AMA
AMERICAN MEDICAL ASSOCIATION

2025 AMA Report on Substance Use and Treatment: Progress, Policy and Future Directions

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Letter from the CEO

Dear Colleagues,

The overdose epidemic touches all of us. If you've cared for patients in pain, supported someone with addiction, or treated those facing mental health challenges, you know this crisis's devastation. While opioid-related deaths dropped from more than 110,000 in 2023 to 75,000 last year, most are still driven by illicitly made fentanyl—and nearly 60 percent involve more than one dangerous substance. The drug supply is more toxic and unpredictable than ever.

We're also seeing harms rise even as more states legalize cannabis. Emergency visits for cannabinoid hyperemesis syndrome have climbed more than 400 percent since 2016, and more than 19 million people met criteria for cannabis use disorder in 2023. The evidence needs to guide us moving forward. Legal doesn't mean harmless or useful, and we can't ignore these trends.

For more than a decade, the AMA Substance Use and Pain Care Task Force has worked to support patients with pain and addiction. We've seen progress: buprenorphine prescriptions—key treatment for opioid use disorder—are up 83 percent, and nearly 2 million naloxone prescriptions are written each year.

But the data show big gaps to close.

> *Pain care:* Opioid prescriptions have dropped from 260.5 million in 2012 to 125.7 million in 2024. Yet patients still struggle to access non-opioid pain care because insurers often don't cover it or make it hard to get.
>
> *Treatment for opioid use disorder:* Buprenorphine and methadone save lives. Still, stigma, regulatory hurdles, and insurance restrictions keep too many people from getting the treatment they need. This year's report takes the deepest look yet at these barriers.
>
> *Naloxone:* Wider access to naloxone continues to save lives. We support OTC availability, emergency department distribution, and strong community programs that get naloxone into the hands of people who can use it.
>
> *Emerging threats:* Polysubstance use is rising, fueled by stimulants, xylazine, kratom, tianeptine, inhalants, and other dangerous combinations. Cannabis use disorder is increasing too, with real mental health and pregnancy-related risks. This report expands significantly on these trends because they demand urgent attention.

The bottom line: this epidemic is evolving faster than our systems are. Small steps aren't enough.

We need physicians, policymakers, payers, and communities working together to remove barriers, expand treatment, and respond quickly to new threats. Every patient deserves care without stigma and without delay.

We know what works. I hope you'll join us.

John Whyte, MD, MPH
CEO and Executive Vice President
American Medical Association

Executive summary

The American Medical Association continues its commitment to addressing the nation's overdose epidemic and improving care for patients with pain and substance use disorders (SUD). Despite progress in reducing opioid prescribing—down **52% since 2012**—patients still face barriers to evidence-based pain care. Despite widespread recognition that medications for opioid use disorder (MOUD) are the gold standard for treatment for opioid use disorder (OUD), health insurance company barriers and other restrictions continue to limit patient access to MOUD. Key challenges for patients with pain and those with OUD or other substance use disorder include restrictive state laws, payer policies, stigma and limited access to non-opioid alternatives.

Key highlights from the 2025 report

- **Pain care: Opioid prescriptions have decreased** from 260.5M in 2012 to 125.7M in 2024, yet access to non-opioid pain care remains inadequate. The AMA advocates for individualized patient care decisions, legislative and other reforms to preserve physician discretion, and increased access to multimodal, multispecialty therapies.
- **OUD treatment: MOUD, including buprenorphine and methadone, saves lives** but remain underutilized due to stigma, regulatory barriers and insurance restrictions. The AMA calls for eliminating prior authorization and expanding methadone access beyond OTP settings.
- **Naloxone: Increased naloxone availability prevents overdose deaths.** The AMA supports OTC access, emergency department distribution and community-based programs to ensure timely administration.
- **Emerging threats: Polysubstance use is rising**—involving stimulants, xylazine, kratom, tianeptine and inhalants. Cannabis use disorder prevalence is growing, with associated mental health and pregnancy risks. The AMA calls for increased surveillance, research and public policies to mitigate further harm.
- **Policy priorities:** Enforce mental health and SUD parity laws, **remove barriers to treatment for pain** and SUDs, and **strengthen overdose prevention efforts** targeting youth and vulnerable populations.

AMA advocacy actions

2025 continued to demonstrate the AMA's and physicians' efforts to improve outcomes and advocate for evidence-based policies to end the nation's overdose and death epidemic. Examples of AMA advocacy included:

- Partnered with key medical societies urging the U.S. Food and Drug Administration to clarify that higher doses of buprenorphine may be appropriate for patients with OUD.
- Joined physician-pharmacy coalition to urge DEA to clarify policies to reduce pharmacy and distributor reluctance in dispensing buprenorphine.
- Supported new state laws in Colorado, Illinois, Virginia and Washington on policy priorities, including pain care, mental health and substance use disorder parity, and access to naloxone.
- Collaborated on the Mental Health Parity Index to monitor insurer compliance.
- Advanced state and national initiatives to improve naloxone access and protect patients with pain.

In 2026, the AMA will continue efforts to build **collaborative efforts among physicians, policymakers, insurers and community organizations** to ensure equitable access to care, reduce stigma and save lives.

Introduction

The American Medical Association presents the 2025 report on the nation's overdose and death epidemic, a report that once again demonstrates how—despite multiple, positive signs of physicians' actions and advocacy—there remains a tremendous amount of work to do to protect patients with pain and increase access to evidence-based care for individuals with a substance use disorder (SUD).

The AMA is pleased that most states saw reductions in drug-related overdose deaths in 2024. It is a sobering fact, however, that there still are approximately 75,000 Americans dying each year—predominantly from potent, illegally made fentanyl (IMF). IMFs, however, are not the only concern.

Tens of thousands of Americans are now dying from causes related to the use of illicit stimulants, in particular, methamphetamine and cocaine. Misuse of other emerging toxic agents including xylazine, hemp-derived intoxicating cannabinoids, kratom, tianeptine and medetomidine add further complications. Often, these substances are used in combination. Individuals are also unknowingly being exposed to these substances through adulterated pills, powders and other forms. Cannabis use remains a high concern with increasing data and research highlighting public health and patient harms.

As in previous reports,[1] this AMA report provides trend data regarding the dispensing of opioid analgesics, buprenorphine and naloxone. These three data trends help provide policymakers with apples-to-apples views of key metrics surrounding the epidemic. For example, while prescriptions of opioid analgesics have decreased by 52% since 2012, policy proposals remain focused on further reductions and restrictions for opioid therapy—even when they harm patients with cancer, sickle cell disease or who are receiving hospice or palliative care.

In addition, while there has generally been a positive increase in policies to remove barriers for medications for opioid use disorder (MOUD), prescriptions for buprenorphine to treat opioid use disorder (OUD) have remained level since 2019. While the available data may not tell the whole story, the AMA continues to advocate to remove all barriers to MOUD. This includes advocating for health insurance companies to finally end all prior authorizations for MOUD, for state departments of insurance to enforce mental health and substance use disorder (SUD) parity laws, and for increasing access to methadone from office-based physician practices.

Our nation is losing tens of thousands of family members, friends and neighbors to unintentional overdose every year—more than 200 lives every day. I urge physicians, policymakers and all others to use this report to identify and commit to taking action in 2026.

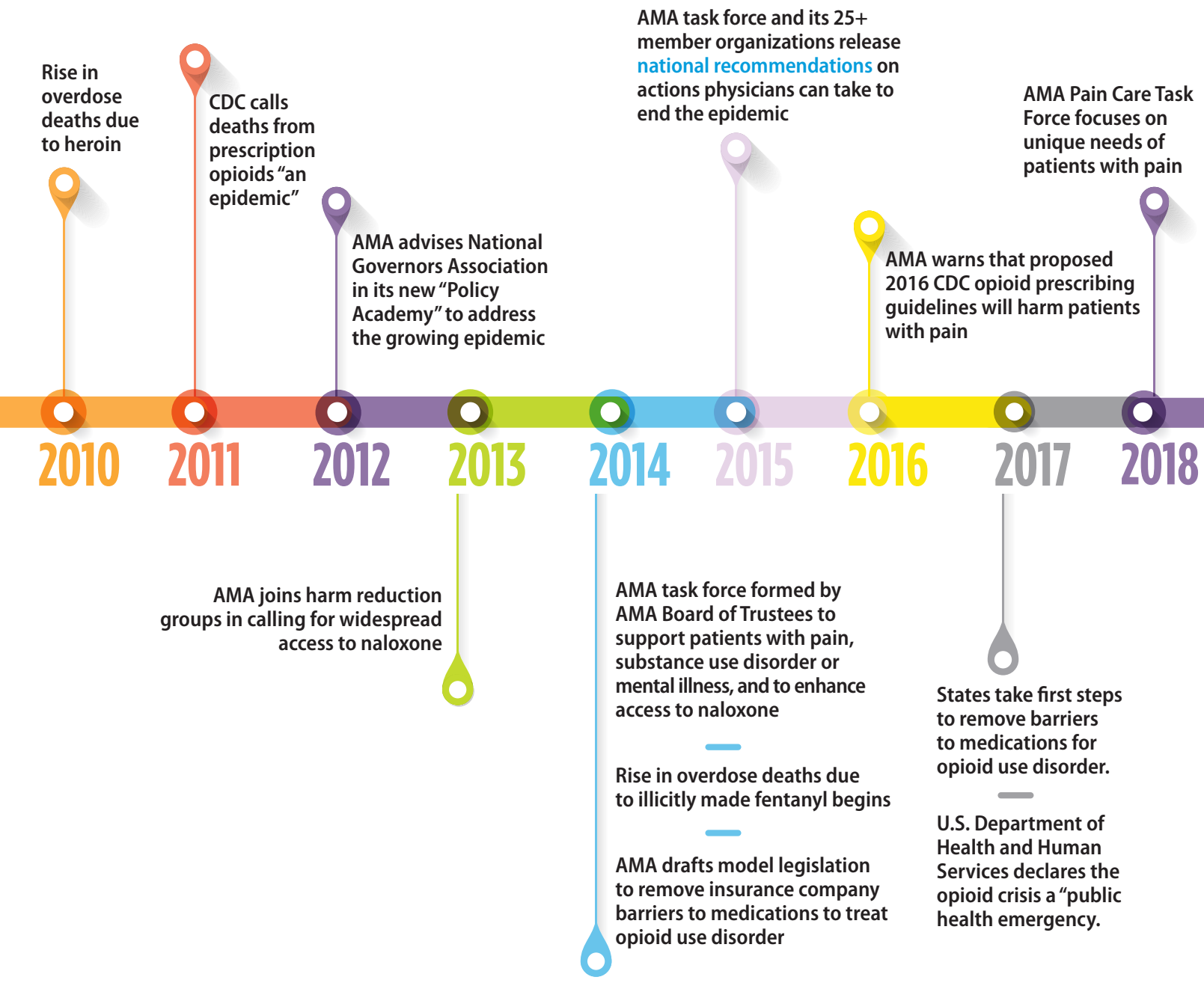
Bobby Mukkamala, MD
President, American Medical Association
Chair, AMA Substance Use and Pain Care Task Force

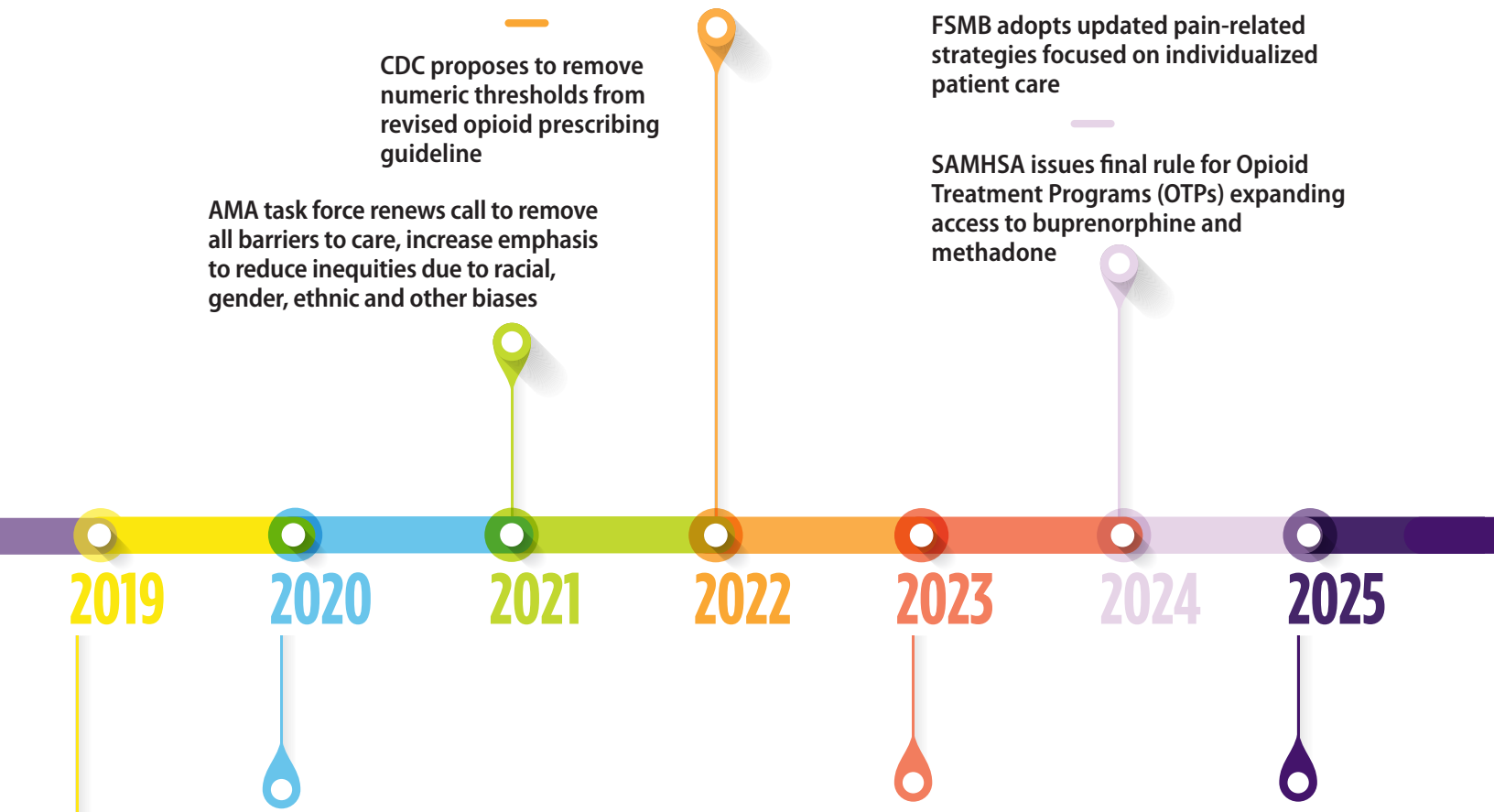
Thankfully, there continues to be broad support for widespread access to naloxone—one of the nation's public health successes to save lives from overdose. Here, too, however, the available data show that there are opportunities to further public policies to ensure naloxone is available at pharmacies, upon discharge from the emergency department, and in public settings as well as colleges, universities and other educational settings.

Finally, this report provides specific policy recommendations and a review of key advocacy issues from the past year. The AMA urges medical societies, policymakers and other key stakeholders to use the data and policy recommendations in this report to support their own advocacy efforts. This report includes examples of regulatory and legislative best practices to increase access to evidence-based treatment for SUD as well as for pain. Using the recommendations and data in this report can directly help improve outcomes and reduce drug-related mortality. To meet those goals, however, we must work together, measure our efforts and rely on the clinical evidence we have at our disposal.

Timeline

The nation's overdose and death epidemic continues to change—requiring continued physician advocacy for evidence-based policies for treatment of pain, substance use disorders and other primary and secondary prevention initiatives. This timeline presents key moments in the policy, clinical and epidemiological history of the epidemic.





2019

AMA Opioid Task Force and member organizations urge policymakers to take action to remove barriers to evidence-based care

Cocaine and methamphetamine kill more people than heroin or Rx opioids

2020

Deaths related to illicitly made fentanyl top 56,000

Evidence-Informed Pain Management: Principles of Pain Care from the AMA Pain Care Task Force released

2021

AMA task force renews call to remove all barriers to care, increase emphasis to reduce inequities due to racial, gender, ethnic and other biases

2022

Overdose deaths top 107,000

US DOL, HHS, IRS report details widespread mental health/substance use disorder parity violations by health insurance companies

CDC proposes to remove numeric thresholds from revised opioid prescribing guideline

2023

Xylazine and Nitazenes emerge as the latest adulterant complicating overdose response efforts

FDA approves over-the-counter naloxone

CDC says inflexible or rigid opioid dosage policies are "misapplication," "inappropriate" and "inconsistent" with its Opioid Prescribing Guideline

Opioid prescriptions decrease for 13th consecutive year

2024

HHS reports that CMS fails to ensure states comply with federal parity laws

Despite OTC status, naloxone availability, particularly in pharmacies, is inadequate

FSMB adopts updated pain-related strategies focused on individualized patient care

SAMHSA issues final rule for Opioid Treatment Programs (OTPs) expanding access to buprenorphine and methadone

2025

U.S. Department of Health and Human Services continues to renew the federal public health emergency for the opioid crisis

AMA recommendations to White House Office of National Drug Control Policy highlight complexity of epidemic [2]

FDA clarifies that buprenorphine doses are not subject to a maximum limit [3]

National snapshot of how the epidemic affects states

Utah counties received millions to battle the opioid epidemic. Many haven't spent a dime
–KUER

Youth Emergency Visits for Cannabis Vomiting Disorder Spiked in Recent Years — Rates highest in states with recreational cannabis
–MedPage Today

Pregnant Women Should Not Use Cannabis, New Medical Guidelines Say
–The New York Times

Emergency department treatment with buprenorphine puts people struggling with opioid use disorder on path to long-term recovery
–Globe Newswire

Amid opioid crisis, UCLA researchers find 14% more emergency physicians are prescribing buprenorphine than in 2017
–UCLA Magazine

Teens work to overcome addiction at one of America's largest recovery high schools
–ABC News

In Alaska, where overdose deaths are rising again, Narcan and community are a lifeline
–The Guardian

Fatal overdoses linked to 'zombie drug' Xylazine in Fargo-Moorhead area
–Valley News

North Dakota Senate tosses out kratom regulations in favor of study
–North Dakota Monitor

Free naloxone vending machine installed in Wyoming.
–ABC 13 News

Millions in Iowa's opioid settlement fund sit idle
–The Gazette

MDHHS study finds harm reduction efforts make significant impacts on overdose deaths, hospitalizations, cases of hepatitis C
–MDHHS

Methamphetamine overtakes fentanyl as leading cause of drug-related deaths in Nevada
–NBC 3 News

Oklahoma's harm reduction programs have helped hundreds with addiction. They're at risk of ending
–The Oklahoman

At least 1 in 6 pregnant Michigan women uses cannabis –MSU Today

Providers: Rollout of $1.5B opioid settlement a 'huge disaster' in Michigan –Bridge Michigan

Milwaukee is losing a generation of Black men to the opioid crisis –PBS Wisconsin

Wisconsin communities expand fentanyl prevention efforts into schools as overdose deaths surge. –News 8 Now

How Chicago succeeded in reducing drug overdose deaths –The Guardian

Indiana teens face higher rates of cocaine, meth, and heroin use, sparking concerns –WBIW

Nearly half of Ohio's opioid settlement money is untraceable, according to new database –WOSU Public Media

'Losing that is terrible.' Federal budget cuts lead to the shutdown of a UMMC opioid addition treatment project. –Starkville Daily News

Florida AG issues emergency rule banning kratom compound –Florida Phoenix

As Fentanyl Deaths Slow, Meth Comes for Maine –The New York Times

New kratom bill is back at R.I. State House. Is it improved? Reviews are mixed. –Rhode Island Current

RI seeing powerful veterinary sedatives in illicit drug supply. –WPRI.com

Kratom regulation bill clears Rhode Island House –Rhode Island Current

Street drugs are being cut with a potent sedative, but criminalizing it may worsen Philly's addiction crisis –Philly Voice

Report finds D.C.'s older Black men are most vulnerable to opioid overdoses –WAMU 88.5 Radio

SC lawmakers championed the passage of their fentanyl bill. Some prosecutors say it's useless –Post and Courier

Care for opioid-addicted mothers and infants is one way SC is spending opioid settlement dollars. –South Carolina Daily Gazette

Florida bill targets growing 'tranq' drug crisis with tougher penalties as its use surges –USA Today

Promoting optimal pain care

Patients with pain deserve the same level of care and compassion as patients with any other symptom(s) or medical condition. AMA advocacy in support of patients with pain is focused on ensuring individuals with pain have access to comprehensive, multi-disciplinary, multi-modal evidence-based treatment. The AMA places particular emphasis on supporting individualized patient care decisions as well as policies that do not arbitrarily restrict patients' access to care. This includes support for both pharmacologic and nonpharmacologic options that are based on the physician's best medical judgment and individualized patient characteristics.

51.7% ↓

decrease in opioid prescriptions
from 260.5M in 2012 to 125.7M in 2024

Prescriptions for opioid analgesics have decreased every year since 2012—from 260.5 million to 125.7 million in 2024. Total dosage strength, measured in morphine milligram equivalents, decreased by 65% from 2012 to 2024.

More work needs to be done to ensure patients with pain receive timely, affordable, high-quality care recommended by their physician. If opioid therapy is indicated, the AMA continues to recommend that physicians "start low and go slow"—continually ensuring that care management is based on ensuring the benefits outweigh the risks.

The AMA points out, however, that the combination of state laws restricting access to opioid analgesics, reduced opioid production quotas from the U.S. Drug Enforcement Administration, restrictive payer and pharmacy policies, and ongoing stigma of opioid therapy continues to negatively affect patients with pain, including those with cancer.[4] **The AMA also continues to observe that patients' access to nonopioid pain care options remains challenging due to high cost, limited insurance coverage and the need to balance access with daily activities such as child care, employment and related social determinants of health.**

Here are three key steps to help patients with pain:

- **Legislative advocacy** – Enact legislation based on updated U.S. Centers for Disease Control and Prevention (CDC) recommendations or Minnesota and Illinois statutes that preserve physician discretion rather than strict adherence to pre-determined morphine milligram equivalency dose or quantity limits.[5]
- **Regulatory advocacy** – Adopt the April 2024 Federation of State Medical Boards "Strategies for Prescribing Opioids for the Management of Pain."[6] The Federation of State Medical Boards (FSMB) strategies provide clear guidance to boards and physicians about the need for individualized patient care decisions while highlighting the importance of patient-physician shared decision-making when considering whether to initiate opioid medication, taper medication, or take measures to discontinue medication. The FSMB strategies also emphasize that evaluating the "success" of a treatment plan is multifaceted and could include functional improvement, improvement in quality of life, as well as reductions in a patient's pain.
- **Education** – Medical students, residents and practicing physicians can help ensure they have the latest clinical and research guidance regarding pain management, safe opioid prescribing and a broad array of pain medicine topics.[7] Education ranges from journal articles *JAMA*®, the JAMA Network™, materials developed by multiple specialties, information from the Providers Clinical Support System and educational modules developed by the AMA on the AMA Ed Hub™.

AMA advocacy efforts support updated FDA opioid label[8]

"The FDA's requirement on opioid labels appropriately focuses on physicians making individualized, informed decisions about opioid prescribing while supporting informed decision-making for patients. The new FDA label continues the approach laid out by CDC in its 2022 opioid prescribing guideline emphasizing the importance of individualized, shared decision-making between the patient and physician."

Bobby Mukkamala, MD
President, American Medical Association and Chair, Substance Use and Pain Care Task Force

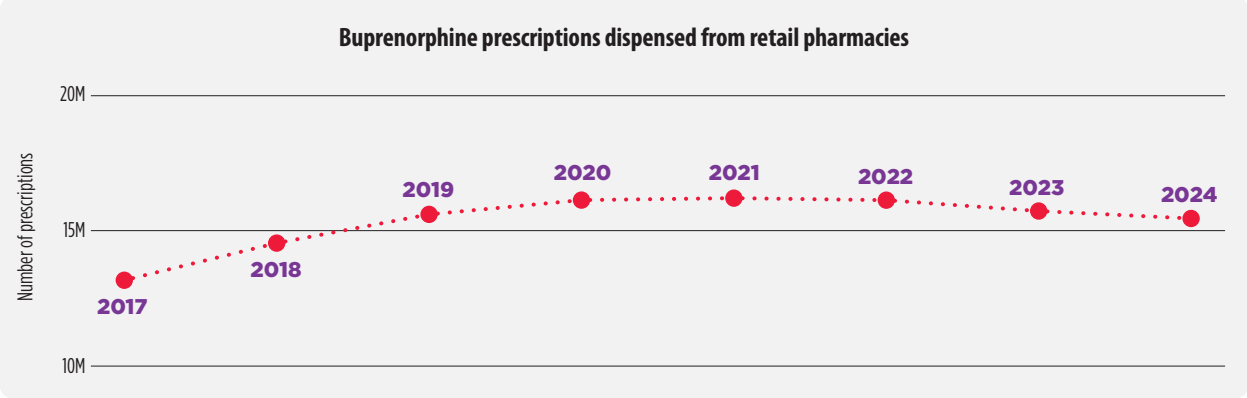
Treatment for opioid use disorder (OUD)

The medical evidence and clinical experience continue to clearly demonstrate the value of medications for opioid use disorder (MOUD) to improve outcomes and save lives. The benefits of MOUD include reduced overdose deaths, reduced cravings, improved maternal and infant outcomes, increased treatment retention, reduced criminal activity and reduced costs to society.[9] Buprenorphine—whether alone or in combination with naloxone—along with methadone continue to be the main types of MOUD benefiting patients with an OUD.

Increasing access to buprenorphine and methadone, however, has always been difficult. People who benefit from MOUD have been falsely and unfairly stigmatized as "trading one addiction for another," as though MOUD is any different than treatment for any other chronic illness such as heart disease or diabetes. Access to buprenorphine—until just a few years ago—was restricted for more than 20 years to only physicians who took extra training and subjected themselves to increased scrutiny by the DEA through the X-waiver program.[10] The stigma surrounding methadone is equally pervasive despite 50 years of efficacy showing methadone successfully treats OUD.[11] Stigma, along with significant policy restrictions, are chief reasons why less than 20% of people who need SUD treatment receive it.[12]

There have been three main trends in buprenorphine prescribing since 2012:

2012–2017: Increases in dispensing as physicians' training and recognition increased (1.4M prescriptions in 2012 to 13.2M prescriptions in 2017)



2018–2022: Continued growth in dispensing, including growth during the COVID-19 years due to increased federal flexibility and increases in telehealth prescribing (14.5M prescriptions in 2018 to 16.0M in 2022)

2023–2024: Slight decrease in total buprenorphine prescriptions dispensed (15.7M in 2023 to 15.4M in 2024) It is not entirely clear why prescriptions dispensed for buprenorphine have decreased—a point that needs greater review. Potential reasons vary and may include:

- More individuals are receiving prescriptions for a greater number of days
- Increased use of long-acting, injectable formulations
- Health insurance company restrictions, such as prior authorization, continue to frustrate and lead to prescription abandonment
- Pharmacy and distributors' fears of buprenorphine being targeted by the DEA as a suspicious drug of concern has led to limited stocking of buprenorphine in the pharmacy
- State laws that place increased scrutiny on physicians who prescribe buprenorphine

Policy recommendations to increase access to MOUD

1. Prohibit prior authorization for MOUD, including for buprenorphine prescriptions greater than 24mg daily.[13] D.C. Medicaid[14] and the State of Illinois[15] have accomplished this.
2. Support actions at the state and federal levels[16] to increase access to methadone, including policy changes that allow office-based addiction medicine and addiction psychiatrists to prescribe methadone outside of an OTP setting so that patients can access their medication from a community pharmacy.
3. Ensure that all individuals entering a jail or prison have access to MOUD; can continue treatment throughout their sentence; and are linked to community-based treatment upon release.[17]
4. Protect families and individuals who are pregnant or breastfeeding by removing penalties that automatically report a positive toxicology test to child welfare authorities.[18]
5. Change policies or practices by pharmacies and/or distributors that restrict access to buprenorphine out of fear of suspicious order reporting (SOR) requirements from the DEA.[19]
6. Enforce state and federal mental health and substance use disorder (SUD) parity laws so that health insurance companies are held accountable for policies and practices that illegally delay and deny care for mental illness and substance use disorders.

Snapshot of AMA advocacy in 2025

- Joined multiple medical societies and other advocates urging—and succeeding—in having SAMHSA clarify that higher doses of buprenorphine are suitable, when warranted, to treat certain cases of SUD. As explained[20] by the American Society of Addiction Medicine, "The label update follows the Food and Drug Administration's (FDA) December 2024 recommendation[21] that transmucosal buprenorphine product labels be updated to address misperceptions of a daily maximum dose of 16 or 24mg. Instead, practitioners should take a patient-centered approach and adjust dosages based on the patient's therapeutic needs and responses. For some patients, doses higher than 24mg may be appropriate." The AMA urges all payers to update their own policies to remove restrictions on buprenorphine that are tied to daily dosage limits.
- Recommended that the DEA clarify or rescind its application of the SOR requirements to buprenorphine for OUD treatment, to reduce pharmacy and distributor reluctance and expand access to life-saving care.[22]
- Continued to support H.R. 2483, the SUPPORT for Patients and Communities Reauthorization Act of 2025.[23]
- Continued to support S. 665, the Fatal Overdose Reduction Act. The establishment of the Health Engagement Hub Demonstration Program, as this bill proposes, aligns with the AMA's ongoing commitment to increase access to treatment for opioid use disorder and other SUDs.[24]
- Joined medical societies in Colorado, Virginia and Washington to strengthen mental health and SUD parity laws.[25] The AMA also developed multiple resources that medical societies can use to enact

additional provisions in law or rule to require health plans to use medical guidance—rather than financial considerations—for determining medical necessity and the generally accepted standard of care.[26]

- Collaborated with The Kennedy Forum and Third Horizon to launch a pilot of the Mental Health Parity Index (MHPI), a free, open-access visual interactive mapping tool that allows physicians, patients, policymakers and other stakeholders assess how well commercial insurance plans are performing with regard to mental health parity laws. The Illinois pilot shows widespread areas where parity violations are likely. The AMA is supporting a national expansion of the MHPI to be launched in 2026.
- Continued to support efforts, such as the Modernizing Opioid Treatment Access Act,[27] to increase access to methadone, including authorizing addiction medicine physicians and addiction psychiatrists to prescribe methadone outside of OTP settings to allow patients with OUD to obtain their prescriptions from community-based pharmacies.

Naloxone

Help save lives—prescribe and distribute naloxone

Increased access to and use of naloxone is one of the most important reasons why the nation's overdose death toll has thankfully decreased. Naloxone is proven to help prevent an opioid-related overdose, but only if it is administered in time.[28] Increased access to naloxone is supported by U.S. health agencies (CDC,[29] SAMHSA,[30] U.S. Surgeon General[31]), state laws and other policies,[32] and many patient, consumer and other advocacy groups.[33]

The AMA is proud that changing state laws to increase access to naloxone was among the first recommendations of the AMA Substance Use and Pain Care Task Force—and that AMA partnership with community-based organizations and the nation's medical societies was part of new and updated laws in all 50 states and the District of Columbia. While physicians' prescriptions for naloxone play an important role in preventing overdose, the AMA continues to strongly support community-based distribution, which for many years has been the primary source of naloxone to save lives. In 2024, for example, Remedy Alliance for the People helped distribute more than 2.1 million doses of naloxone across 45 states and Puerto Rico—unquestionably helping save thousands of lives.[34]

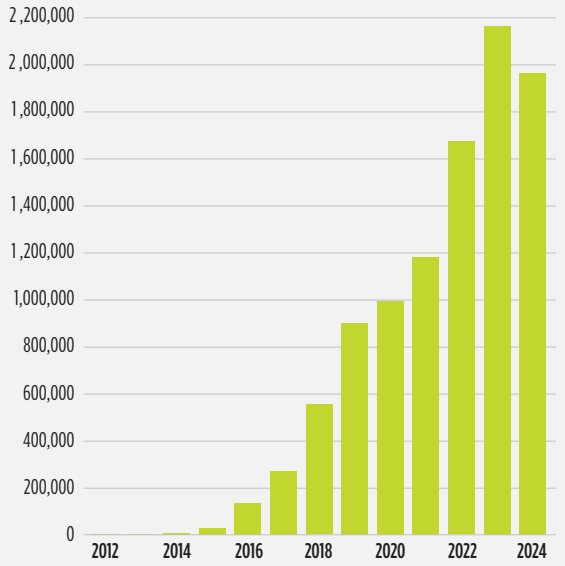
To continue the positive trends, the AMA recommends that:

- Physicians prescribe naloxone to anyone at risk of overdose, including dispensing naloxone in emergency departments and ensuring hospitalized patients at risk for overdose leave the hospital with naloxone (not just a prescription) in hand.
- Public health professionals provide ongoing community-based bystander training to recognize signs of overdose and how to administer naloxone.
- Public officials make naloxone available in public places, such as schools and other educational settings, libraries and concert venues; and also increase availability of naloxone in jails and prisons as well as for distribution upon release.
- Health insurance companies ensure naloxone is not subject to co-pays or cost-sharing.

> **"I talk with my patients and their families about naloxone the same way I discuss any other life-saving medication—with clear information, compassion, and take the time to address their questions and concerns. I hope they never need to use it, but just like an EpiPen or a rescue inhaler, being prepared can make all the difference."**
>
> **Elizabeth Salisbury-Afshar, MD, MPH**
> Addiction Medicine physician, Wisconsin

- Pharmacies make naloxone visible in front of the cash register and pharmacy counter.
- Employers and retailers consider making naloxone available alongside other first aid supplies—and ensure that naloxone is available with no cost on employee benefit health plans.

Trends in naloxone dispensed from retail pharmacies[33]
United States 2012–2024



Following a significant increase in naloxone dispensed from retail pharmacies since 2012, prescriptions have stabilized [35]

Access to naloxone has increased but still could be better[36]

- Despite studies showing the essential nature of community-based naloxone, there continues to be a great shortage of access to naloxone.[37]
- There is substantial, state-by-state variation in naloxone access.[38]
- New state laws to increase access to naloxone through civil protections for possession and administration by lay bystanders led to a 9–11% reduction in opioid-related deaths.[39]
- There is a need for emergency department distribution given that individuals who overdose and are saved rarely fill prescriptions for naloxone.[40]
- States with high overdose rates often have low-access to OTC naloxone.[41]
- Black people receive fewer naloxone prescriptions than other individuals.[42] Females receive naloxone by EMS less often than males.[43]
- In 2023, the FDA approved OTC naloxone, but high cost and stocking location(s) remain barriers.[44]

Prescribe naloxone to anyone at risk of overdose or in a position to save a life from overdose

The AMA strongly encourages physicians to consider prescribing or distributing naloxone to all individuals at risk of overdose or an individual who may be in a position to save a life from overdose. This is a decision to be made between the individual and physician and other health care professionals.[45] Factors that may be helpful in determining whether to prescribe naloxone to a patient, or to a family member or close friend of the patient, include:

Is the patient in the emergency department after an overdose?[46]

Does the patient history demonstrate a risk of unintentional, opioid-related overdose?

Does the patient have a history of substance use disorder or prior overdose?

Does the patient have a concomitant benzodiazepine prescription or other medication that might increase risk of overdose?

Does the patient have an underlying mental health condition that might make them more susceptible to overdose?

Might the patient be in a position to aid someone who is at risk of overdose?

Are the patient's family or friends in a position to help save a life from an overdose?

Does the patient have a medical condition, such as a respiratory disease, sleep apnea or other co-morbidities which might make him or her susceptible to opioid toxicity, respiratory distress or overdose?

Additional considerations when prescribing naloxone

Determining whether to prescribe or dispense naloxone or other opioid overdose reversal agents raises many issues, including initiating a discussion about the risk of overdose; the potential stigma a patient may experience; engaging the patient in broader discussions about treatment for a substance use disorder, if applicable; and how to ensure the patient (or close friend/family member) has the appropriate training in case of an overdose. Though prescribing or dispensing naloxone or other opioid overdose reversal agents is not a guarantee for an overdose reversal, it does provide a tangible option for care that otherwise may not be available in a timely manner.

- Prescribing naloxone has been found to reduce emergency department visits, and may help patients become more aware of the potential hazards of substance use, including risks of fentanyl contamination.[47]
- Prescribing naloxone does not increase liability risk.[48]
- Physicians and other health care professionals can help reduce stigma and increase appropriate use of naloxone through educating patients and families about risk and signs of overdose and how to administer naloxone.[49]
- Although it is recommended that naloxone be used in pregnant women in the case of maternal overdose,[50] pregnant women are less likely than men to receive naloxone during an opioid overdose-related emergency department visit.[51]
- Patients with cancer or hospice and palliative care needs benefit from discussions about overdose education and naloxone distribution.[52]
- In addition to current dosing for naloxone, the FDA has approved certain high-dose and long-acting opioid overdose reversal medications.[53] The AMA supports access to all FDA-approved opioid overdose reversal agents. Higher doses, however, have not demonstrated superior efficacy,[54] and some experts in public health, secondary prevention and emergency response have raised concerns about risks including precipitated withdrawal for the newer products.[55]

A note of caution: Naloxone and other opioid-overdose reversal agents do not reverse an overdose related to methamphetamine, cocaine or other non-opioid containing substances. They also do not work to counteract overdose related to alcohol, benzodiazepines or xylazine, which may increase the sedative effects of opioids, making the antagonist effects of naloxone appear not as rapid or sustaining.[56] Polysubstance use, moreover, may be intentional or unintentional as illicit substances may contain multiple adulterants, including illicitly manufactured fentanyl.[57] The CDC, SAMHSA, NIDA and many other leading health organizations, including the AMA, continue to counsel that in addition to immediately calling 911, it is still advised to administer naloxone or another FDA-approved overdose reversal agent if an overdose is suspected because it is likely an opioid is present, and naloxone has a low risk of harm to an individual. When in doubt, the AMA advises to administer the overdose reversal agent and give rescue breaths to help reduce respiratory depression.

Cannabis

Cannabis as a public health threat

Cannabis availability and use is increasing. The AMA continues to be concerned about increased access to cannabis, increased potency of cannabis products, and a growing body of research showing increases in cannabis use disorder as well as adverse effects on youth and vulnerable populations, including pregnant women.[58] Cannabis use also is increasing among older adults, increasing their risk of heart disease, stroke and cognitive harms.

As cannabis use has increased, the population prevalence of cannabis use disorder has risen in the U.S. In 2023, 6.8% of individuals aged 12 years and older (approximately 19.2 million people), and approximately 30% of those who reported using cannabis, met criteria for cannabis use disorder.[59]

Cannabis risks

According to the U.S. Substance Abuse and Mental Health Services Administration,[60] there are significant risks associated with cannabis use. Risks include adverse effects on brain health; associations between cannabis use and increased risk of depression, anxiety, suicide planning and psychotic episodes; harmful effects on timing and coordination; increased dangers when driving; and harms during pregnancy to the fetus, including fetal growth restriction, premature birth, stillbirth, and problems with brain development, resulting in hyperactivity and poor cognitive function.

40 of 50 states
3 territories and the District of Columbia
allow for medical use of cannabis [61]

More than 1/2 the U.S. population, 12 years and older, live in states where cannabis is legal for adult use [62]

Over 15% of people aged 12 years or older
(43.6 million people) used cannabis in the past month. Highest use is among young adults aged 18–25 years.

Key actions to reduce risk with cannabis

- **Research is needed:** Despite cannabis advocates' claims, there is limited data showing any meaningful benefit to cannabis. Adequate, well-controlled research studies to evaluate safety and efficacy are needed for cannabis, as well as related cannabinoids, including derived psychoactive cannabis products and hemp-derived intoxicating cannabinoids.
- **Prevention in high-risk populations is vital:**
  - **Youths:** Limiting access to cannabis products for minors/youths is critical to reduce risk of cannabis use. Additionally, limiting marketing to youths, including prohibiting the use of characterizing flavors that may enhance the appeal. Avenues for legal and financial penalties for marketing to youth are needed. Finally, the use of secure, child- and tamper-proof packaging and design, and safety labeling on all cannabis products will decrease risks of cannabis for children and youths.
  - **Pregnancy:**[63] Cannabis use in pregnancy is associated with adverse outcomes, including preterm birth, low birth weight and developmental delays. All pregnant women should be screened for cannabis use in pregnancy and lactation, and physicians should be prepared to counsel patients in a non-judgmental way on the risks of use during pregnancy and postpartum.
- **The AMA encourages states to review their regulations to ensure—at a minimum—the following requirements are present:**
  - Prohibit cannabis use in all places that tobacco use is prohibited, including in hospitals and other places in which health care is delivered
  - Apply the same marketing and sales restrictions that are applied to tobacco cigarettes, including prohibitions on television advertising, product placement in television and films, and the use of celebrity spokespeople as well as avenues for legal and financial penalties for marketing to youth
  - Establishing manufacturing and product standards for identity, strength, purity, packaging and labeling with instructions and contraindications for use
  - Requiring transparency and disclosure concerning product design, contents and emissions
  - Ensure that a substantial portion of cannabis tax revenue is allocated for public health purposes, including substance use prevention and treatment programs, cannabis-related educational campaigns, scientifically rigorous research on the health effects of cannabis and public health surveillance efforts.

The AMA Advocacy Resource Center has model state legislation to help states strengthen cannabis protections for public health.

AMA Cannabis Task Force

The AMA Cannabis Task Force (CTF) was formed in 2019 to evaluate and disseminate relevant scientific evidence to health care providers and the public. The CTF developed and launched a continuing medical education podcast series on AMA Ed Hub™ and the AMA Moving Medicine podcast series. The podcast series—free for physicians, public health officials and the general public—serves as a primer on cannabis products and their uses and potential health effects.

Podcast series topics

1. All about cannabis pharmacology[64]
2. Cannabis and pain management[65]
3. Cannabis use among pregnant persons[66]
4. Cannabis use and psychiatric disorders[67]
5. How addictive is cannabis?[68]
6. Preventing cannabis use among minors[69]
7. What to know about FDA-approved cannabis-derived products[70]

Stimulants

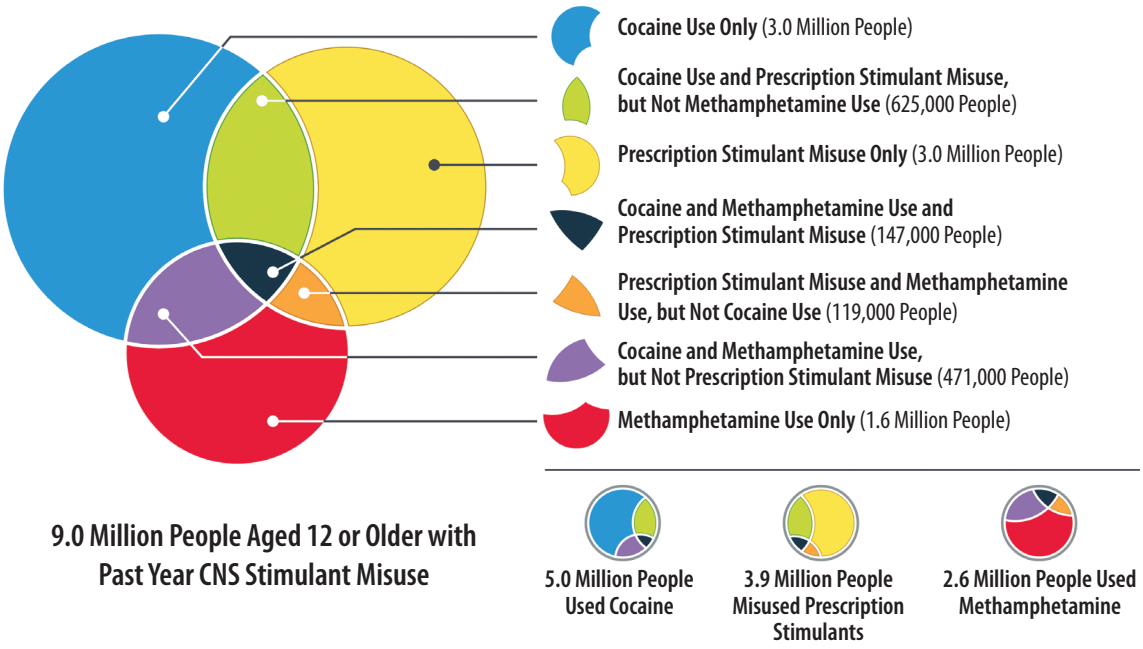
Stimulant use and risk for overdose deaths

Stimulant presence in overdose deaths—particularly methamphetamine and cocaine—has increased with the majority of overdose deaths involving stimulants, often mixed with opioids. The AMA is concerned with this increasing overdose trend given the beneficial role of stimulants for medical use as part of treatment for attention deficit hyperactivity disorder (ADHD) and other disorders. Prescription stimulant misuse has remained stable and even decreased in youth populations[71] despite increases in prescribing.[72]

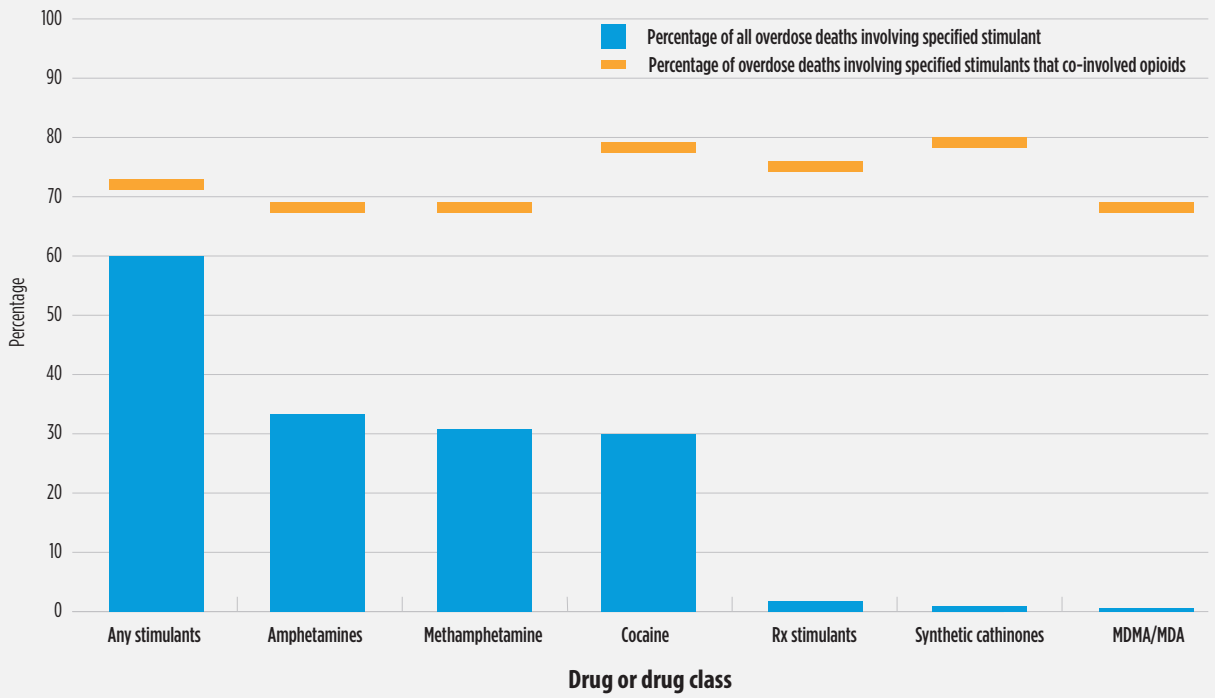
Stimulant use trends

- Cocaine use decreased from 1.7% in 2021 to 1.5% in 2024
- Methamphetamine use remained at less than 1% from 2021 to 2024
- From 2021 to 2024: [73]
  - 59.0% of overdose deaths involved stimulants
  - 43.1% co-involved stimulants and opioids
  - 15.9% involved stimulants and no opioids

Past Year Central Nervous System (CNS) Stimulant Misuse: Among People Aged 12 or Older; 2024 [74]



Percentage of overdose deaths (N=309,274) by type of stimulant involved and by combinations of stimulants involved–State Unintentional Drug Overdose Reporting System, United States January 2021–June 2024 [75]



Prescription stimulants

The AMA recognizes that FDA-approved stimulant drugs to help treat psychiatric and related conditions may be essential parts of a treatment regimen. Non-medical use, however, raises significant concerns. More than 15 million Americans are diagnosed with ADHD.[76] Prescription stimulants, such as amphetamine salts or methylphenidate, are treatment agents for ADHD, narcolepsy and other disorders. For nearly a century, prescription stimulants have been the cornerstone evidence-based treatment for ADHD.

- When taken as prescribed, prescription stimulant use has been shown to lower risks of self-harm, unintentional injury, traffic crashes and crime.[77]
- More research is needed across different populations to support positive outcomes and reduce harm.

Stimulant use disorder

The American Society of Addiction Medicine and American Academy of Addiction Psychiatry jointly developed a new clinical practice guide for Stimulant Use Disorder (StUD). According to the guide, StUD "can cause a range of serious and long-term health problems, including cardiac, psychiatric, dental, and nutritional complications. Injection stimulant use increases the risk of contracting human immunodeficiency virus (HIV), viral hepatitis, and other infectious diseases such as infective endocarditis. The stable or rising availability of stimulants, low prices, and potential contamination of stimulants with high potency synthetic opioids such as fentanyl and other components such as levamisole are expected to exacerbate risks." There are currently no FDA-approved medications to treat StUD.

Contingency management (CM) is an incentive-based health care intervention to motivate people to change behavior. CM is well studied in substance use disorder treatment, particularly StUD, with demonstrated superior benefits compared to other behavioral health interventions, including cognitive behavior therapy and 12-step models. The Substance Abuse and Mental Health Services Administration (SAMHSA) provides guidance on prize-based and voucher-based CM models for implementation.[78]

Hallucinogens

Hallucinogens

- Hallucinogen use increased from 2.7% in 2021 to 3.6% in 2024.[79]
- These include psilocybin, MDMA, ibogaine, ketamine, peyote and other entactogenic compounds.
- These agents may be used recreationally or advertised or marketed to treat psychiatric disorders or other conditions.

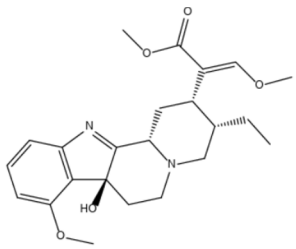
While some states are pursuing legislation to authorize the personal use of these compounds,[80] the AMA broadly recommends that individuals seeking to use these substances to treat a medical condition consult their physician.

The AMA also advocates against the use of any psychedelic or entactogenic compounds to treat any psychiatric disorder except those which have received FDA approval or those prescribed in the context of approved investigational studies.

Kratom

The U.S. Food and Drug Administration (FDA) estimates that approximately 1.7 million people used kratom in 2021.[81] A recent report and scheduling action by the FDA addressed concerns for 7-hydroxymitragynine (7-OH), a naturally occurring compound found in kratom.[82] The FDA cautioned[83] that "there are no FDA-approved 7-OH drugs, 7-OH is not lawful in dietary supplements and 7-OH cannot be lawfully added to conventional foods."

Figure: 7-Hydroxymitragynine (7-OH) chemical structure found in kratom[84]



The AMA recommends that states regulate kratom and ban over-the-counter sales. Before kratom can be marketed, purchased or prescribed:

- Research is needed to determine the safety and efficacy of kratom.
- Relevant regulatory entities need to evaluate kratom's appropriateness for sale before it can be marketed, purchased or prescribed.

Tianeptine

Tianeptine has opioid- and anti-depressant properties and is known as "gas station heroin" because it is commonly sold in gas stations, convenience stores and by online retailers. According to the FDA, tianeptine "is not approved by the FDA for any medical use, is not generally recognized as safe for use in food, and it does not meet the statutory definition of a dietary ingredient."[85] The FDA has issued multiple drug safety alerts because tianeptine products have been linked to serious harm, overdoses and death.

The AMA urges states to ban the sale of tianeptine directly to the public in the absence of research into the safety and efficacy of the substance.

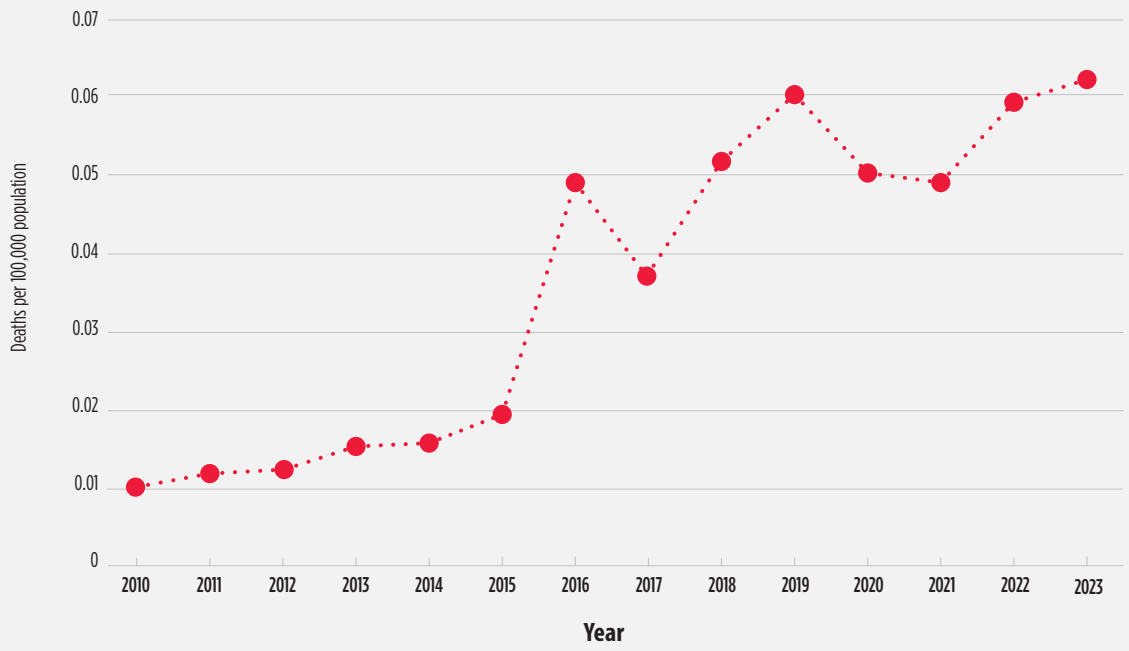
Inhalants

Inhalants are volatile substances in commonly used products such as paint thinner, hair sprays, computer keyboard cleaners and nitrous oxide (NO).[86] While NO can be safely used in medical settings as an anesthetic, when used recreationally, NO can cause severe neurological, cardiovascular and psychiatric complications. Adverse events, including death, associated with NO use is on the rise. The CDC reported, for example, that in Michigan in 2023, ED visits and EMS responses related to NO misuse increased four to five times compared to 2019.[87] Deaths due to NO have increased nearly 600% from 2010 to 2023.[88]

New AMA model state legislation can help states implement common-sense protections to prohibit the sale of dangerous kratom and tianeptine products.

The AMA highlights the need for education and awareness among medical professionals and the public of the health risks with inhalant use. The AMA also supports efforts to limit the ability of non-medical facilities to acquire NO for recreational inhalation purposes.

Figure: Crude nitrous oxide poisoning mortality rate in the U.S. from 2010 to 2023[89]



Stakeholder collaboration

Ending the nation's drug-related overdose and death epidemic—through improving care for patients with pain, mental illness or substance use disorder (SUD) and increasing access to primary and secondary prevention—requires partnership, collaboration and commitment. The AMA continues to urge action across multiple domains.

Increased access to treatment for substance use disorders

- Legislators and regulators at the state and federal levels need to increase support for legislative and other actions to remove administrative and other barriers faced by individuals with SUD. This includes prior authorization, step therapy, dosage caps for medications to MOUD and restrictions on access to methadone.
- The U.S. Drug Enforcement Administration (DEA) and other government agencies are urged to issue clear guidance that DEA's suspicious order reporting requirements will not be enforced against buprenorphine approved by the FDA for the treatment of opioid use disorder (OUD) until further notice.
- Jail and prison officials can implement screening, treatment and other programs that ensure individuals with an OUD—including pregnant women—are able to continue MOUD upon entry, during incarceration, and efforts are made to ensure connections to treatment upon release.

Protect patients with pain

- Medical and other health care professional licensing boards have the opportunity to help patients with pain by reviewing and updating opioid prescribing policies to reflect guidance from the 2022 CDC Clinical Practice Guideline for Prescribing Opioids for Pain.[90]
- Health insurers can show their commitment to ending the epidemic by increasing access to affordable, accessible non-opioid pain care options. Employers can review benefit plans to ensure employees have access to affordable, accessible non-opioid pain care options.

- Policymakers and public health officials can make clear that patients with pain deserve the same care and compassion as individuals with any other medical condition or disease, whether acute or chronic.

Primary and secondary prevention

- Public health officials, colleges, universities and other educational settings can adopt best practices to reduce overdose by supporting widespread overdose education and distribution of naloxone and fentanyl test strips as well as other measures to increase awareness of the contaminated, toxic, illicit drug supply.
- Policymakers are urged to help stop the spread of infectious disease by supporting sterile needle and syringe services programs, including removing restrictions on availability of sterile supplies.
- Faith leaders and community leaders can increase awareness about polysubstance use, availability of treatment and support networks, and overdose education and prevention resources.

Resources

Substance use in the United States: An issue brief from the American Medical Association providing updates on data, trends and policy directions.

CLICK HERE

Help save lives prescribe and distribute naloxone: Recommendations for physicians, policymakers and others to increase access to naloxone.

CLICK HERE

Support medical criteria for medical necessity determinations for mental health and substance use disorders: Specific legislative and regulatory recommendations to ensure health insurers are not allowed to use non-medical criteria when making medical necessity and other determinations.

CLICK HERE

Specific actions policymakers can take to end the nation's drug overdose epidemic.

CLICK HERE

Dispelling myths of bystander overdose: Highlights medical evidence and AMA strong support for primary and secondary overdose prevention efforts.

CLICK HERE

State snapshot of overdose epidemic: A state-by-state snapshot of news articles, public health reports and other information.

CLICK HERE

National snapshot of overdose epidemic: A collection of national news items, research and other information.

CLICK HERE

Prescribing trends

Opioids

CLICK HERE

Naloxone

CLICK HERE

Buprenorphine

CLICK HERE

Endnotes

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