Substance use in the United States: An update on data, policy and future directions

INTRODUCTION

After more than a decade of opioid overdose deaths involving illegally-made fentanyl (IMF) increasing at staggering rates year after year, opioid deaths decreased almost 27 percent nationally from 2023-2024, according to the U.S. Centers for Disease Control and Prevention (CDC).[1] Provisional CDC mortality data show that there were 77,677 drug-related deaths from January 2024 through December 2024.[2] The AMA welcomes the decrease in overdose mortality, although the epidemic of drug-related overdose deaths is far from over—and there are many different substances being used that represent current public health threats.

POLYSUBSTANCE USE IS COMMON

Opioids (typically IMFs) and stimulants used in combination accounted for more than 46 percent of deaths in 2023.[3] Provisional CDC data show that from January 2024 through December 2024, deaths involving cocaine and methamphetamine also decreased slightly but remain at near-historic levels (21,297 and 28,753, respectively).[4] Among people aged 12 years or older in 2024 who were identified to need substance use treatment in the past year, only 19.3 percent (10.2 million people) received substance use treatment.[5]

Data from the 2024 National Survey on Drug Use and Health[6] (NSDUH) show that among people aged 12 or older, the percentage who used illicit drugs in the past year increased from 22.2 percent (or 62.0 million people) in 2021 to 25.5 percent (or 73.6 million people) in 2024. Other key findings of people aged 12 years and older from the NSDUH include:

- Cannabis use increased from 19.0% in 2021 to 22.3% in 2024
- Prescription opioid misuse decreased from 3.0% in 2021 to 2.6% in 2024
- Hallucinogen use increased from 2.7% in 2021 to 3.6% in 2024
- Cocaine use decreased from 1.7% in 2021 to 1.5% in 2024
- Methamphetamine use remained at less than 1% from 2021 to 2024
- Inhalant use prevalence was 1.1% in 2024

This issue brief provides information on emerging substances used in the United States that pose health-related risks; and provides relevant AMA resources and policy recommendations for states to use.[*]

Prescription opioids. Opioid prescribing has decreased by more than 50 percent since 2012.[7] The AMA and the AMA Substance Use and Pain Care Task Force continue to recommend that pain care decisions be made on an individualized basis—weighing the risks and benefits of any treatment, including opioid therapy if indicated. The AMA recommends that states revise policies based on arbitrary numeric thresholds and consider adopting policies based on the most recent recommendations from the Federation of State Medical Boards[8] and the State of

[*] This document is not intended to provide legal or medical advice. The AMA strongly encourages individuals who use substances to discuss such use with their physician.

Minnesota[9] that align with the most recent FDA opioid labeling,[10] where patient-centered, individualized care is recommended.

The AMA Science, Medicine and Public Health group has developed an opioid overdose educational podcast series[11] with expert discussions and insights on topics including treatment options for pain management, best practices in opioid prescribing, standards of care and medications for opioid use disorder, pediatric approaches, primary and secondary prevention, and more.

Xylazine and medetomidine. These are veterinary sedative medications that may be commonly mixed in with IMFs. Xylazine[12] and medetomidine have no approved human use. Using xylazine or medetomidine test strips can help identify when these agents may be present in a drug product. States are encouraged to review their state laws to ensure that there are no civil or criminal penalties for the possession, use, distribution or administration of xylazine or medetomidine test strips.[13]

Hallucinogens. These include psilocybin, MDMA, ibogaine, ketamine, peyote and other "entactogenic compounds" that 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[14], 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 psychedelics 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.

Stimulants. As with other medications, the AMA recognizes that FDA-approved drugs to help treat behavioral health and related conditions may be essential parts of a treatment regimen. Non-medical use, however, raises significant concerns. The American Society of Addiction Medicine and American Academy of Addiction Psychiatry jointly developed a new clinical practice guide for Stimulant Use Disorder[15] (StUD). 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."

Cannabis. The AMA urges states that have already legalized cannabis (for medical or adult use or both) to take steps to regulate the product effectively to protect public health and safety, including but not limited to: regulating retail sales, marketing, and promotion intended to encourage use; limiting the potency of cannabis extracts and concentrates; requiring packaging to convey meaningful and easily understood units of consumption; and requiring that for commercially available edibles, packaging must be child-resistant and come with messaging about the hazards about unintentional ingestion in children and youth. AMA model state legislation is available for state and specialty society use.

The AMA supports the use of strong public health messaging on the health effects of cannabis and cannabinoid inhalation and ingestion, with an emphasis on reducing initiation and frequency of cannabis use among adolescents, especially high potency products; use among individuals who are pregnant or contemplating pregnancy; individuals who are breastfeeding; and avoiding cannabis-impaired driving. The AMA further urges states to apply these laws to Derived Psychoactive Cannabis Products and Hemp-Derived Intoxicating Cannabinoids (e.g., Delta-8 and Delta-10 products).The AMA Cannabis Task Force developed an educational podcast series[16] to support health professionals and policymakers with evidence-based information on cannabis and its impact on health across a wide range of conditions, such as pregnancy, pediatrics, pain, psychiatric conditions and its pharmacology.

Kratom. The U.S. Food and Drug Administration estimates that approximately 1.7 million people used kratom in 2021[17], and the FDA recently issued a report and scheduling action addressing concerns for 7-hydroxymitragynine (7-OH), a naturally occurring compound found in kratom.[18] The FDA cautioned[19] 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."

The AMA recommends that states regulate kratom and ban over-the-counter sales. The AMA also urges that—before kratom can be marketed, purchased, or prescribed—the safety and efficacy of kratom should be determined through research and clinical trials, and subsequently evaluated by relevant regulatory entities. The AMA also agrees with the FDA that kratom should be regulated, and its safety and efficacy should be determined through clinical trials before it can be marketed, purchased, or prescribed as a treatment for any condition.

Tianeptine. This substance, which has opioid- and anti-depressant properties, is known as "gas station heroin" because it is commonly sold in gas stations, convenience stores and by online retailers. 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."[20] 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. This includes a variety of volatile substances, including chemical solvents, aerosols, gases, and nitrites. These are often commonly used products such as paint thinner, hair sprays, computer keyboard cleaners, and nitrous oxide (NO).[5] While NO can be safely used in medical settings as an anesthetic, when used recreationally, NO can cause severe neurological, cardiovascular, and psychiatric complications. 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.[21]

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.

CONCLUSION

The AMA recognizes that the use of illicit substances remains a public health threat. The AMA supports ongoing efforts of the National Institute on Drug Abuse, the Drug Enforcement Administration, the Centers for Disease Control and Prevention, the Department of Justice, the Department of Homeland Security, state departments of health, and poison control centers to assess and monitor emerging trends in illicit drug use, and to develop and disseminate fact sheets, other educational materials, and public awareness campaigns.

The AMA supports a collaborative, multi-agency approach to addressing emerging and ongoing public health threats for illicit substances, including information and data sharing, increased epidemiological surveillance, early warning systems informed by laboratories and epidemiological surveillance tools, and population driven real-time social media resulting in actionable information to reach stakeholders. This requires adequate federal and state funding of agencies tasked with addressing the issues raised in this issue brief as well as continued education and prevention efforts on emerging trends in illicit drug use.

FOR MORE INFORMATION

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