDC. (2017, Aug. 31). Annual Surveillance Report of Drug-Related Risks and Outcomes - United States, 2017. Retrieved Feb. 6, 2018, from cdc.gov/drugoverdose/pdf/pubs/2017-cdc-drug-surveillance-report.pdf
- CDC. Data Brief 294. Drug Overdose Deaths in the United States, 1999-2016. Retrieved Feb. 6, 2018, from cdc.gov/nchs/data/databriefs/db294_table.pdf#page=4
- CDC. (Feb. 28, 1997). MMWR Weekly. Retrieved from cdc.gov/mmwr/preview/mmwrhtml/00046531.htm
- CDC HAN Alert (2016). Influx of Fentanyl-laced Counterfeit Pills and Toxic Fentanyl-related Compounds Further Increases Risk of Fentanyl-related Overdose and Fatalities. Retrieved from emergency.cdc.gov/han/han00395.asp
- CDC National Vital Statistics Report. (2017). Deaths: Final Data for 2015. Retrieved from cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_06.pdf
- Dart, R., Surratt, H., Cicero, T., Parrino, M., Severson, S., and Bucher-Bartelson (2015). Trends in Opioid Analgesic Abuse and Mortality in the United States. *New England Journal of Medicine*. Retrieved Feb. 6, 2018, from nejm.org/doi/full/10.1056/NEJMsa1406143?af=R&rss=currentIssue
- Davis, C. and Carr, D. (2017). Naloxone affordability measures. *Journal of American Pharmacies Association*, 740.
- DEA (2017, October). 2017 National Drug Threat Assessment. Retrieved Feb. 6, 2018, from dea.gov/docs/DIR-040-17_2017-NDTA.pdf
- Dews, F. (2017, Sept. 7). How the opioid epidemic has affected the U.S. labor force, county-by-county. Retrieved Feb. 6, 2018, from brookings.edu/blog/brookings-now/2017/09/07/how-the-opioid-epidemic-has-affected-the-u-s-labor-force-county-by-county/
- D'Onofrio, G., O'Connor, P. P., Chawarski, M., Busch, S., Owens, P., and Bernstein, S. F. (2015). Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. *Journal of the American Medical Association*, 313(16):1636-44. doi: 10.1001/jama.2015.3474.
- Dowell, D., Arias, E., Kochanek, K., Anderson, R., et al. (2017). Contribution of Opioid Involved Poisoning to the Change in Life Expectancy in the United States, 2000-2015. *Journal of the American Medical Association*, 318(11):1065-1067v. doi: 10.1001/jama.2017.9308
- Dowell, D., Zhang, H., Noonan, R., and Hockenberry, J. (2016). Mandatory Provider Review And Pain Clinic Laws Reduce The Amounts Of Opioids Prescribed And Overdose Death Rates. *Health Affairs*, doi: 10.1377/hlthaff.2016.0448.
- Federation of State Medical Boards. (2017, Jan. 5). Continuing Medical Education Board by Board Overview. Retrieved March 1, 2016, from fsmb.org/Media/Default/PDF/FSMB/Advocacy/GRPOL_CME_Overview_by_State.pdf
- Foundation for AIDS Research. (2017, Jan. 5). Opioid and Health Indicators Database. Retrieved Feb. 6, 2018, from opioid.amfar.org/indicator/AMAT_fac
- Goldberger, B. A., Maxwell, J. C., Campbell, A., and Wildford, B. B. (2013). Uniform Standards and Case Definitions for Classifying Opioid-Related Deaths: Recommendations by a SAMHSA Consensus Panel. *Journal of Addictive Diseases*, 32:231-243. Retrieved from tandfonline.com/doi/pdf/10.1080/10550887.2013.824334
- Goplerud, E., Hodge, S., and Benham, T. (2017, Nov.). A Substance Use Cost Calculator for US Employers With an Emphasis on Prescription Pain Medication Misuse. *Journal of Occupational and Environmental Medicine*, 59(11), 1063-1071.
- Gupta, R., Shah, N., and Ross, J. (2016). The Rising Price of Naloxone — Risks to Efforts to Stem Overdose Deaths. *New England Journal of Medicine*, 375:2213-2215 doi: 10.1056/NEJMp1609578.
- Guy, G., Zhang, K., Bohm, M., Losby, J., Lewis, B., Young, R., and Dowell, D. (2017, July 7). Vital Signs: Changes in Opioid Prescribing in the United States, 2006-2015. Retrieved from cdc.gov/mmwr/volumes/66/wr/mm6626a4.htm
- Hedegaard, H., Warner, M., and Miniño, A. (2017). Drug Overdose Deaths in the United States, 1999-2016. CDC. Retrieved from cdc.gov/nchs/products/databriefs/db294.htm
- Jones, A., Honermann, B., Sharp, A., and Millet, G. (2017, Jan. 5). Where Multiple Modes Of Medication-Assisted Treatment Are Available. Retrieved Feb. 6, 2018, from healthaffairs.org/doi/10.1377/hblog20180104.835958/full/?tr=y&auaid=17509590
- Jones, C. M. (2013). Heroin use and heroin use risk behaviors among nonmedical users of prescription opioid pain relievers — United States, 2002-2004 and 2008-2010. *Drug and Alcohol Dependence*, 95-100.
- Jones, C. M., Campopiano, M., Baldwin, G., and McCance-Katz, E. (2015). National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment. *American Journal of Public Health*, e55-e63.
- Jones, C., Logan, J., Gladden, R. and Bohm, M. (2015, July 10). Vital Signs: Demographic and Substance Use Trends Among Heroin Users — United States, 2002-2013. Retrieved from cdc.gov/mmwr/preview/mmwrhtml/mm6426a3.htm?s_cid=mm6426a3_w
- Katzman, J., Comerci, G., Landen, M., Loring, L., Jenkusk, S., Arora, S. and Geppert, C. (2014). Rules and values: a coordinated regulatory and educational approach to the public health crises of chronic pain and addiction. *American Journal of Public Health*, 1356-62. doi: 10.2105/AJPH.2014.301881.
- Kenan, K., Mack, K. A., and Paulozzi, L. J. (2012). Trends in Prescriptions for Oxycodone and Other Commonly Used Opioids, 2000-2010, United States. *Open Medicine*, 6(2), 41-47.
- Kochanek, K., Murphy, S., Xu, J., and Arias, E. (2017, Dec. 22). Mortality in the United States, 2016, NCHS Data Brief No. 293. Retrieved from cdc.gov/nchs/products/databriefs/db293.htm
- Kochanek, K., Murphy, S., Xu, J., and Tejada-Vera, B. (2016). National Vital Statistics Reports, Deaths: Final Data for 2014. Retrieved from cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_04.pdf
- Krueger, A. (2017). Where have all the workers gone? An inquiry into the decline of the U.S. labor force participation rate. Retrieved from brookings.edu/bpea-articles/where-have-all-the-workers-gone-an-inquiry-into-the-decline-of-the-u-s-labor-force-participation-rate/
- Lee, J., Nunes, E., Novo, P., Bachrach, K., Bailey, G., Bhatt, S., and Farkas, S. (2018, Jan.). Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention. *Lancet*, 391(10118), 309-318. doi: 10.1016/S0140-6736(17)32812-X.
- Mezei, L. and Murinson, B. (2011). Pain Education in North American Medical Schools. *Journal of Pain*, 1199-1208. doi: 10.1016/j.jpain.2011.06.006.
- National Center for Health Statistics. (2016). Wide-ranging online data for epidemiologic research (WONDER). Retrieved from <https://wonder.cdc.gov/>
- The National Center on Addiction and Substance Abuse. (2005). Under the Counter: The Diversion and Abuse of Controlled Prescription Drugs in the US. Retrieved Feb. 6, 2018 from centeronaddiction.org/sites/default/files/Under-the-counter-the-diversion-and-abuse-of-controlled-prescription-drugs-in-the-us_0.pdf
- National Research Council (2011). Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Retrieved Feb. 6, 2018 from ncbi.nlm.nih.gov/pubmed/22553896 <https://www.ncbi.nlm.nih.gov/pubmed/22553896>
- National Safety Council (2017, Nov. 8). 1 in 4 Americans directly impacted by opioid misuse. Retrieved from nsc.org/Connect/NSCNewsReleases
- National Safety Council (2017). Prescription Opioid Painkiller Public Opinion Poll. Retrieved from nsc.org/NewsDocuments/2017/Prescription-Painkiller-Public-Opinion-Poll.pdf
- New Mexico Board of Medicine. (2017, Jan. 5). Continuing Education Courses for Pain Management. Retrieved from nmb.state.nm.us/pain_management_cme.html
- Paulozzi, L. J., Jones, C. M., Mack, K. A., and Rudd, R. A. (2011, Nov. 4). Vital Signs: Overdoses of Prescription Opioid Pain Relievers, United States, 1999 - 2008. *MMWR: Morbidity & Mortality Weekly Report*, 60(43), pp. 1487-1492.
- Pollini, R., Banta-Green, C., Cuevas-Mota, J., Metzner, M., Teshale, E., and Garfein, R. S. (2011). Problematic use of prescription-type opioids prior to heroin use among young heroin injectors. *Substance Abuse and Rehabilitation*, 2(1), 173-180

NSC SPEAKERS BUREAU

Rasubala, L., Pernapati, L., Velasquez, X., Burk, J., and Ren, Y. (2015). Impact of a Mandatory Prescription Drug Monitoring Program on Prescription of Opioid Analgesics by Dentists. *PLoS One*, 10(8):e0135957. doi: 10.1371/journal.pone.0135957.

Rudd, R. A., Aleshire, N., Zibbell, J. E., and Gladden, R. M. (2016, Jan. 1). *Morbidity and Mortality Weekly Report (MMWR)*. Retrieved Feb. 6, 2018, from cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm?_cid=mm6450a3_w

Ruhm, C. J. (2017). Drug involvement in fatal overdoses. *Population Health*, 219-226. doi: 10.1016/j.ssmph.2017.01.009

SAMHSA (2017, Sept.). Results from the 2016 National Survey on Drug Use and Health: Detailed Tables. Retrieved Feb. 6, 2018 from samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2016/NSDUH-DetTabs-2016.htm#tab4-4B

SAMHSA Center for the Application of Prevention Technologies (Feb. 19, 2018). Practicing Effective Prevention. Retrieved from samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/risk-protective-factors

Shah, A., Hayes, C., and Martin, B. (2017, March 17). Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015. Retrieved Feb. 6, 2018, from cdc.gov/mmwr/volumes/66/wr/mm6610a1.htm

Thomas Franko, P. B. (2017). Naloxone coverage remains a barrier to use. *Journal of the American Pharmacies Association*, 740.

Tobin, K. E., Davey, M. A., and Latkin, C. A. (2005). Calling emergency medical services during drug overdose: an examination of individual, social and setting correlates. *Addiction*, 100(3):397-404.

U.S. Department of Veterans Affairs. (2017). America's Wars Fact Sheet. Retrieved from va.gov/opa/publications/factsheets/fs_americas_wars.pdf

U.S. Drug Enforcement Administration (2015, March 18). DEA Issues Nationwide Alert on Fentanyl as Threat to Health and Public Safety. Retrieved March 1, 2016, from dea.gov/divisions/hq/2015/hq031815.shtml

Volkow, N., Frieden, T., Hyde, P., and Cha, S. (2014). Medication-Assisted Therapies — Tackling the Opioid-Overdose Epidemic. *New England Journal of Medicine*, 370(22), 2063-2066.

Warner, M., Paulozzi, L. J., Nolte, K. B., Davis, G. G., and Nelson, L. S. (2013). State Variation in Certifying Manner of Death and Drugs Involved in Drug Intoxification Deaths. *American Forensic Pathology*, 231-236.

Wheeler, E., Jones, T. S., Gilbert, M. K., and Davidson, P. J. (2015, June 19). Opioid Overdose Prevention Programs Providing Naloxone to Laypersons — United States, 2014. *Morbidity and Mortality Weekly Report (MMWR)*. Retrieved March 1, 2016, from cdc.gov/mmwr/preview/mmwrhtml/mm6423a2.htm?s_cid=mm6423a2_e

World Health Organization (2009). Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence. Retrieved Feb. 6, 2018 from who.int/substance_abuse/publications/opioid_dependence_guidelines.pdf



Alaa Abd-Elseyed, M.D.

Dr. Abd-Elseyed provides chronic pain medicine services at the University of Wisconsin School of Medicine and Public Health. At UW, he is also the Pain Clinic and Pain Services Department medical director and assistant professor in the Department of Anesthesiology.



Ezekiel Fink, M.D.

Dr. Fink is triple board certified in neurology, pain medicine and brain injury medicine. He serves as the medical director of Pain Management at the Houston Methodist's seven hospitals and its outpatient clinics, and is an assistant clinical professor at UCLA.



Kelly Clark, M.D.

Dr. Clark is board certified in addiction medicine and psychiatry, and the chief medical officer of CleanSlate Centers, which currently treat over 7,800 opioid-addicted patients with medication and psychosocial care. She is president of the American Society of Addiction Medicine.



Natalie Kirilichin, M.D.

Dr. Kirilichin is a board-certified attending emergency medicine physician and assistant professor with the George Washington University Department of Emergency Medicine. She clinically cares for patients, teaches and trains medical students and residents.

The National Safety Council can provide medical experts for medical meetings and conferences. Learn more and submit a speaker request at nsc.org/SpeakersBureau.

The National Safety Council grades the 50 states and District of Columbia on their efforts to combat the opioid crisis.

8 states earned a failing grade

29 states are lagging

13 states and District of Columbia are improving



How does your state measure up?



About the National Safety Council

The National Safety Council is a nonprofit organization whose mission is to eliminate preventable deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy. Founded in 1913 and chartered by Congress, NSC advances this mission by partnering with businesses, government agencies, elected officials and the public in areas where we can make the most impact.

Visit our prescription drug initiative timeline to learn how the Council has addressed the opioid epidemic at:

nsc.org/OpioidTimeline

Explore drug overdose trends in more detail at:

injuryfacts.nsc.org/DrugOverdoses