

The JOURNAL of the INDIANA DENTAL ASSOCIATION

# Journal IDA

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2 HOURS  
OF OPIOID  
CE

## Opioid Abuse and Prevention 2025

## How to Receive Credit for this CE Issue

This self-study publication is ideal for helping to fulfill the 8-hour MATE Act requirement for DEA registration renewal, but it is also a useful refresher on opioid abuse and prevention for any dentist.

Once you have finished reviewing this publication, you will be ready to take the online quiz and receive 2 hours of CE credit. The cost of the quiz and certificate of completion is **\$40 for member dentists** and **\$200 for non-members**. To access the online quiz, visit our website:

**[www.indental.org/opioids](http://www.indental.org/opioids)**

If you prefer a paper or PDF version of the quiz, email [terri@indental.org](mailto:terri@indental.org). Regardless of how you choose to take the quiz, upon completion with a score of 80 percent or higher, you will receive a certificate from IDA. You may re-take the quiz up to two times if you are not satisfied with your score.



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*Use of this  
publication for CE  
purposes expires on  
October 31, 2027.*

## Is Opioid CE Still Required?

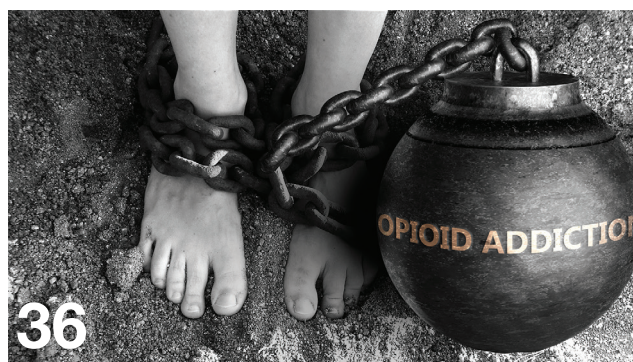
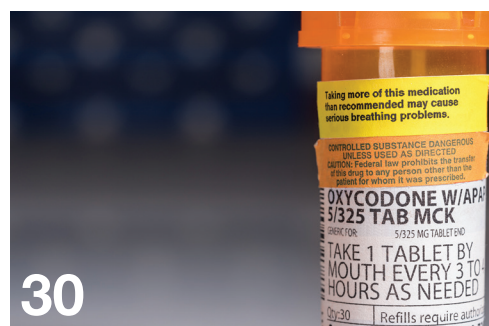
Beginning in 2019, Indiana began requiring dentists with a CSR to take 2 hours of opioid abuse and prevention education during each renewal cycle. This requirement sunsetted on July 1, 2025. **However, the federal MATE Act requires dentists with a DEA Registration to complete 8 hours of opioid CE for any renewal after June 27, 2023. The MATE Act is a one-time requirement that will end in June 2026.**

Even for practitioners without an Indiana CSR/DEA Registration, this publication is relevant and useful CE for any dentist to understand the evolving opioid crisis, traits of opioid addiction, drug-seeking behaviors and more.

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# Planning Ahead for Members

Dr. Vanchit John

**PLANNING FOR THE** articles for the Ethics/Opioid Issue of the Journal of the Indiana Dental Association proved to be quite a challenge. I was coming off from a very busy time at school and my practice, and was a bit lost with regards to how to approach the upcoming issue of the Journal. Jay Dziwlik sent me a list of suggestions for articles which I put on the back burner while I was working on several other projects and putting out fires that had developed along the way. It was after the Board Retreat that the leadership had in July that I began to sequence my thoughts on how I needed to go about assembling the articles for this issue of our journal. I need to refine the list of suggested topics for the issue and then figure out who to invite to write some of the articles.

I have always felt it important to engage residents in my department to get involved with the writing process early in their residency! Accordingly, I began working with the residents and assigning topics to them for their input. I also worked with my colleagues in the Allied fields of Dental Hygiene and Dental Assisting to help with their expertise on selected topics. In the process, I re-learned how obsessive I become when faced with a task that needs to be completed with a deadline that is looming. While I always knew how I dealt with deadlines, I was taken by surprise by my own intensity in accomplishing this goal.

This issue of the Journal is packed with practical and informative articles to help the clinician and member of the Indiana Dental Association to become acquainted with current and relevant information as it relates to their clinical practice. Scientific information is constantly being updated, rules and regulations being changed frequently. As a clinician, keeping up with all these changes is a big challenge. I am hoping that the Journal of the Indiana Dental Association continues to be a positive



benefit for our members and encourages you to continue to participate with the IDA and its component societies, the one that you belong to, while also getting more involved with organized dentistry in general.

We begin the issue passionate editorial from our President, Dr. De La Rosa, who sends out a clarion call to all of us to show up and participate. The IDA has been blessed with strong leadership and a great group of staff. We want to encourage the younger groups of dentists to get involved and soon take over the reins of leadership. The articles in this issue of the Journal have been carefully curated and will provide our members with a lot of



good information. I hope you find the reading to be a useful addition to your overall knowledge base as it applies to the overall theme of Ethics and Opioids.

On a different topic, now as the head of the IDA's Communication Committee, I have been working with the committee and Kathy Walden to first introduce you to the Board of Trustees at a personal level, then moving on to the IDA staff and then to the executive directors of the component societies. My goal is to make sure you get to see the faces behind all that takes place at the IDA and the 13 component societies along with the ASDA Trustee. The IDA staff and the staff at the component societies are the backbone of our organizations. It is important that we recognize them and appreciate the work that they do on our behalf on a daily basis. It is also important that we recognize all our volunteer members who give tirelessly as they participate at all levels of our organizations. Our organizations would not be able to function without the efforts of all our members who work in symbiosis with our staff. Kudos to all of you who keep the engines running. We see you and we appreciate you. Follow us on Instagram, Facebook and X @indental. Give us a "like." We appreciate it.

I think you will agree that the Ethics/Opioid Issue has a lot of good information packed within each page. Completing the quizzes helps you to gain CE credits for your efforts that can be applied toward the CE credits needed for your two-year cycle.

Looking ahead, plans for the next three issues of the journal are underway. I have already started the ball rolling with contacting authors whose writings will be a big benefit to our members.

We hope to continue to provide our members with a lot of new information as we try to add more topics and feature clinical topics and more that are of interest to the group. Let me know what you think. Are there topics of interest that you think should be included in future issues of our Journal?

Tell us more. We want to hear from you.

May you be well. #JIDAPRIDE

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# So, What's Going On?

Dr. Rebecca De La Rosa

**SO MANY THINGS** are changing in our world. Automobiles drive themselves, carrying cash is taboo and AI summarizes data and creates documents in minutes! Many of the resources and modus operandi that we take for granted are being modified or are disappearing.

Dentistry is also changing. Recent surveys show that as baby boomers retire, the dentist population is shifting to a younger and predominantly female group of professionals. This shift may also explain the emerging trend which emphasizes life-balance and focusing more on family, health and work.

A new trend in practice modality is also being seen. On average, after five years of DSO employment, employee dentists are transitioning to private practice ownership. This trend allows early career dentists to reduce debt, develop a business plan and hone their clinical skills and speed.

We are also seeing changes in how the ADA is being perceived by some dentists. I have observed our members express their frustration, confusion and distrust for the organization that has been a stalwart for years. I have heard unfavorable comments regarding the ADA's budgetary activities and cancellation of SmileCon in Indiana. The tone of these comments is new to hear and concerning. Our IDA Delegation to the ADA House is eager to work with the ADA to be part of the solution to repair our trust in our national association. As a tripartite, we are stronger together, especially with national policies.

May I assure you, Your IDA leadership is listening!

Prior to the news of the ADA's financial situation, IDA leadership was already addressing budgetary issues. As our Membership and Finance Committees reported changes in revenue due to Baby Boomer retirements, the IDA proactively found opportunities to incorporate fiduciary checks and balances, while also keeping relevant programs and benefits offerings for our members.

To deter the lack of fiduciary oversight that has been witnessed at the national level, the IDA 2025 House of Delegates adopted Bylaws changes to enhance our financial stability.

Changes to our Bylaws incorporate spending caps, more transparency in fiduciary budgeting and reporting. Our Finance Committee is readily scrutinizing and preparing scheduled reports to present to the Board of Trustees regarding the management of our investments, reserves and spending accounts.

The IDA leadership is always working to stay relevant to our members.

The IDA is always looking for ways to anticipate a potential weakness or threat and address it with actions for positive change and opportunity. The talent of both volunteers and staff at the IDA is exceptional. Volunteers and staff work well together. Not only are they member focused, they also ask challenging questions to ensure that the IDA remains relevant to members.

Another change our members are facing is the workforce shortage. Dentists throughout the state constantly reach out to our leadership and to the IDA staff to express the urgency of addressing this trying issue.

As a result, the 2025 House of Delegates charged the President to appoint a taskforce to address the Oral Preventive Assistant Role (OPA). OPA trained individuals will be able to help relieve the backlog of patients needing prophylaxis care. Both the OPA Taskforce and Governmental Affairs Committee are working together to address the workforce challenge being experienced by most dentists in our state.

In addition to dentists, the OPA five-member dentist taskforce is working with representatives from the hygienist and dental assistant associations, as well as a dental school faculty member. Education and collaboration with all roles in the dental team is key to addressing this workforce need. Our goal is to address this workforce shortage with proficiency in training, education and efficiency.

Here are some other things going on at the IDA!

Members often ask about insurance reimbursements. Legislatively, the IDA represents approximately 80 percent of Indiana dentists. Collectively, we are a strong voice. Numbers matter at the state house when we discuss dental matters like insurance and reimbursements. Further, the IDA makes sure legislators are aware of our collective philanthropic presence. Indiana dentists are very generous to those with limited resources and access to care.

Members often ask about the value of membership. Member benefits and programs are being objectively evaluated and modified to reflect what our members need. As busy professionals, we often struggle to find the time to research what is best for our practices, well-being and educational needs. The IDA is here by your side.

The focus of both our staff and committee chairs is to filter through a plethora of program and benefit options. They review and assess continuing education and insurance

offerings and provide members opportunities to volunteer and join colleagues in community building events. Simply put, the IDA does the legwork so you can save time and make choices tailored to fit your practice and life.

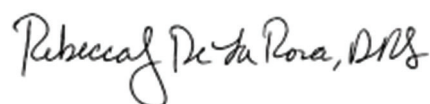
What an exciting time to be a member of the Indiana Dental Association! As an association we have the unique opportunity to listen to our members, volunteers and families to grow the IDA into an association that connects with members on their terms!

I encourage you to visit our website, [INDental.org](http://INDental.org). Fill out a volunteer form and get involved with leadership or a committee, register for continuing education, peruse our many member benefits and link into our many social media options. Take a look at our most recent addition #IDAPride.

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The Time is Now to get involved and make this Your IDA!

Kindest Regards,



## About the Author



Dr. Rebecca De La Rosa is a dentist from Avon and is the 2025-2026 IDA president.



# The MATE Act and its Implications for Dentistry

Dr. Ashwin Shastri  
Dr. Avinash Nagpal  
Dr. Vanchit John

**THE MEDICATION ACCESS** and Training Expansion Act (MATE Act) mandated that dentists who completed their DEA registration or renewal after June 27, 2023, must have completed eight hours of training on opioid and substance use disorder management. This is and was a one-time training requirement. It was introduced to address the opioid crisis while also working toward improving prescribing practices.

## The Opioid Crisis in the United States

It was estimated that 105,000 people died from drug overdose in 2023 of which nearly 80,000 of those deaths involved opioids. This amounted to about 76 percent of the deaths. The number of deaths in 2023 represented almost ten times that which was seen in 1999. However, deaths from opioid overdose declined 4 percent from 2022 to 2023. Deaths involving various types of opioids from 2022-2023 involving synthetic opioids primarily illegally made fentanyl and fentanyl analogs decreased by 2 percent. The rate of overdose deaths involving heroin decreased approximately 33 percent. The rate of overdose deaths involving prescription opioids decreased nearly 12 percent. This data was taken from CDC data.<sup>1</sup>

Three waves of opioid overdose deaths were reported. The first wave began with increased prescribing of opioids in the 1990s. The second wave began in 2010, with rapid increases in overdose deaths involving heroin. While the third wave began in 2013, with substantial increases in overdose deaths involving synthetic opioids, particularly those involving illegally made fentanyl and fentanyl analogs

In 2023, almost 47 percent of drug overdose deaths involved both opioids and stimulants.

In 2016, dentists in the U.S. issued over 11.4 million opioid prescriptions, with opioids accounting for 22.3 percent of all US dental prescriptions.<sup>1</sup> In 2022, there was a decrease in the number of prescriptions of approximately 45 percent. While this is positive news, the rate of this decline has slowed since then which has required some reassessment of prescribing practices among dentists.

## Key Aspects for Dentists

Effective June 27, 2023, it was federally mandated that health care practitioners including dentists that apply for or renew their Drug Enforcement Administration (DEA) registration to prescribe controlled substances attest that they have completed the training by checking a box on their online DEA application form. This applied to all dentists requiring DEA registration to prescribe controlled substances (Schedules II, III, IV, and V). The training requirements of the MATE Act involve completing eight hours of training on the treatment and management of patients with opioid or other substance use disorders.

## Approved Providers

The IDA recommends that dentists complete the training through organizations approved by the Accreditation Council for Continuing Medical Education (ACCME).<sup>3</sup> Other training options to comply with these requirements have included using resources through the ADA<sup>4</sup> while also considering courses through organizations such as ACES<sup>5</sup> and Elite Learning.<sup>6</sup> Some

courses may be self-guided e-learning or live webinars. Non-compliance can lead to issues with DEA registration renewal.

### Sun Setting on the Opioid CE Requirements

The Indiana opioid CE requirement has been sun set as of July 2025. Dentists can still apply MATE Act CE towards their Indiana CE requirements. However, other key aspects of opioid regulations remain in effect. These include.

Limits on initial opioid prescriptions: Senate Enrolled Act 226<sup>7</sup> (SEA 226), which imposes a seven-day limit on initial opioid prescriptions for certain patients, remains active.

Prescription Drug Monitoring Program (INSPECT): Requirements related to utilizing the INSPECT program before prescribing opioids or benzodiazepines continue to be in place.

Patient assessment and treatment protocols: Regulations outlining standards for patient assessment, non-opioid treatment options, patient consent, follow-ups and other aspects of safe prescribing practices remain.

It is also important to remember that the state continues to monitor the situation and may introduce new laws or amend existing ones in the future to address the opioid crisis.

### What is the New Opioid Law in Indiana?

Under SEA 226, a physician writing an initial opioid prescription for a patient may not prescribe more than a seven-day supply, unless an exception applies. For an adult patient aged 18 or older, there are no quantity limits on subsequent opioid prescriptions written by that physician.

In summary, while a specific CME requirement related to opioid education has expired, other significant opioid prescribing and monitoring regulations in Indiana remain in force. It's crucial for healthcare professionals and patients to stay informed about the latest developments in this area.

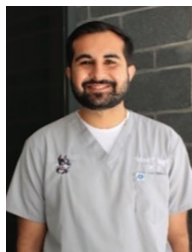
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# Spotting the Signs: Identifying and Managing Drug-Seeking Behavior in the Dental Office

Dr. Monica Gibson  
Dr. Neetha Santosh  
Dr. Vanchit John

**THE MISUSE OF** prescription opioids remains a significant public health crisis. Dentists, who often treat acute pain resulting from surgical or emergency procedures, are uniquely vulnerable to patients who may be seeking narcotics. Unlike physicians with long-term patient relationships, dentists frequently see new patients in acute pain, which complicates the ability to distinguish between genuine pain and drug-seeking behavior. This paper explores behavioral, verbal, and clinical red flags, reviews evidence from research, and offers practical strategies for dental professionals to address this challenge.<sup>1</sup>



## Behavioral Red Flags

Several patient behaviors observed even before a clinical examination is done can indicate potential drug-seeking behavior. These include:

- Demanding or manipulative conduct, such as insisting on immediate attention or becoming confrontational when requests are denied.
- Patients may specifically request certain opioids by name or dosage, often citing implausible stories to justify their need.
- A common tactic is to claim prescriptions were lost or stolen, or to seek care from multiple clinicians, a practice known as “doctor shopping.”
- Doctor shopping may also include claims of having been the patient of a dentist or physician who recently died or retired.<sup>2</sup>
- Suspicious scheduling patterns, such as requesting the last appointment of the day, after-hours visits or calling just before weekends, are also common.
- Claims of visiting relatives or just passing through the area when the pain or problem arose.
- Over- or under-dressed for a dental appointment.
- Finally, patients who insist on paying in cash rather than using insurance may be attempting to avoid leaving a record.<sup>2,3</sup>



### Table 1—Identifying Drug Seeking Patients

- Patients seeing multiple providers
- Patients requiring higher doses of medications each time
- Patient being assertive and demanding
- Not completing medical history or evading questions
- Very knowledgeable about medical and dental conditions
- Dressed inappropriately for dental appointment
- Reporting allergies to non-narcotic medications
- Reporting lost prescriptions frequently
- Insisting on paying cash rather than insurance

### Verbal Red Flags

The way patients describe their pain or medical history may also reveal concerning patterns. Below are some verbal red flags that might identify a drug-seeking patient:

- Some claim allergies to all non-opioid analgesics, leaving opioids as their “only option.”
- Others exaggerate pain severity, often rating it as a “10 out of 10” in situations where clinical findings suggest otherwise.
- Refusal to consider alternatives, such as ibuprofen or acetaminophen, is another red flag.
- Patients who display unusually detailed knowledge about opioid medications, including dosage strengths or even street values, may also warrant closer scrutiny.
- Finally, vague or evasive answers regarding past medical or dental history can raise suspicion.<sup>1,4</sup>

### Physical and Clinical Red Flags

Clinical examinations often reveal subtle but important indicators of substance misuse.

- Poor oral hygiene, untreated decay and periodontal disease are frequently observed in patients with substance use disorders.
- Xerostomia, or dry mouth, is a common side effect of many drugs, while oral lesions may indicate infectious diseases associated with intravenous drug use.

- Bruxism, often linked to stimulant use, results in excessive tooth wear.
- Abnormal pupil responses, such as dilated or constricted pupils unresponsive to light, may further suggest current drug influence.<sup>5-7</sup>
- Clinicians should watch for rapid speaking and/or incoherent conversation.<sup>2</sup>
- Watch for skin tracks and related scars on the neck, axilla, forearm, wrist, foot and ankle. Such marks are usually multiple, hyper-pigmented and linear. New lesions may be inflamed.
- Patient may also show signs of “pop scars” from subcutaneous injections.<sup>2</sup>

### Evidence from Research

Although rigorous epidemiologic data are limited, case reports and commentary indicate that dental offices are vulnerable to drug-seeking and diversion attempts: dentists may be targeted by individuals seeking prescriptions for non-medical use or diversion. One large administrative study of dentist-prescribed opioids in South Carolina during 2012–2013 found that nearly all dispensed prescriptions (99.9 percent) were for immediate-release opioids, and that 96.2 percent of these were first-time (initial) fills rather than refills. That same study also documented a “notable minority” of dental patients who had multiple, over-

## Table 2—Dealing with patients who you suspect of seeking drugs

- Work as team with your entire staff and careful documentation
- Use the INSPECT program to review patient's medication history (see page 26 for more information)
- Check with other providers
- Be calm and non-confrontational
- Focus on dental treatment and offer resources for addiction treatment

lapping opioid prescriptions (i.e., concurrent prescriptions) within time windows of 30, 90, and 180 days—an indicator of risk for misuse or diversion.<sup>5</sup>

Nationally, dentists account for a substantial fraction of opioid prescribing: a 2024 CDC summary notes that dentists prescribe about 8.6 percent of all opioid prescriptions in the U.S. Among adolescents and young adults, dental procedures often serve as an initial exposure to opioids. For example, in one large cohort of approximately 15,000 youth given a first dental opioid prescription in 2015, 6.8 percent went on to fill another opioid within the following year.<sup>8</sup>

In a dental school outpatient clinic, 20.6 percent of patients surveyed reported either recent problematic alcohol use or illicit drug use, a rate higher than general population benchmarks. The same survey (n ≈ 384) reported that 7.4 percent of patients disclosed problematic alcohol use, and 18.6 percent reported illicit drug use. Because adolescents are a high-vulnerability group for substance misuse, the fact that dentists may provide a first opioid prescription underscores the potential for downstream misuse.<sup>9</sup>

### Practical Steps for Dentists

When suspicion arises, dentists must balance patient care with caution. The entire dental team should be engaged in observing and documenting patient behavior, as multiple perspectives increase accuracy. Prescription Drug Monitoring Programs (PDMPs) provide valuable insight into a patient's history of opioid prescriptions and are essential tools in identifying potential doctor shoppers. Verification of medical histories with prior providers can also help confirm or rule out suspicious claims. Dentists should remain

calm and non-confrontational, clearly explaining treatment plans that emphasize non-opioid options. Thorough documentation of observed behavior, discussions, and prescribing rationale protects both patient and provider. Finally, when appropriate, dentists should offer resources or referrals to addiction treatment services.

### Challenges in Measuring True Incidence

The true incidence of drug-seeking behavior in dentistry is difficult to determine. Patients who misuse drugs rarely admit their intentions, and many present with subtle or manipulative behaviors that closely resemble legitimate pain presentations. Prescription monitoring helps reduce risk but cannot track drugs obtained through friends, relatives, or illicit sources. Research often underestimates the problem due to reliance on self-reported data.

### The Ethical Role of Dentists

Dentists play an important role not only in treating dental pain but also in protecting patients and the public from the consequences of opioid misuse. Ethical prescribing requires balancing compassion for genuine pain with vigilance against abuse. By prioritizing non-opioid alternatives, patient education, and safe prescribing practices, dentists can significantly reduce the risk of addiction and diversion. As frontline providers, dentists are uniquely positioned to contribute to public health efforts in combating the opioid epidemic.

## Conclusion

Drug-seeking behavior poses a complex challenge for dental professionals. Recognition of behavioral, verbal, and clinical warning signs, combined with tools like PDMPs and evidence-based prescribing, empowers dentists to address the problem proactively. Through teamwork, communication, and patient-centered care, dentists can protect their practices, serve their patients responsibly, and play a critical role in reducing opioid misuse in the broader community.

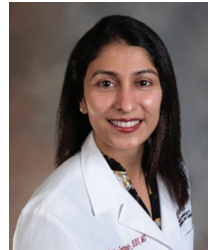
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# Striking the Balance: Rethinking Pain Management in Dentistry

Dr. Scott Papineau



## Introduction: The Dilemma of Dental Pain

Pain, or even the fear of pain, is often the driving factor behind a patient's reluctance to seek dental care.<sup>1</sup> As dental professionals, we must be equipped to manage pain safely, effectively, and empathetically. This requires a strong understanding of both the pharmacologic tools at our disposal and the current regulatory and ethical climate surrounding their use.

## Understanding Pain: A Physiologic and Emotional Response

Pain is both a sensory and emotional experience that arises in response to tissue damage, or in some cases, perceived tissue damage.<sup>2</sup> In dentistry, pain commonly results from inflammation following surgical procedures or trauma to the oral tissues. Specialized nociceptors detect stimuli such as pressure, temperature, and chemical irritants, relaying signals through peripheral nerves to the central nervous system. The result is not only perception but also an emotional response that can vary widely between individuals.

## First-Line Agents: NSAIDs

Non-steroidal anti-inflammatory drugs (NSAIDs) remain the first-line treatment of dental pain management.<sup>3</sup> These agents exert their analgesic effects by inhibiting the cyclooxygenase (COX) enzymes, primarily COX-2, which mediate the production of prostaglandins involved in inflammation and pain signaling. Their anti-inflammatory properties make NSAIDs highly effective for the kind of inflammatory pain seen in most dental procedures.<sup>4</sup>

However, NSAIDs are not without risk. Gastrointestinal bleeding, renal impairment, and cardiovascular complications are well-documented concerns, particularly in medically complex patients.<sup>5</sup> It is critical that dentists evaluate the patient's overall health before recommending NSAIDs, as inappropriate use in at-risk individuals may result in serious and potentially life-threatening adverse outcomes. A comprehensive medical history and medication review should inform prescribing decisions, especially in patients with conditions that contraindicate NSAID use.

## Acetaminophen: A Non-Inflammatory Alternative

Acetaminophen (Tylenol) is another commonly used analgesic, especially in patients who cannot tolerate NSAIDs. While its precise mechanism is not fully understood, acetaminophen is believed to work centrally, likely by inhibiting prostaglandins within the brain.<sup>6</sup> It lacks anti-inflammatory activity, but it is often well-tolerated and effective when used alone or in combination with NSAIDs for moderate to severe pain.

Its safety profile, however, is routinely questioned due to concerns about hepatotoxicity, particularly in cases of overdose or chronic high-dose use.<sup>7</sup> Adherence to safe daily limits (not exceeding 3,000–4,000 mg per day) is essential. Patients can easily exceed this limit unintentionally, as acetaminophen is a common ingredient in many over-the-counter cough, cold, and flu remedies, making accidental overdose a real risk, especially when multiple products are taken concurrently.

## Opioids: A Double-Edged Sword

Opioids such as hydrocodone and oxycodone are reserved for managing more severe or refractory pain. These agents act on mu-opioid receptors in the central nervous system, mimicking endogenous endorphins to produce powerful analgesia.<sup>8</sup> However, they can also cause sedation, nausea, and respiratory depression.

Because of variable metabolism, particularly involving the CYP2D6 enzyme, opioid efficacy can differ dramatically between patients. Drug interactions with SSRIs or genetic variability affecting CYP2D6 can make some opioids, such as codeine or tramadol, less effective or more dangerous.<sup>9</sup>

Although opioids may be necessary for some cases of acute dental pain, their use must be judicious. Dentists should rely on opioid-sparing approaches whenever possible and follow appropriate prescribing guidelines when opioids are deemed necessary.

### What Do the Guidelines Say?

Current dental guidelines from organizations such as the ADA, ADEA and CDC strongly recommend non-opioid therapies as first-line agents for acute dental pain.<sup>10</sup> The use of ibuprofen and acetaminophen, either alone or in combination, has been shown in systematic reviews to be as effective, or more effective, than many opioids for dental pain.<sup>11</sup>

Guidelines also stress the importance of individualized care. Factors such as patient age, comorbidities, and prior analgesic use should influence clinical decision-making. The emphasis is not just on what we prescribe, but how and why, which requires practitioners to balance evidence-based protocols with the needs of the patient in front of us.

### Navigating Subjective Pain in Objective Systems

One of the challenges in dental pain management is that pain is inherently subjective.<sup>2</sup> The same procedure may provoke wildly different levels of discomfort in different individuals. This variability makes standardization difficult and underscores the need for clinician flexibility.

We must listen actively to our patients, assess both their medical history and their verbalized concerns, and not let protocols blind us to individual experience. Objective guidelines are essential, but so is empathy.

## The Pendulum Swings: From Overuse to Underuse?

In years past, it was not uncommon to see 20 or 30 tablets of hydrocodone prescribed for a single extraction, an approach that, in hindsight, often exceeded clinical necessity. In response to the opioid epidemic, both public sentiment and clinical guidelines have shifted dramatically. Today, many dentists have swung to the opposite extreme, avoiding opioid prescribing entirely. In fact, a growing number of dentists are choosing not to renew their DEA licenses, thereby removing their ability to prescribe opioids, even in cases where such medications might be genuinely indicated.<sup>12</sup>

Compounding this shift are legislative changes such as mandated electronic prescribing.<sup>13</sup> While intended to reduce diversion and improve safety, these systems often require expensive third-party software integrations and administrative overhead. For smaller practices, especially those in rural or underserved areas, the cost and complexity of complying with e-prescribing mandates can be prohibitive. The result? Even fewer providers are willing or able to prescribe opioids when needed.

This dilemma is not unique to dentistry. It is playing out across all of healthcare. My wife and I experienced it firsthand. After giving birth to our twin boys via C-section—both over eight pounds—she received little more than acetaminophen and ibuprofen for pain management. Despite the clear physical toll of childbirth, especially with large twins, her discomfort was dismissed and adequate relief was never offered. We were left to manage her recovery in frustration and disbelief, not because providers lacked compassion, but because they had become so paralyzed by fear of overprescribing that they failed to act.<sup>14</sup> We must do better. Compassionate care requires discernment. It requires clinical judgment. And it requires a willingness to treat pain seriously.

All of this raises an important ethical question: Should we be performing extractions or other invasive procedures if we are no longer equipped to treat all potential outcomes, including significant postoperative pain?

While minimizing opioid use is unquestionably a public health goal, so too is preserving the ability to treat pain when non-opioid options fail. The pendulum should not rest at either extreme. We must find a reasonable middle ground—one that balances responsible prescribing with

compassionate, patient-centered care. In our effort to right past wrongs, we must not create new harm by allowing our patients to suffer unnecessarily. The goal should not be zero opioids, but it should be appropriate opioids, prescribed thoughtfully, when truly needed. Dentists need the tools, training, and flexibility to make informed, individualized decisions—not barriers that force an all-or-nothing approach.

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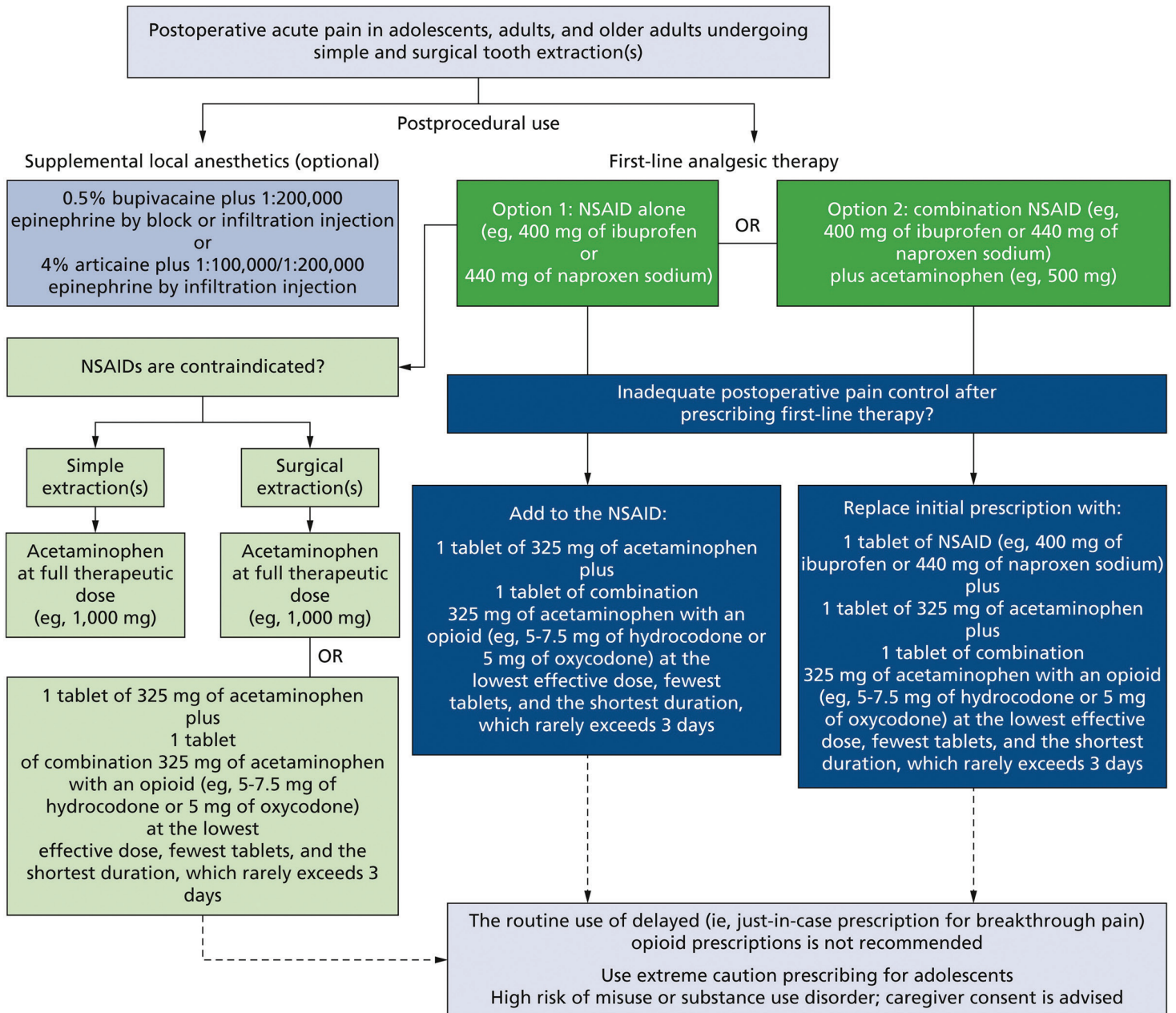
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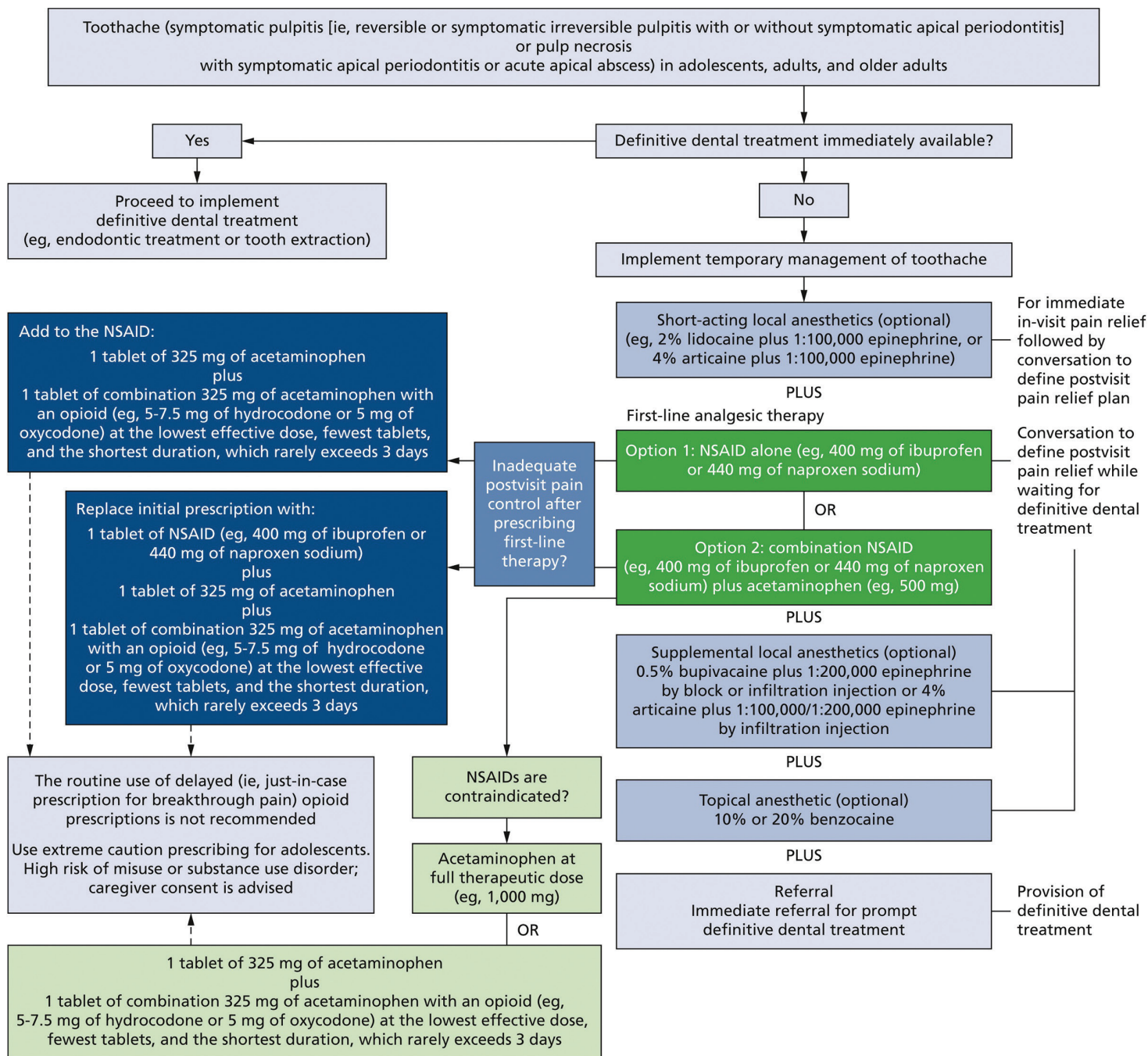


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Clinical pathway for the pharmacologic management of acute dental pain: postoperative pain after simple and surgical tooth extraction(s) in adolescents (aged 12-<17 years), adults (aged 17-<65 years), and older adults ( $\geq 65$  years). NSAID: Non-steroidal anti-inflammatory drug. From The Journal of the American Dental Association February 2024 (155102-117.e9DOI: (10.1016/j.adaj.2023.10.009)



Clinical pathway for the temporary pharmacologic management of acute dental pain: toothache (symptomatic pulpitis [ie, reversible or symptomatic irreversible pulpitis with or without symptomatic apical periodontitis] or pulp necrosis with symptomatic apical periodontitis or acute apical abscess) in adolescents (aged 12-<17 years), adults (aged 17-<65 years), and older adults (≥65 years). NSAID: Non-steroidal anti-inflammatory drug. From The Journal of the American Dental Association February 2024 (155102-117.e9DOI: (10.1016/j.adaj.2023.10.009)



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# Non-Opioid Therapies to Manage Dental Pain: An Overview

Samuel Caskey  
Milan Zaida Lynn  
Dr. Vanchit John

**DENTAL PAIN CAN** manifest in several different forms. The nature of the pain—sharp or dull, constant or intermittent, or triggered by certain stimuli—helps the clinician arrive at an accurate diagnosis.

## Types of Pain: A Brief Overview

Sharp, sudden pain may be triggered by hot, cold, or sweet foods/drinks. When the pain quickly subsides, this may indicate tooth sensitivity because of attrition or abrasion of the enamel or gingival recession. Pain that lingers after the stimulus is removed may indicate a more advanced and serious issue, such as irreversible pulpitis. Sharp pain when biting down may be due to a cracked tooth, a loose filling, or a cavity. It may also result from a dental abscess.

Dull, persistent pain is often a sign of a more serious, long-term problem. Causes for constant and dull pain may include presence of an infected tooth or a dental abscess. It may also result due to clenching or grinding their teeth (bruxism).

Throbbing pain which can be severe, pulsating, is a more urgent type of dental pain. It is usually due to the presence of an infection, commonly accompanied by swelling and fever. It is often a sign of a dental emergency.

Referred pain is when a patient feels pain in a tooth, but the actual problem is located elsewhere. Causes may include sinus infection along with other conditions like trigeminal neuralgia or ear infections.

## Management of Dental Pain

Safe and effective management of acute dental pain can be accomplished with nonopioid and opioid analgesics. This article will focus on the non-opioid therapies to manage dental pain.

**Nonopioid therapies are at least as effective as opioids** for many common types of acute pain. Non-opioid options for dental pain include over the counter (OTC) medications like ibuprofen and acetaminophen, prescription medications such as anti-seizure and anti-depressant drugs, and non-drug therapies like heat or ice application, acupuncture, massage, and physical therapy.

For mild to moderate pain, a combination of ibuprofen and acetaminophen is often more effective than opioids and carries fewer risks. It is important that we as clinicians discuss our pain management strategies with our patients ahead of time to help patients understand office protocols. Clinicians we should work on maximizing the use of nonpharmacologic and non-opioid therapies for our patients as part of surgical and non-surgical therapies rendered. If we are considering opioid therapy to manage acute pain it is important to weigh the risks to the patient. Many acute pain conditions can often be managed most effectively with nonopioid medications. Noninvasive and nonpharmacologic approaches to acute pain also have the potential to improve pain and function without risk for serious harm.



## Nonopioid Analgesics

Non-opioid pain medications can relieve pain without the addictive or dependence-inducing effects of opioids. They are often used as a first-line treatment for mild to moderate pain.

Non-steroidal anti-inflammatory drugs (NSAIDs) are a class of medications, available both over the counter (OTC) and by prescription, used to relieve pain, reduce fever, and decrease inflammation from conditions like arthritis and injury.

The following Information is taken from the ADA Library Resources on Oral Analgesics for Acute Dental Pain—Oral Analgesics for Acute Dental Pain (<https://www.ada.org/resources/ada-library/oral-health-topics/oral-analgesics-for-acute-dental-pain>)

Nerve pain follows a pathway beginning with a transduction step, where noxious stimuli are converted into electrical signals, then continues with a transmission step as these signals travel from peripheral nerves to the spinal cord, leading to a perception step in the brain. Our central nervous system interprets them as pain, and a final modulation step occurs where descending pathways can amplify or dampen the pain experience.

Nonopioid analgesics include non-steroidal anti-inflammatory drugs (NSAIDs), as well as acetaminophen. Examples of NSAIDs include ibuprofen, naproxen, celecoxib, and aspirin. These medications inhibit cyclooxygenase (COX), which is an enzyme that is involved in the conversion of arachidonic acid to prostaglandins (PG). PGs are mediators of inflammation, fever, and pain.<sup>1,2</sup> NSAIDs focus to block the transduction step of the pain pathway. On the other hand, Acetaminophen provides pain relief through the inhibition of prostaglandin synthesis in the central nervous system, thus blocking the transmission and perception step of the pain pathway.<sup>3</sup>

NSAIDs act peripherally, by reducing inflammation at the site where it is occurring. As acetaminophen acts centrally by blocking the transmission of pain signaling within the central nervous system, taking NSAIDs and acetaminophen in combination has been shown to be highly effective in reducing mild to moderate pain, as the pain is blocked at both ends of the nociceptive pathway.

Acetaminophen and some NSAIDs (aspirin, ibuprofen, and naproxen sodium) are available to patients over the counter (OTC) in standard doses (e.g., 200 mg ibuprofen; 325 or



500 mg acetaminophen), but higher doses of these medications can be prescribed to patients. In 2020, the U.S. Food and Drug Administration approved an OTC fixed-dose combination product containing ibuprofen plus acetaminophen; each 2-caplet dose contains 250 mg ibuprofen and 500 mg acetaminophen. There are also several other NSAIDs only available with a prescription, such as celecoxib, ketoprofen, and diclofenac.<sup>4</sup>

### Side Effects of NSAIDs and Acetaminophen

Although effective in relieving acute pain, use of NSAIDs, especially long-term use, can be accompanied by adverse effects. Because prostaglandins have a role in gastrointestinal (GI) mucosal protection and play an essential role in renal perfusion, by blocking prostaglandin synthesis, NSAIDs can cause GI and renal adverse effects. The most common adverse effect with NSAID use is GI toxicity, which can result in symptoms such as nausea, heartburn, abdominal pain, and bleeding. Additionally, NSAIDs may increase the risk of serious cardiovascular events and nephrotoxicity. All prescription NSAIDs must display a black box warning that cardiovascular thrombotic events as well as gastrointestinal risks are possible when using the medication.

Acetaminophen use has been associated with liver toxicity as well as other less serious adverse effects such as headache, agitation, and GI symptoms. Prescription acetaminophen must display a black box warning about hepatotoxicity, as taking over 4,000 mg per day has been

*Continued on page 22*

associated with acute liver failure. Patients may be at risk of exceeding this 4,000 mg limit with OTC drugs, as there are many OTC combination drugs that contain acetaminophen as an active ingredient (i.e., cold and flu medications), and patients may unknowingly take more than one acetaminophen-containing drug at once. When NSAIDs are taken in combination with acetaminophen, there is little indication that adverse effects are any greater than those experienced with each drug individually.

### Multimodal Approaches Using Oral Analgesics for Acute Dental Pain

Non-steroidal anti-inflammatory drugs (NSAIDs) are recommended as the first-line therapy for acute pain management.

Effective non-opioid strategies for dental pain include multimodal approaches combining NSAIDs (like ibuprofen or naproxen) and acetaminophen. NSAIDs alone have been shown to be as effective or more effective than opioids. The multimodal combination offers enhanced pain relief with fewer side effects. For patients, a personalized multimodal pain management plan may include preemptive measures using a long-acting local anesthetic, a corticosteroid along with, the use a NSAID-Acetaminophen combination combined with patient counseling on pain expectations and shared decision-making regarding risks and benefits.

### Multimodal Pharmacological Strategies

#### NSAID-Acetaminophen Combination

For mild-to-moderate pain, NSAIDs like ibuprofen or naproxen, combined with acetaminophen, provide enhanced pain relief by targeting different pain pathways.

#### Preemptive Analgesia

Administering NSAIDs before a procedure helps establish therapeutic blood levels, reducing postoperative pain.

#### Gabapentin

This medication has shown promise in a multimodal strategy to minimize or eliminate the need for opioids in post-extraction pain.

#### Local Anesthetics

Using long-acting local anesthetics can provide significant pain relief for hours after treatment.

#### Corticosteroids

For post-surgical pain and swelling, corticosteroids like dexamethasone can be used to reduce inflammation and discomfort.

### Shared Decision-Making

Have a conversation with the patient about potential pain levels, the risks and benefits of different medications, and their preferences to co-create a pain management plan.

### Educate on Pain Expectations

Explain that some discomfort is normal and what it will feel like, helping patients understand the prescribed treatment aligns with their goals and risk tolerance.

### Assess Risk Factors

Obtain a thorough medical history to identify any contraindications for NSAIDs, such as gastrointestinal issues, bleeding disorders, or allergies, and adjust the treatment plan accordingly.

### Non-Drug Therapies

Consider integrating non-pharmacological options like cognitive-behavioral therapy (CBT) to help manage the psychological aspects of chronic pain.

### Acupuncture

Acupuncture can be a complementary therapy for tooth pain, but it is not a substitute for conventional dental treatment.

Acupuncture involves inserting thin needles into specific points on the body. According to traditional Chinese medicine, these points stimulate the body's natural pain-relieving mechanisms.



*Studies have shown that acupuncture can be effective in reducing tooth pain, but it is not a substitute for conventional dental treatment.*

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*Effective non-opioid strategies for dental pain include multimodal approaches combining NSAIDs (like ibuprofen or naproxen) and acetaminophen. NSAIDs alone have been shown to be as effective or more effective than opioids. The multimodal combination offers enhanced pain relief with fewer side effects.*

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#### Effectiveness

Studies have shown that acupuncture can be effective in reducing tooth pain. A review of 10 randomized controlled trials found that acupuncture significantly reduced pain intensity and duration compared to placebo.

In 2023, Muller et al.<sup>7</sup> reported on using acupuncture in the management of acute dental pain. The authors reported that acupuncture had a potential role in improving acute dental pain both intraoperatively and postoperatively as well as improving the efficacy of local anesthesia.

#### Safety and Side Effects

Acupuncture is generally considered safe when performed by a qualified practitioner. Common side effects include mild discomfort, bruising, and bleeding at the needle site.

#### Recommendations

If you are considering acupuncture for tooth pain, it is important to consult with a qualified acupuncturist. They can assess your condition and recommend the appropriate acupuncture points and treatment plan. It is also essential to continue with any conventional dental treatment prescribed by your dentist.

#### Use of StellaLife VEGA Oral Care Recovery Kit

There is anecdotal evidence based on clinician experiences that an option for the management of post-op pain following dental procedures may be positively aided using the StellaLife mouth rinse via the Oral Care Recovery Kit.

The VEGA Oral Care Recovery Kit includes an antimicrobial rinse, sublingual spray, and topical gel, to accelerate healing, relieve pain, and reduce swelling after dental procedures by providing holistic, natural, and opioid-free care. The Recovery Kit is a homeopathic product designed to accelerate healing, relieve pain, and reduce inflammation after dental procedures like oral surgery or implant placement. It includes a rinse, spray, and gel with ingredients like Aconitum, Arnica, Calendula, and Echinacea to help reduce swelling and discomfort, potentially decreasing the need for narcotic pain medications and steroids.

The kit is used for three days pre-op and seven days post-op, with the rinse, spray, and gel applied sequentially three to four times daily after meals, and patients should avoid eating or drinking for 20 minutes after use.

#### Indiana's INSPECT Program<sup>8</sup>

INSPECT is the Indiana Board of Pharmacy Prescription Monitoring Program. It is a statewide electronic database that collects, stores and analyzes information on controlled substances dispensed in the state. The data that is collected through this program includes patient information, prescriber information, and dispenser information for schedule 2-5 medications along with pseudoephedrine/ephedrine dispensed in Indiana. The information can be accessed by prescribers, pharmacists and law enforcement officials 24/7. On average, information on more than 17 million controlled substances prescriptions from retail and hospital pharmacies, dispensing physicians, mail orders, online and non-residents pharmacies are collected every year. It is funded by controlled substance registration fees. Practitioners that participate in the INSPECT program must hold a valid DEA number as well as a valid CSR license. See page 26 for more information about INSPECT.

#### Recent Advances

In 2025, the U.S. Food and Drug Administration approved Journavx (suzetrigine) 50 milligram oral tablets, a first-in-class non-opioid analgesic, to treat moderate to severe acute pain in adults. Journavx reduces pain by targeting a pain-signaling pathway involving sodium channels in the

*Continued on page 24*



peripheral nervous system, before pain signals reach the brain. Journavx is the first drug to be approved in this new class of pain management medicines<sup>9</sup> It may be considered in the management of dental pain. However, currently there is not enough data to back up this option.

## Conclusion

Nonopioid analgesics are a valuable and effective treatment option in management of mild to moderate pain of dental origin. They offer a lower risk of addiction and dependence than opioids and can be effective in reducing inflammation and pain. Consulting with an MDs to determine the appropriate course of medications or combinations of medications used for the management of patients' pain along with accessing the INSPECT site to review patients' histories is good practice to follow in our offices.

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# An Overview of Indiana's INSPECT Program and Statistics on Indiana Opioid Overdose Deaths

Dr. Vanchit John



The information provided in this article is a compilation of data obtained using AI search engines to increase the knowledge base of the members of the Indiana Dental Association on the topics as noted in the title of the article.

Indiana's INSPECT (Indiana Scheduled Prescription Electronic Collection and Tracking) program is a prescription drug monitoring program (PDMP) that tracks prescriptions for controlled substances and gabapentin dispensed in the state. The program is designed to combat prescription drug abuse and diversion by giving healthcare professionals and law enforcement access to a patient's-controlled substance history.

## Prescription Drug Monitoring Program (INSPECT)

The INSPECT program is a prescription monitoring database for controlled substances, ephedrine, and pseudoephedrine.

- Purpose: The system was established to help combat the opioid crisis by allowing registered health professionals, pharmacists, and law enforcement to monitor the prescription history of controlled substances.
- Mandatory use: Since 2018, Indiana law requires practitioners to check the INSPECT database before prescribing an opioid or benzodiazepine.
- Reporting: Pharmacies are required to report data on dispensed prescriptions every 24 hours.
- Integration: In recent years, the state has promoted the integration of the INSPECT platform with electronic health records for seamless access.

## Key INSPECT requirements

### For practitioners

- Mandatory account registration: All practitioners in Indiana with the authority to prescribe, dispense, or administer controlled substances must have an individual account with INSPECT. This includes physicians, advanced practice nurses, and physician assistants.
- Querying the database: Before prescribing an opioid or a benzodiazepine, practitioners are required to check the patient's INSPECT record.
  - This requirement applies to all patients, regardless of age or care setting (hospice, palliative, or long-term care).
  - The only exception is for patients with a pain-management contract, where a query is only required once every 90 days.
- Electronic prescribing: Since January 1, 2022, all controlled substance prescriptions must be sent electronically, except for specific exemptions or waivers from the Indiana Board of Pharmacy. Veterinarians are exempt from this mandate.
- For dispensers
- Mandatory reporting: Licensed pharmacies and other dispensers in Indiana, as well as out-of-state pharmacies licensed

to dispense drugs in Indiana, must submit prescription data for controlled substances (Schedules II-V), ephedrine, pseudoephedrine, and gabapentin to INSPECT.

- **Timeliness:** Dispensations must be reported through the PMP Clearinghouse at least every 24 hours.
- **“Zero” reports no longer required:** Since July 1, 2021, dispensaries are no longer required to submit “zero reports” for days when no controlled substances were dispensed.
- **Exemptions from reporting:** A dispenser does not need to submit information to INSPECT for:
  - A drug administered directly to a patient.
  - A controlled substance dispensed by a practitioner if the quantity does not exceed a 72-hour supply.

### Program access and usage

- **Access:** Access to the INSPECT database is limited to registered and approved users and is available through a secure website.
- **Individual accounts:** Each user must have their own individual account. Sharing login credentials is not permitted.
- **Data use:** The information from an INSPECT report is a decision-making tool for healthcare professionals and an investigative tool for law enforcement. It is not considered evidence in a court of law.

### Usage and effectiveness statistics

- **Provider use:** In a 2021 study, 70.7 percent of healthcare professionals surveyed had used the INSPECT program, and 85 percent were aware of it. Of those users, 35.7 percent reported changing their prescribing habits in the last year, with nearly 92 percent prescribing “fewer” controlled substances.
- **Effect on prescribing:** An earlier pilot study found that using INSPECT altered prescribing patterns. In 58 percent of surveyed responses, healthcare providers reduced the number of prescriptions written or the number of pills given. In 72 percent of cases, the report revealed information the prescriber was unaware of.
- **Patient record requests:** In 2018, Indiana users requested 5,092,777 patient prescription history reports. This was a significant increase from 2,697,850 requests in 2017.
- **Prescriptions logged:** The number of controlled substance prescriptions logged into INSPECT declined slightly between 2017 and 2018, from 13,431,572 to 12,574,674.
- **Opioid prescribing trends:** In 2019, the rate of opioid analgesic dispensations in Indiana was 44.3 per 100 persons. This rate increased significantly in 2020 by 38.4 percent, to 61.3 dispensations per 100 persons.

### Program developments and impact

- **Mandatory checks:** A 2018 law (Senate Enrolled Act 221) mandated that practitioners registered with INSPECT check a patient’s prescription history before prescribing an opioid or benzodiazepine. This requirement was phased in, with the mandate extending to all Indiana practitioners by 2021.
- **EHR integration:** In 2017, Indiana began integrating INSPECT data with electronic health record (EHR) systems to improve access for providers. A study found that using this EHR integration was easier for prescribers than using the INSPECT web portal directly.
- **Interstate data sharing:** Indiana began sharing data with other states through the PMP InterConnect system in 2011, which facilitates the exchange of prescription information across state lines.
- **Identification of doctor shopping:** A 2016 study using 2014 data identified 1,153 patients who met the criteria for “doctor shopping” (obtaining prescriptions from multiple prescribers in a short period) under a federal definition. Most of these patients were female and averaged around 40 years old.

### Who reports to and can access INSPECT

- **Required reporting:** Licensed dispensers in Indiana, including out-of-state pharmacies licensed in the state, must report controlled substance prescription data to INSPECT within 24 hours of dispensation.
- **Exemptions from reporting:** A 72-hour supply of a controlled substance administered directly to a patient or dispensed by a practitioner is not required to be reported.
- **Authorized users:** INSPECT data is accessible to registered users, including healthcare providers and law enforcement, but strict confidentiality rules apply.
- **Prohibited data sharing:** To protect patient privacy, users are not allowed to email, fax, or otherwise share an INSPECT report with other providers. The report must be clearly marked “Do Not Copy” if it is stored in a patient’s medical records.

**Disclaimer:** This is a summary of the INSPECT program requirements based on available public information. For complete and up-to-date details, refer to the official Indiana Professional Licensing Agency (PLA) website and relevant Indiana statutes.

*Continued on page 28*

## Statistics on Indiana Opioid Overdose Deaths

Based on data through 2024 and mid-2025, Indiana has seen a decline in opioid overdose deaths following a peak in 2022. Fentanyl remains the primary driver of overdose deaths, with stimulant co-involvement also a growing concern. While statewide arrest data are limited, local statistics and national figures provide insight into the scope of the problem.

### Overdose statistics-Statewide overdose death trends

- **Decline in 2023:** After a long-term increase, Indiana experienced a 17.1 percent decrease in the statewide overdose death rate between 2022 and 2023. The 2023 rate was lower than in the three preceding years.
- **Total deaths in 2022:** In 2022, there were 2,670 drug poisoning deaths in Indiana, down from the previous year.
- **Continuing impact of fentanyl:** While the rate of overdose deaths involving synthetic opioids (primarily fentanyl) decreased slightly from 2022 to 2023, it continues to be the main contributor to overdose fatalities.
- **Other drug trends:** From 2022 to 2023, there was a decrease in overdose deaths involving heroin (33.3 percent) and prescription opioids (17.1 percent).

### Marion County (Indianapolis) statistics (2024)

- **Decrease in suspected deaths:** In the first quarter of 2024, Marion County saw a 28 percent decrease in suspected overdose deaths compared to the first quarter of 2023 (134 deaths versus 185).
- **Substances detected:** Toxicology results from the second quarter of 2024 in Marion County indicated that fentanyl was the most common substance found (71 percent), followed by methamphetamine (41 percent) and cocaine (23 percent).
- **Demographics:** The average age of overdose decedents in Marion County during Q1 2024 was 44, and over half were white (51 percent).

### Arrest and drug seizures

- **Arrest data scarcity:** Recent statewide data on opioid-specific arrests were not available in the search results. Historically, a significant portion of Indiana's criminal offenses and incarcerations have been linked to drug and alcohol abuse.
- **National seizures:** For context, the U.S. Drug Enforcement Administration (DEA) made over 2,105 fentanyl-related arrests nationwide in the first half of 2025.
- **National trends:** Broader national trends show that increases in drug overdose deaths are increasingly driven by deaths involving both stimulants and opioids.

## Treatment admissions

- **Heroin admissions:** In state fiscal year (SFY) 2023, 17 percent of treatment admissions in Indiana involved heroin as a primary, secondary, or tertiary substance, a decline from the previous year.

### Additional statistics

- **Emergency department visits:** In 2022, there were 6,729 emergency department visits for opioid overdoses, a decrease from the previous year.
- **Rural vs. urban trends (2019–2022):** A 2024 Indiana Department of Health report highlighted urban-rural differences. Urban counties had a higher percentage of fatal overdoses with evidence of prior prescription opioid or heroin use, while rural counties had a higher percentage of cases involving methamphetamine.

## Epilogue

The information provided in this article is a compilation of data obtained using AI search engines to increase the knowledge base of the members of the Indiana Dental Association on the topics as noted in the title of the article.

Information for this article was curated by the Editor of the Journal of the Indiana Dental Association, Dr. Vanchit John.

**Learn More:**  
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# Opioid Prescriptions: The Role of the Dental Practitioner in Prescribing Opioids for Patients

Dr. Monica Gibson  
Dr. Neetha Santosh  
Dr. Vanchit John

**DENTISTS HISTORICALLY HAVE** overprescribed opioids for dental pain. This practice has contributed significantly to the opioid crisis, particularly by first exposing young people to these drugs. Overall, it is reported that dentists have prescribed 1 in 10 opioid prescriptions in the U.S. In 2012, dentists wrote 6.4 percent of all opioid prescriptions in the United States. When opioids are necessary for the management of acute and post-op pain, national guidelines recommend the prescription of low-dose opioids for a short duration. In 2019, US dentists provided 10.9 million opioid prescriptions, representing 7.6 percent of the opioid prescriptions dispensed that year.<sup>1</sup> Relative to other nations with similar dental practices, the proportion of prescriptions written by U.S. dentists for opioids is approximately 37 times higher.<sup>2</sup> The American Dental Association, has recommended the use of non-opioid medication such as non-steroidal anti-inflammatory drugs as the drug of choice for acute dental pain management.<sup>3</sup> However, dentists have frequently prescribed opioids over non-steroidal anti-inflammatory drugs with the most frequently prescribed analgesic after third-molar extractions being opioid combinations such as hydrocodone/ acetaminophen.<sup>4,5</sup>

From 1996 through 2015, dental opioid prescriptions increased significantly.<sup>6,7</sup> As one of the top prescribers of opioids, dentists have had the opportunity to contribute to curbing the public health crisis that led to the opioid endemic. While significant progress has been made, with dental opioid prescriptions declining substantially from 2016 to 2022, reductions have slowed, and efforts are still needed. While guidelines recommend non-opioids like NSAIDs for most dental pain, dentists continue to prescribe opioids at higher doses and for longer durations than recommended, risking addiction and other harms.

## Key Aspects of Dental Opioid Prescribing

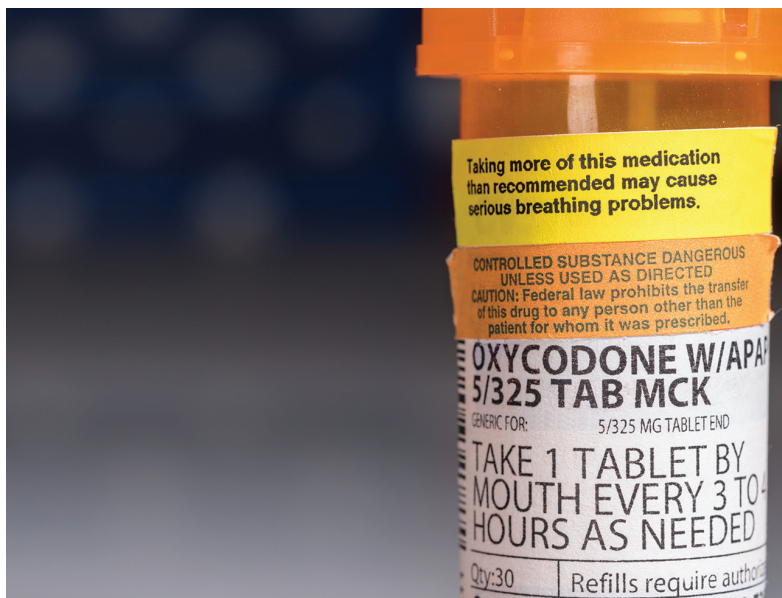
**Younger patients:** Dental procedures, like wisdom teeth extraction, often are the first source of opioid prescriptions for a vulnerable population, like adolescents and young adults, that are at a high risk for developing opioid use disorder.

**Prescription practices:** Overprescribing of opioids has been commonly noted in dental prescriptions. More than half of dental prescriptions for opioids exceed federal guidelines for duration which is typically a three-day supply.

**Effectiveness of non-opioid medications:** Non opioid medications, such as combinations of acetaminophen and ibuprofen, are often safer and more effective for treating common dental pain. This realization among practitioners has led to a change in prescribing habits.

**Unrealized side effect:** Overprescribing of opioids has led to an increase of opioid misuse, opioid use disorder, diversion of prescription drugs, and overdose.





### Declining, but slowing, rates of opioid prescriptions:

While dental opioid prescribing rates declined significantly between 2016 and 2022, the rate of decline has slowed, indicating a need for continued efforts.

### Factors Contributing to Dental Opioid Prescribing

Factors contributing to dental opioid prescribing include procedure complexity, such as surgical extractions and procedures involving sedation; patient-specific factors, like age and insurance coverage; dentist-related factors, such as the specialty and experience of the provider; system-level influences, including regulatory policies and available pain management treatments; and patient expectations for pain relief. Opioid prescribing is often linked to other pain management strategies, with factors like receiving an antibiotic prescription or non-opioid pain reliever increasing the odds of an opioid being prescribed concurrently.

### Procedure-Related Factors

**Complexity and type of procedure:** The more involved and invasive procedures, like surgical extractions, wisdom teeth extraction or those requiring conscious sedation, are more likely to have an opioid prescription written following treatment.

**Number of teeth extracted:** A higher number of teeth extracted, has often been associated with the writing of an opioid prescription.

### Dentist-Related Factors

**Specialty and experience:** In general, surgical related specialties have associated with an increased number of opioid prescriptions written. Additionally, dentists' individ-

ual beliefs about pain management, understanding of guidelines, and awareness of the opioid crisis all influence their prescribing behaviors.

**Insurance and demographics:** Patients with Medicaid coverage have a higher likelihood of receiving an opioid prescription.

**Regulations and guidelines:** The presence and adherence to prescribing guidelines, as well as state and federal regulations, play a role in shaping prescribing habits.

**Pharmaceutical marketing:** Marketing by pharmaceutical companies has contributed to an excess supply of opioids and has influenced prescribing rates.

**Day of the week:** Prescribing patterns can also vary by the day of the week, with higher likelihood of prescriptions on days leading into the weekend, such as Fridays.

### States With the Highest Overall Opioid Dispensing Rates

Overall, 39 states have enacted restrictions on the duration of opioid prescriptions for patients with acute pain, patients who are new to opioids, or both. The reason behind the implementation of limits was to reduce the duration of opioid prescriptions for the management of acute pain, for patients who are new to opioids or both.<sup>8,9</sup>

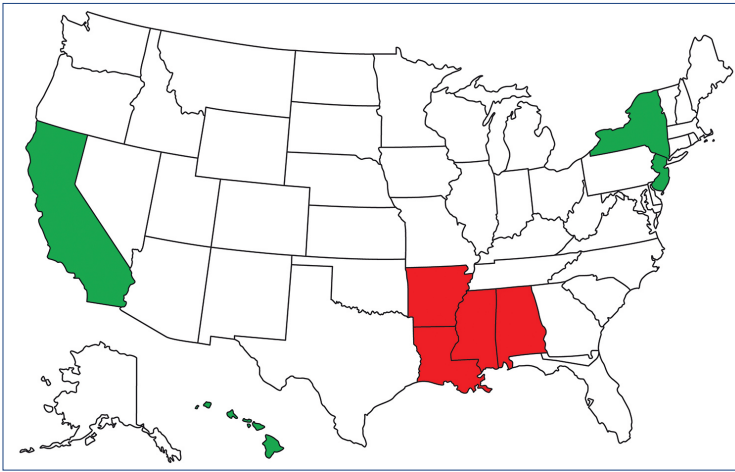
States with the highest overall opioid dispensing rates include Arkansas, Alabama, Mississippi, and Louisiana. However, this data is not specific to dentists. While data on state-specific dental opioid prescriptions is less recent, studies have shown higher rates of dental opioid exposure in the U.S. South, indicating that states in this region likely have higher dental opioid prescription rates as well.

### Data on Dentist-Specific Prescribing

**Regional trends:** A 2018 study<sup>10</sup> published in the Journal of the American Medical Association (JAMA- Internal Medicine) found that the U.S. South had the highest prevalence of opioid-exposed dental patients, suggesting higher dental opioid prescription rates in this region.

Some areas, like West Virginia, were historically known as an “overdose capital” due to widespread opioid use, including from sources like dental prescriptions for pain relief.

*Continued on page 32*



Highest and Lowest Dispensing States (2023): Highest rates in red, lowest in green.

The most recent available data from 2023 from the Centers for Disease Control shows the highest overall opioid dispensing rates were in Southern states like Arkansas (71.5 prescriptions per 100 persons), Alabama (71.4) and Mississippi (63.1).

### Highest and Lowest Dispensing States (2023)

**Highest Rates:** Arkansas (71.5), Alabama (71.4), Mississippi (63.1), and Louisiana (62.7).

**Lowest Rates:** Hawaii (22.6), California (23.8), New Jersey (26.3), and New York (26.3).

### Opioid Prescription Patterns Among Dentists in 2025

In reviewing opioid prescriptions written by dentists in 2025, prescribing rates have significantly declined due to new guidelines, a push for non-opioid alternatives and a broader understanding of opioid risks.

Factors that have influenced this change in prescribing patterns:

**Proof of better alternatives:** Studies published as recently as January 2025 show that a combination of over-the-counter ibuprofen and acetaminophen is often more effective for managing acute dental pain than opioids, with fewer side effects and no risk of addiction.

**Stronger regulations and guidelines:** Organizations such as the American Dental Association (ADA) and the Centers for Disease Control and Prevention (CDC) have issued new recommendations that emphasize non-opioid pain relievers as the first-line treatment for most dental pain. In 2025, new Drug Enforcement Administration (DEA) regulations took ef-

fect that scaled back some telehealth flexibilities, requiring in-person evaluations for long-term opioid prescriptions.

**Increased education:** Many states now require mandatory continuing education for dentists on safe opioid prescribing practices. These courses educate practitioners on the risks of addiction, the benefits of non-opioid options, and the proper use of Prescription Drug Monitoring Programs (PDMPs).

**Slower but persistent decline:** Although the rate of decline in opioid prescribing slowed during the COVID-19 pandemic, it has continued its downward trend. Data from 2023 indicates that the number of dental opioid prescriptions was still considerably lower than pre-pandemic levels.

**Improved patient management:** Many dentists are now adopting multimodal pain strategies, which involve combining different types of pain relievers, to eliminate or reduce the need for opioid analgesics.

Okunev et al.<sup>11</sup> in their study analyzing trends in national opioid prescribing for dental procedures among patients enrolled in Medicaid noted that *opioid prescription rates in dentistry for people enrolled in Medicaid declined substantially from 2012 through 2019 for both children and adults. The percentage of prescriptions written for nonsurgical visits consistently declined over the observed time. During the same time, opioid prescription rates for both surgical and dental nonsurgical procedures decreased as well.*<sup>11</sup>

### Where Opioids May Still be Prescribed

While the trend is toward non-opioid alternatives, some situations may still warrant an opioid prescription. These include cases where:

- Non-opioid treatments are insufficient for pain relief.
- A patient has a medical condition that prevents them from taking non-steroidal anti-inflammatory drugs (NSAIDs) or acetaminophen.
- The procedure is more complex, such as certain oral or maxillofacial surgeries.

Even in these cases, the prescribed dose is generally the lowest effective amount for the shortest duration necessary.

### Influencing Factors and Regulations

Several state and federal regulations, along with professional guidelines, have influenced opioid prescribing habits among Indiana dentists.

**Seven-day supply limit:** Indiana law (Senate Enrolled Act 226, effective 2017) limits opioid prescriptions to a seven-day supply for adults receiving an initial prescription and for all patients under.<sup>18</sup> A longer supply is allowed only if the dentist documents a clinical justification.

**Prescription Monitoring Program (INSPECT):** Indiana dentists are required to check the state's Prescription Monitoring Program (INSPECT) before prescribing an opioid to verify a patient's prescription history.

**Electronic prescribing:** To enhance security and tracking, Indiana required healthcare providers, including dentists, to issue all controlled substance prescriptions electronically as of January 1, 2022.

**Continuing education:** The IDA supports continuing education for dentists on the topic of opioid prescribing.

**Dental access and opioid use:** Research from Indiana has explored the link between dental care access and opioid use. A 2023 study found that individuals from Dental Professional Shortage Areas (DPSAs) in Indiana who presented to an emergency department for dental pain were 16 percent more likely to have received an opioid prescription in the preceding 30 days. This suggests that limited access to routine dental care may contribute to reliance on opioids for pain management.

## Paradigm Shift Toward Non-Opioid Alternatives

**Efficacy of non-opioids:** Extensive evidence shows that non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, and acetaminophen, alone or in combination, are as effective—or even superior—to opioids for managing most acute dental pain.

## Recommended Best Practices

**First-line therapy:** Non-opioids are now the standard first-line treatment for acute dental pain, with opioids reserved for severe pain that does not respond to other therapies or when non-opioids are contraindicated.

**Lowest effective dose:** When opioids are necessary, clinicians should prescribe the lowest effective dose for the shortest duration possible, typically not exceeding three to seven days.

**Multimodal analgesia:** Combining NSAIDs and acetaminophen can provide more effective pain relief with fewer side effects than relying on opioids.

## Encouraging Trends and Ongoing Challenges

**Declining prescriptions:** Overall dental opioid prescriptions have dropped significantly in recent years, reflecting increased awareness and efforts to promote safer prescribing.

**Plateaued progress:** The COVID-19 pandemic caused a notable slowdown in the rate of decline for dental opioid prescriptions, potentially due to reduced access to care leading to more severe emergencies.

**Geographic and provider variations:** Prescribing patterns and policy effectiveness can vary by region and type of dental provider. Oral and maxillofacial surgeons, for example, tend to have higher prescribing rates due to the nature of their procedures.

## The Path Forward

To continue reducing opioid-related harm, dentists must reinforce and expand on existing best practices. Key actions include:

**Education and training:** Further training is needed to address knowledge gaps, especially concerning the superiority of non-opioid treatments and updated prescribing regulations.

**Patient communication:** Dentists must engage patients in shared decision-making, discussing pain management strategies and the risks of opioids. They must also emphasize proper storage and disposal of unused pills.

**Monitoring programs:** Consistent use of Prescription Drug Monitoring Programs (PMPs) is crucial to track patient-controlled substance history before prescribing.

**Targeted interventions:** Focus should be placed on providers who continue to be high-rate opioid prescribers to align their practices with safer standards.

## A Brief Review of the Pharmacological Actions of Opioids

Opioids exert their analgesic effect primarily through agonism at  $\mu$ -opioid receptors within the central and peripheral nervous systems, leading to modulation of nociceptive transmission.<sup>12</sup> However, this same mechanism underlies their high potential for dependence and tolerance. Chronic or even short-term exposure can induce neuroadaptive changes in dopaminergic and glutamatergic pathways, re-



sulting in altered reward circuitry, compulsive drug-seeking behavior, and physiological dependence.<sup>13</sup>

Beyond addiction, opioids depress respiratory drive via medullary receptor activation, increasing the risk of fatal overdose, particularly when combined with other central nervous system depressants such as benzodiazepines or alcohol.<sup>14</sup> Their use is also associated with endocrine dysregulation, immunosuppression, hyperalgesia, and cognitive impairment, making them a poor risk–benefit choice for routine dental pain.<sup>15</sup> Importantly, epidemiologic studies have shown that initial exposure to opioids after dental procedures—especially in adolescents and young adults—significantly elevates the likelihood of subsequent misuse and long-term opioid use disorder. The convergence of neurobiological susceptibility, psychosocial vulnerability, and unnecessary opioid exposure thus represents a critical vector for perpetuating the broader opioid epidemic.<sup>16</sup>

## Conclusions

CDC data<sup>17</sup> indicates that dentists are significant but decreasing prescribers of opioids, accounting for around 8.6 percent of all U.S. opioid prescriptions as of 2022, a decrease from earlier years. This is a hopeful sign along with the key action steps noted. While these decreases in both quantity and strength points toward a positive trend, overall opioid prescription rates are still too high. Dentists must learn about non-opioid prescriptions as the first line of pharmacologic management for their patients' needs as it is becoming very evident these options are often more effective in managing pain for their patients thus reducing the incidence of opioid use disorder.

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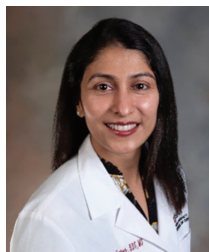
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*AI search engines were used to curate some information for portions of the article.*

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# Understanding Opioid Addiction: Causes, Effects and Risk Factors

Dr. Monica Gibson  
Dr. Neetha Santosh  
Dr. Vanchit John

**OPIOID ADDICTION HAS** become a major public health crisis in the United States and around the world. With the rise in prescription painkiller use and the increasing availability of illicit opioids such as heroin and fentanyl, communities have witnessed devastating consequences for individuals and families. While state and federal government efforts to combat the opioid crisis have made headway in recent years, there is still uncertainty surrounding the nature of opioid addiction, its causes, effects and the ongoing efforts to combat this epidemic.

Opioids are a class of drugs that include prescription pain relievers (such as oxycodone, hydrocodone, morphine), synthetic opioids (like fentanyl) and illegal drugs (such as heroin). They act on the nervous system to relieve pain, but they also trigger the release of endorphins and thus reduce the sense of pain. This combination creates a sense of well-being that is powerful but short-lived. When an opioid dose wears off, a user may find him or herself wanting those good feelings and lack of pain back as soon as possible. This is often the beginning of an opioid use disorder. Opioids are a class of drugs that can be developed naturally from poppy plants or synthetically. Most illicit opioids are developed from synthetic sources rather than from the natural poppy plant.

## Opioid Addiction Overview

Opioid addiction often begins with the legitimate use of prescription painkillers for injury or surgery. Over time, the body becomes tolerant, requiring higher doses to achieve the same effect. Some individuals may transition from prescription opioids to illegal substances like heroin because of cost or availability. Addiction can affect anyone, regardless of age, socioeconomic status or background. Signs and symptoms of opioid addiction include:<sup>1</sup>

- Craving opioids and inability to control usage
- Neglecting responsibilities at work, school or home
- Stealing to support habit
- Poor hygiene
- Weight loss
- Physical symptoms such as drowsiness, constipation and slowed breathing
- Withdrawal symptoms when not using opioids (nausea, sweating, anxiety)
- Engaging in risky behaviors to obtain drugs

## Impact on Individuals and Society

Opioid addiction can lead to health complications, including overdose and death. Families and communities suffer from increased crime, strained social services, and loss of productivity. The stigma surrounding addiction often prevents individuals from seeking help, further exacerbating the crisis.<sup>1</sup>

## General Risk Factors of Addiction

Genetics play a significant role in the development of drug dependency. Studies have shown that individuals with a family history of addiction are more likely to develop substance use disorders themselves. Certain genetic traits may affect how the brain responds to drugs, making some people more susceptible to dependency. Additionally, underlying mental health con-



ditions such as depression, anxiety or bipolar disorder can increase vulnerability to substance abuse, as individuals may use drugs to self-medicate.<sup>2</sup>

Personality traits and psychological states significantly contribute to the risk of drug dependency. People with high levels of stress, low self-esteem, or poor coping skills may turn to drugs as a way to escape their problems or emotional pain. Early exposure to trauma, such as physical or emotional abuse, can also elevate the risk, as individuals may seek relief through substance use.<sup>3</sup>

Social environments also play a critical role in shaping attitudes and behaviors related to drug use. Peer pressure, especially among adolescents and young adults, is a well-documented risk factor. Individuals who associate with friends or family members who use drugs are more likely to experiment and develop dependency themselves. Socioeconomic status also matters: People living in poverty or unstable environments may have limited access to education, health care and support systems, increasing their risk.<sup>3</sup>

### Early Exposure and Accessibility

Early exposure to drugs and easy access are important risk factors for any kind of addiction, including opioid use disorder. The younger an individual is when they begin using drugs, the greater the likelihood that they will develop dependency. Communities with high availability of drugs or lax regulations may inadvertently increase the risk for their residents. Furthermore, cultural attitudes toward drug use can influence how likely individuals are to begin using substances.<sup>3</sup>

Dysfunctional family dynamics, such as lack of parental supervision, inconsistent discipline, or neglect, can contribute to an increased risk of drug dependency. Children growing up in environments where drug use is normalized or where there is little emotional support are more vul-

nerable. Conversely, strong family bonds and positive communication can act as protective factors.<sup>4</sup>

### Genetic/Biological Risk Factors

Genetic and biological risk factors for opioid abuse are often the same as general risk for drug and alcohol addiction. Large-scale genomic studies (analyzing data from over 1 million people) have identified genes that are commonly inherited across different substance use disorders, regardless of the specific drug involved. These shared genetic markers suggest that there are underlying biological mechanisms that predispose individuals to addiction in general, not just to one particular substance.<sup>2</sup>

The combination of genes linked to addiction disorders is strongly associated with the regulation of dopamine signaling in the brain. Dopamine is a neurotransmitter involved in reward, motivation and pleasure, and its dysregulation is central to the development of addictive behaviors.<sup>2</sup>

### Polygenic Nature of Addiction

Substance use disorders are highly polygenic, meaning many genetic variants across the genome contribute to risk, each with a small effect. No single gene determines addiction risk; instead, it is the cumulative effect of many genes interacting with environmental factors.<sup>5</sup>

Studies have identified dozens of genetic variants linked to substance use disorders: 32 for tobacco, nine for alcohol, five for cannabis, and one for opioid addiction. In addition, twin, family and adoption studies consistently show that genetic factors account for 40 to 60 percent of the risk for developing substance use disorders.<sup>5</sup>

However, while genetics play a key role, environmental factors (such as stress, trauma and social influences) also significantly impact addiction risk. Genes may predispose, but do not guarantee, the development of substance use disorders. Protective factors and interventions can reduce risk.<sup>5</sup>

### Opioid-Specific Risk Factors

Although many of the risk factors for opioid use disorder are the same or similar to those for addiction in general, below are the specific risk factors for abuse of both prescription and illicit opioids.<sup>6</sup>

*Continued on page 38*

- **Age:** Specifically those in their teens or early 20s.
- **Abuse history:** History of physical or sexual abuse.
- **Criminal history:** A history of DUIs or other criminal record can increase the chances of opioid abuse.
- **Socioeconomic stress:** History of unemployment or underemployment and/or living below the poverty line.
- **Psychological issues:** Psychological disorders such as depression, anxiety and/or PTSD can increase the risk for opioid use disorder.
- **Family history:** Family history of addiction disorders.
- **Personality:** Those with opioid use disorders often have thrill-seeking personalities and are inclined to engage in risky behavior.
- **Concurrent substance abuse:** Those addicted to opioids are also more likely to engage in heavy alcohol and/or tobacco use.
- **Academic performance:** Those who drop out of school or have low academic achievement.

## Symptoms of Opioid Addiction

Opioid withdrawal symptoms can be painful, intense and, unfortunately, discouraging to those who try to quit on their own. Early withdrawal signs may include:<sup>7</sup>

- Anxiety
- Muscle aches
- Sweating
- Insomnia

More progressive symptoms may include:<sup>7</sup>

- Nausea
- Vomiting
- Diarrhea
- Severe cravings

## Treatment and Recovery Options

While physical symptoms can be difficult and taxing, the emotional toll can often be worse. Professional opioid addiction treatment such as detox centers and medical teams can help patients manage withdrawal safely and reduce the risk of relapse.<sup>7</sup>

Although controversial in the substance abuse disorder treatment profession, Medication Assisted Treatment (MAT) can help reduce cravings and stabilize brain chemistry through medications like buprenorphine, methadone and naltrexone. MAT is often combined with therapy, either individual or group therapy or both, for a comprehensive approach.<sup>7</sup> Genetic differences in opioid receptor genes (like OPRM1) and drug-metabolizing enzymes (like CYP2D6) can affect response and dosing.<sup>8</sup>

## The Future of Addiction Treatment and Prevention

Gene therapy, while still largely experimental, is being explored in animal and early human studies. For example, research on dopamine receptor gene therapy has shown that increasing D2 dopamine receptor expression in the brain via gene therapy has reduced addictive behaviors in animal models. In addition, research is showing promise in medications that can modify gene expression (epigenetics) to reduce addiction risk or relapse.<sup>8</sup>

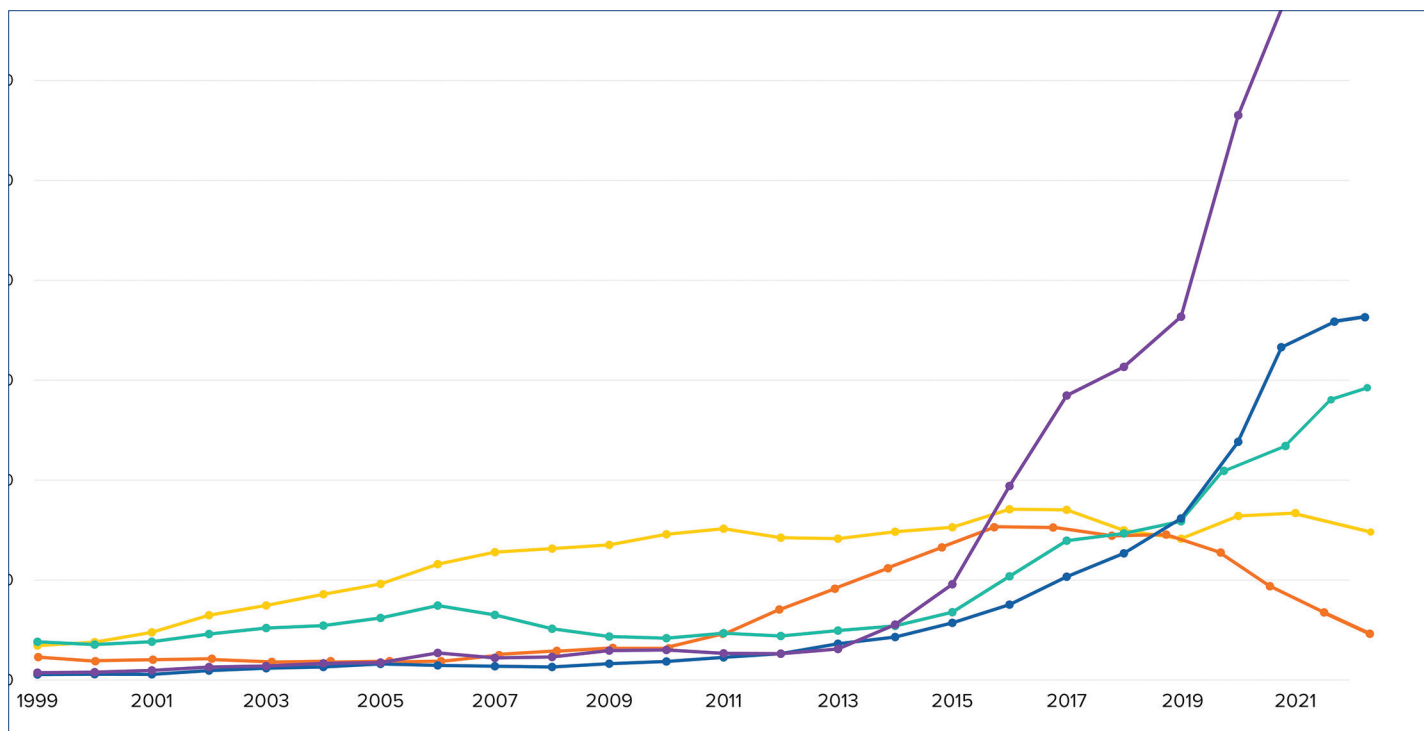
## Conclusion

Opioid addiction is a complex and multifaceted issue that affects millions of people. Understanding its causes, recognizing the signs, and supporting effective treatment and prevention strategies are essential steps towards addressing this epidemic. With coordinated efforts from individuals, healthcare providers, and policymakers, it is possible to reduce the impact of opioid addiction and support those on the path to recovery.

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# Trends in U.S. Drug Overdose Deaths (December 1999–June 2023), by Drug Type\*



The overdose crisis has evolved over time and is now largely characterized by deaths involving illicitly manufactured synthetic opioids, including fentanyl and, increasingly, stimulants.

**Synthetic opioids** excluding methadone overdose deaths increased **103-fold**

**Psychostimulants with abuse potential** (primarily methamphetamine) overdose deaths increased **64-fold**

**Cocaine** overdose deaths increased **7.6-fold**

**Rx opioid** overdose deaths increased **4.1-fold**

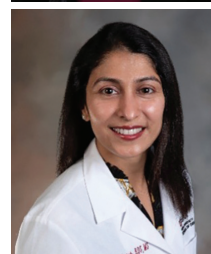
**Heroin** overdose deaths increased **2.5-fold**

\*This graph shows the total number of drug overdose deaths in the United States over the previous 12 months for each month from December 1999 through June 2023, by drug type. Overdose deaths of all intents are included, using underlying cause of death ICD-10 codes X40–X44 (unintentional overdose), X60–X64 (suicide), X85 (homicide), and undetermined intent (Y10–Y14). Drug and drug category involvement are identified by specific multiple cause-of-death codes (heroin: T40.1, prescription opioids: T40.2 and T40.3, synthetic opioids excluding methadone (primarily fentanyl): T40.4, cocaine: T40.5, and psychostimulants with abuse potential (primarily methamphetamine): T43.6. Data source: CDC WONDER Multiple Cause of Death data file (1999–2021: final data file; 2022–2023: provisional data file, accessed 1/24/24). Source: National Vital Statistics System Mortality File: <https://www.hhs.gov/overdose-prevention/>

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# The Fentanyl Crisis: Facts, Risks and Impact

Jay Dziwlik

**ORIGINALLY DEVELOPED AS** a treatment for pain management in medical settings, fentanyl is a powerful synthetic opioid. It is estimated to be 50 to 100 times stronger than morphine.<sup>1</sup> Doctors prescribe fentanyl to treat severe pain, especially after surgery or for patients in advanced stages of cancer. In clinical use, fentanyl is available in several forms, such as patches, lozenges or injectable solutions.<sup>2</sup>

Opioids are a class of drugs that include prescription pain relievers (such as oxycodone, hydrocodone, morphine), synthetic opioids like fentanyl and illegal drugs such as heroin. When prescribed and used properly, fentanyl can provide relief to patients suffering from chronic or acute pain. Because of its potency, doctors carefully monitor its dosage to prevent accidental overdoses. Medical fentanyl is tightly regulated and administered under strict guidelines to minimize risks to patients.<sup>1</sup>

## Illicit Use and the Opioid Crisis

In recent years, fentanyl has become notorious due to its presence in the illegal drug market. Illicitly manufactured fentanyl is often mixed with other substances like heroin, cocaine or counterfeit pills, sometimes without the user's knowledge. This dramatically increases the risk of overdose, as users may not be aware of the amount or potency of fentanyl they are consuming. Fentanyl can be taken in a number of ways, including injections, pills, snorting or smoked.<sup>2</sup> Common street names include Apache, China Girl, China Town, Dance Fever, Friend, Goodfellas, Great Bear, He-Man, Jackpot, King Ivory, Murder 8, and Tango & Cash.<sup>2</sup> Fentanyl overdoses have contributed to a significant increase in opioid-related deaths across the United States. According to the Centers for Disease Control and Prevention, synthetic opioids (primarily fentanyl) are now the leading driver of opioid overdose fatalities.<sup>3</sup>

## Risks and Side Effects

Fentanyl's extreme potency makes it highly dangerous, especially outside of medical supervision. Common side effects include drowsiness, nausea, confusion, constipation, and respiratory depression. The risk of fatal overdose is high because even a small amount can cause breathing to slow or stop. Signs of fentanyl overdose include:<sup>2</sup>

- Slow or shallow breathing
- Loss of consciousness
- Pale or bluish skin
- Pinpoint pupils

If an overdose is suspected, immediate medical intervention is necessary. Naloxone, a medication that can reverse opioid overdoses, is often administered by emergency responders or bystanders trained in its use.<sup>2</sup>



## Prevention and Harm Reduction

Efforts to address the fentanyl crisis focus on education, prevention and harm reduction. Public health campaigns aim to raise awareness about the dangers of fentanyl and the importance of seeking help for substance use disorders. Harm reduction strategies include providing naloxone, promoting safe injection practices, and supporting access to addiction treatment services.<sup>3</sup>

## Legal Status and Regulation

Fentanyl is classified as a Schedule II controlled substance under U.S. law, meaning it has a high potential for abuse but can be prescribed for legitimate medical purposes. Law enforcement agencies are actively working to disrupt the production and distribution of illicit fentanyl, but its potency and ease of transport make it a challenging issue to combat.<sup>1</sup>

## Conclusion

Fentanyl is a critical medication for those in severe pain, but its misuse has led to a public health emergency. Understanding the risks and taking steps to prevent opioid misuse are vital for individuals and communities. If you or someone you know struggles with opioid use, seek help from healthcare professionals or support organizations. Education, awareness, and compassion are essential in addressing the complex challenges posed by fentanyl.

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## About the Author



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*A fatal dose of fentanyl.<sup>2</sup>*



*Fake rainbow oxycodone M30 tablets containing fentanyl.<sup>2</sup>*

# The Opioid Fight in Indiana: Ten Years of Progress

Shane Springer

**OPIOID ABUSE IN** various forms has existed for many decades in the United States, but it began to attract significant media and political attention in the early 2000s following a rapid increase in heroin overdoses and deaths. Both prescription and illicit opioids seemed to explode throughout the nation, and Indiana experienced a higher than average rate of overdoses and deaths. Below are some highlights of the progression in the fight against opioid abuse in Indiana.

## 2015

**An Indiana county in the news:** Scott County makes national news for its large outbreak of HIV and hepatitis C. Most cases are attributed to intravenous injections of opioids.

**Task force created:** Governor Mike Pence creates the Task Force on Drug Enforcement, Treatment and Prevention on September 1, 2015. The Task Force was comprised of experts from a variety of specialties. Task Force members were charged with developing a comprehensive approach to addressing drug problems in Indiana.

## 2016

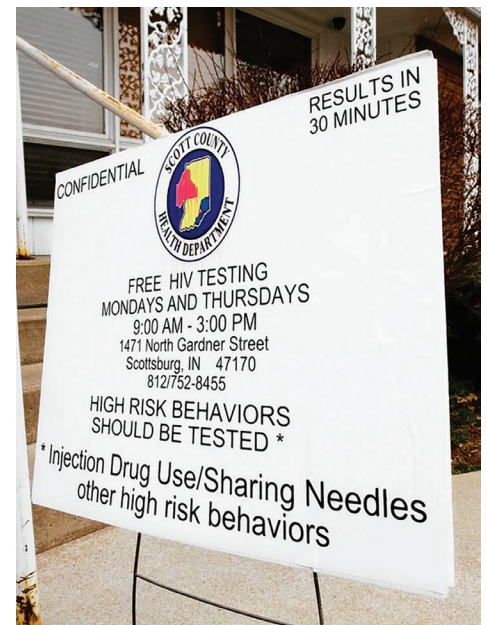
**Numerous bills signed:** Governor Pence signed several bills to combat drug abuse in Indiana. These bills originated from recommendations of the Task Force on Drug Enforcement, Treatment and Prevention. The bills included:

**HEA 1235** to increase penalties on drug dealers. The bill ensured that those convicted of repeated, drug dealing felony offenses may not receive suspended sentences if the offense involves meth or heroin and the person has a prior conviction for dealing either cocaine, heroin or meth.

**SEA 271** establishes the Indiana Commission to Combat Drug Abuse, which was responsible for coordinating substance abuse prevention, treatment and enforcement throughout the State of Indiana. The Commission went into effect on January 1, 2017, transitioning from and building on the work accomplished by the Governor's Task Force on Drug Enforcement, Treatment and Prevention.

**SEA 297** Expanded the criteria FSSA Medicaid uses to determine medical necessity for inpatient detox and requires Medicaid coverage for inpatient detoxification in accordance with ASAM (American Society of Addiction Medicine) Patient Placement Criteria to include treatment of opioid or alcohol dependence.

*Where it started: An HIV testing sign in Scott County, 2015. Photo from WISH-TV.*





**SEA 187** ensured that lifesaving overdose intervention drugs are available statewide by requiring the Indiana State Department of Health to issue a statewide standing order for naloxone. This increased access to naloxone statewide and allowed entities such as pharmacies and non-profits to register with ISDH using their standing order and dispense naloxone to individuals in need of the drug without a prescription from a physician. SEA 187 also provides immunity from certain offenses for individuals who administer naloxone to a person who has overdosed, call 911, and cooperate with law enforcement when they arrive on the scene.

## 2017

**Indiana overdoses soar:** Indiana saw over 1,700 deaths from drug overdoses. The vast majority of the overdoses were from opioids. The 2017 deaths were 12 percent higher than 2016 deaths and higher than the national rate.

## 2018

**Indiana overdoses finally level off:** Indiana's overdose deaths begin to fall slightly.

**ADA policy announcement:** The ADA announced a new policy on opioids supporting mandates on prescription limits and continuing education. The ADA policy supported statutory limits on opioid dosage and duration of no more than seven days for the treatment of acute pain, consistent with CDC evidence-based guidelines at the time. The ADA also supported policies requiring dentists to register with and utilize Prescription Drug Monitoring Programs (PD-MPs) to promote the appropriate use of opioids and deter misuse and abuse.

**Opioid CE requirement:** The Indiana General Assembly passed SEA 225 during the 2018 legislative session. This law required any board-licensed health care practitioner applying for or renewing a controlled substance registration to have completed 2 hours of continuing education on opioid addiction and prescribing. The requirement took effect July 1, 2019, and sunsetted on July 1, 2025.

## 2019

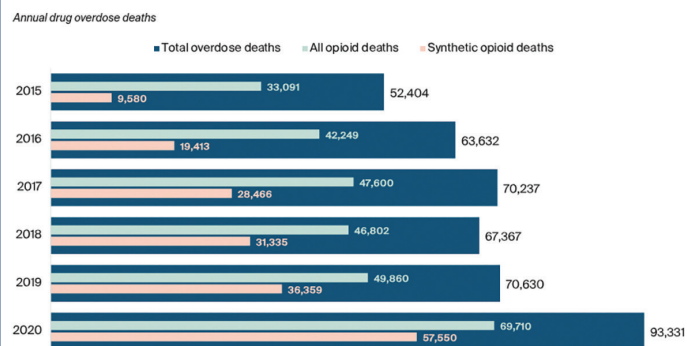
**INSPECT mandate:** The Indiana General Assembly passed SEA 176 to phase in a mandate to use the INSPECT prescription management program for opioid and benzodiazepine prescribing. This law is designed to prevent "doctor shopping" and excessive opioid prescriptions. The deadline for full compliance across all medical specialties, including dentistry, was January 1, 2021.

**Electronic prescription mandate:** SEA 176 also required health care providers to issue prescriptions for controlled substances in an electronic format rather than on paper. The requirement was initially scheduled to take effect on January 1, 2021, but was delayed due to COVID until January 1, 2022.

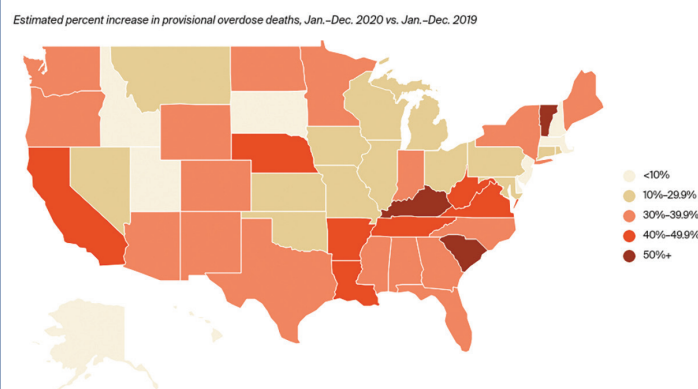
## 2020

**Overdoses during COVID:** After several years of a leveling off or a decrease in drug overdoses in many states, overdoses and opioid-related deaths soared during the COVID pandemic. In the 12-month period from May 2019 to May 2020, synthetic opioid-involved overdose deaths rose by 38.4 percent.

Overdose deaths exploded to more than 90,000 in 2020, and synthetic opioids were involved in more than 60 percent of all overdose deaths.



Overdose deaths increased significantly in almost every state during 2020.



Source: Jesse C. Baumgartner and David C. Radley, "The Drug Overdose Mortality Toll in 2020 and Near-Term Actions for Addressing It," Commonwealth Fund, July 15, 2021.

*Continued on page 44*



## 2021

**Record high for deaths:** The U.S. reached a record high of over 100,000 overdose deaths for the first time ever.

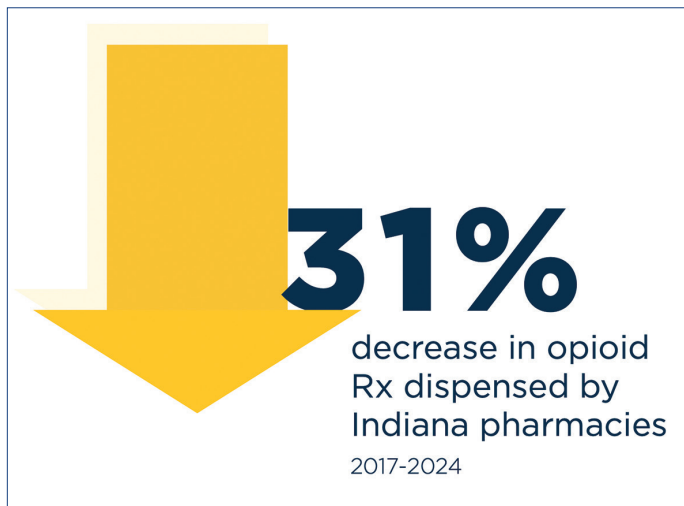
**Opioid settlement:** A bipartisan coalition of state Attorneys General announced final agreements with several pharmaceutical companies and health care organizations. The settling companies and organizations agreed to a settlement of \$26 billion and a commitment to make major changes in the manufacturing and distribution of prescription opioids. Indiana distributed the funds across communities statewide to develop targeted plans of action to effectively address substance use disorder. The settlement stipulated that the funds will be distributed over a span of 18 years.

## 2022

**Indiana deaths fall:** Indiana overdose deaths fall by 5 percent over the previous year.

**MATE Act passes:** In December 2022, the DEA issued information about the Medication Access and Training Expansion (MATE) Act, which was part of the Omnibus Bill at the end of December 2022. The bill required all medical practitioners with a DEA Registration to complete 8 hours of one-time training in opioid abuse and prevention before their next renewal.

## 2023



Graphic from Next Level Recovery 2024 Progress Report

**U.S. deaths fall:** The United States shows a decrease in the number of overdose deaths for the first time since 2018.

**Indiana has second largest decrease:** CDC data showed the number of overdose deaths in Indiana decreased by about 18 percent, which was the second largest decrease in the country. It was one of only four states to show a decrease of more than 15 percent.

**OTC naloxone:** The FDA approved an over-the-counter version of naloxone hydrochloride nasal spray.

**Treatment Atlas launch:** In September 2023, Governor Eric Holcomb announced the launch of Treatment Atlas, a free, confidential tool to connect Hoosiers with appropriate addiction treatment and user-friendly information about the quality of available programs. Since the 2023 launch, more than 37,000 individuals have engaged in 48,600 sessions on the site.

**MATE Act goes into effect:** The MATE Act went into effect on June 27, 2023.

## 2024

**Indiana deaths fall further:** CDC data shows a 19.2 percent reduction in opioid overdose deaths in Indiana, a larger decline than the national average.

**Indiana opioid prescriptions down:** Indiana's Next Level Recovery 2024 Progress Report shows that opioid prescriptions between 2017 and 2024 are down 31 percent.

## 2025

**Indiana Opioid CE sunsets but MATE Act remains:** The Indiana 2-hour opioid CE requirement sunsets, but the MATE Act is still in effect for new or renewed DEA Registrations between June 27, 2023 and June 26, 2026.

## About the Author



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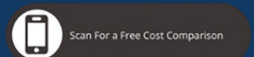
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# Naloxone Facts: Combatting the Effects of Opioids

Dr. Monica Gibson  
Dr. Vanchit John

**NALOXONE IS NOW** a standard emergency treatment for opioid overdoses. First patented in 1961, naloxone has evolved from an injection available exclusively in hospitals to a nasal spray and even an over-the-counter option for the general public. Below are some facts about naloxone in Indiana and across the country.

Naloxone is a medicine that rapidly reverses an opioid overdose as an opioid antagonist. This means that it attaches to opioid receptors and reverses and blocks the effects of other opioids. Naloxone can quickly restore normal breathing to a person if their breathing has slowed or stopped because of an opioid overdose. Naloxone has no effect on someone who does not have opioids in their system, and it is not a treatment for Opioid Use Disorder. It is meant to be used exclusively as an emergency treatment for opioid overdoses.

Naloxone works to reverse opioid overdose in the body for only 30 to 90 minutes. However, because many opioids remain in the body longer than that, it is possible for a person to still experience the effects of an overdose after a dose of naloxone wears off. Also, some opioids are stronger and might require multiple doses of naloxone. Therefore, one of the most important steps in naloxone administration is to call 911 so the individual can receive immediate medical attention. People who are given naloxone should be observed constantly until emergency care arrives and should be monitored for another two hours after the last dose of naloxone is given to make sure breathing does not slow or stop.

In 2023, the FDA approved an over-the-counter version of naloxone hydrochloride nasal spray. This allows anyone to purchase and administer the spray to someone who has overdosed. Side effects from naloxone are rare, but allergic reactions are possible. Naloxone reverses only overdoses from opioids. It does not reverse overdoses from other drugs such as cocaine or methamphetamine.

## Indiana Naloxone Statistics

- Indiana has distributed over 1 million doses of naloxone since 2020.
- In 2024, Overdose Lifeline, a Substance Use Disorder Help and Prevention organization in Indianapolis, distributed on average 24,600 doses of naloxone a month.
- Since 2022, Indiana has funded the placement of 430 NaloxBox units and 18 naloxone vending machines statewide. These vending machines allow people to access naloxone quickly.
- Since 2017, the Indiana Department of Health has distributed an estimated 325,000 doses of naloxone to local health departments statewide. Over 60,900 doses were distributed to 63 local health departments in 2024.
- Since 2017, the Indiana Department of Health has distributed over 27,500 doses of naloxone to rural first responders. Nearly 4,500 doses were distributed to 82 first responder agencies during the 2023-2024 grant period.

## About the Authors

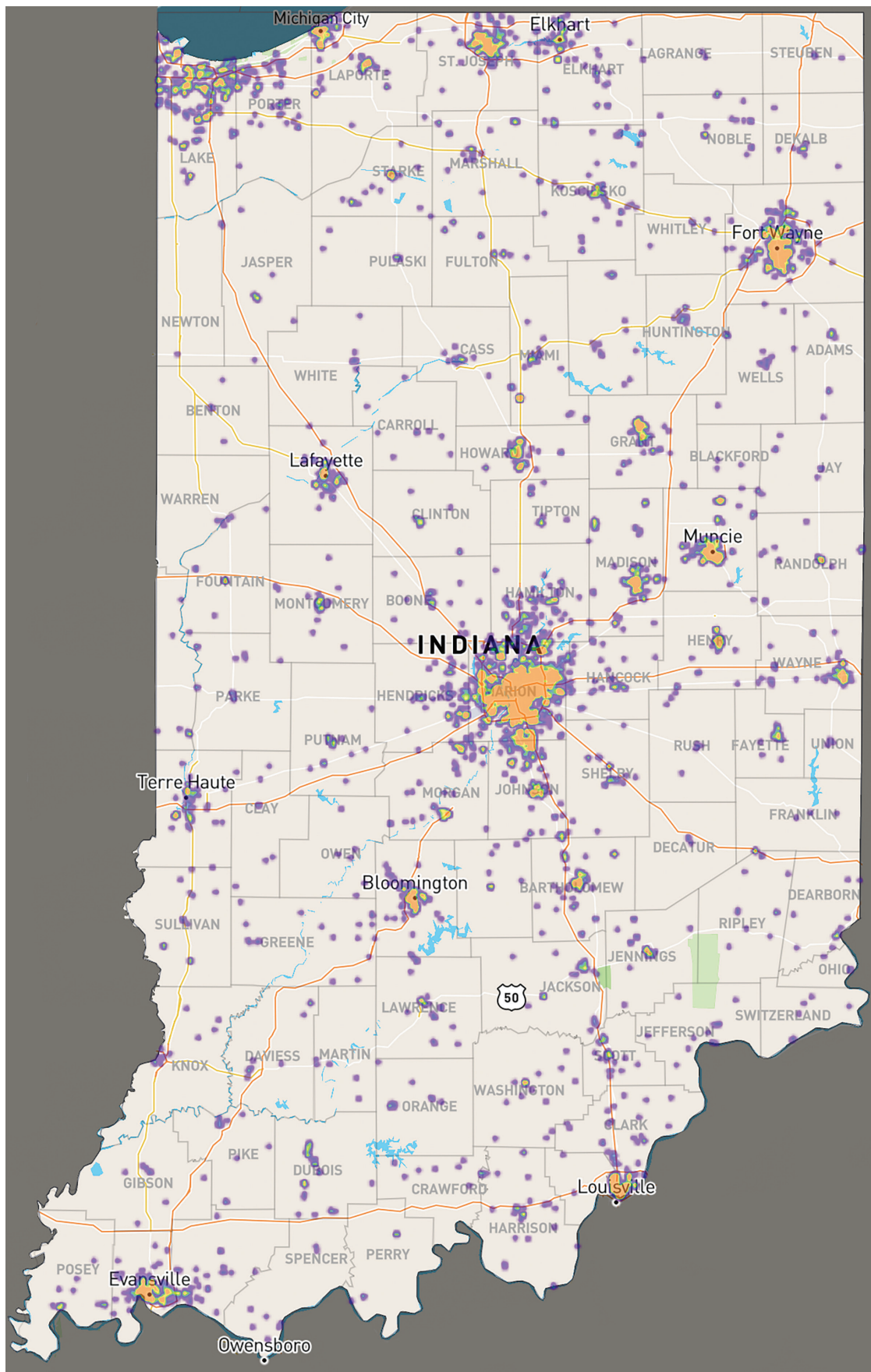


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Heat map of naloxone doses administered in Indiana between January 1, 2025 and October 6, 2025. Data provided through Next Level Recovery website, [www.in.gov/recovery/naloxone/heatmap.html](http://www.in.gov/recovery/naloxone/heatmap.html).



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