



National Institute
on Drug Abuse

Improving Opioid Prescribing

SCIENCE DRIVEN SOLUTIONS

PAIN EDUCATION IS OFTEN INSUFFICIENT

Most U.S. medical students only received about 9 hours of pain-related training.¹ In addition, most providers are not trained to identify or treat opioid addiction.² The NIH is working to help address this gap through:

EVIDENCE-BASED RESOURCES FOR PHYSICIANS

The National Institute on Drug Abuse (NIDA) has developed tools, as part of its [NIDAMED](#) initiative, to educate health care professionals about how to identify and treat patients with opioid use disorders. The materials include continuing medical education (CME), screening and assessment tools, and opioid prescribing resources.

IMPROVING PAIN EDUCATION

The NIH Pain Consortium developed the Centers of Excellence in Pain Education program ([CoEPes](#)) to improve how health care professionals are taught about pain and its treatment. The CoEPes act as hubs for the development, evaluation, and distribution of pain management curriculum resources for medical, dental, nursing, and pharmacy schools.

OPIOID PRESCRIBERS CAN PLAY A KEY ROLE IN STOPPING THE OPIOID OVERDOSE EPIDEMIC

Prescription opioid medications can help treat and manage severe pain but may pose risks for addiction, overdose, and death.

- The risk of addiction, overdose, and death are increased when patients are prescribed higher doses of prescription opioids.³⁻⁵
- In a recent study, nearly 60% of patients using prescription opioids were also taking other prescription drugs that put them at higher risk of overdose; more than 29% were prescribed benzodiazepines, 28% were prescribed muscle relaxants, and 8% were prescribed all three medications concurrently.⁶
- Misuse of prescription opioids is a risk factor for heroin use—80% of people initiating heroin use report prior misuse of prescription opioids.⁷

Chronic pain affects 100 million Americans, but opioids may not be appropriate for many pain patients.

- In 2014, Americans filled 245 million prescriptions for opioid pain relievers, making them the most frequently prescribed medication in the U.S.⁸
- Among new pain patients who take prescription opioids for more than 30 days in the first year, 47% continued to do so for 3 years or longer.⁷
- Patients with central pain syndromes (e.g., fibromyalgia, tension headaches) respond better to antidepressant and anticonvulsant medications than to opioids.⁹
- Chronic opioid use can lead to increased pain sensitivity, exacerbating pain conditions.¹⁰

Prescribers should re-evaluate opioid prescriptions after nonfatal overdoses.¹¹

- One recent study found opioids were prescribed to 91% of patients following a nonfatal overdose.
- Of these patients, 63% remained on a high dose of prescription opioids after overdosing, and 17% of these patients overdosed again within 2 years.

Implementation of opioid prescribing guidelines can save lives

- Clinical practice guidelines promote safer, more effective chronic pain treatment while reducing the number of people who misuse opioids, develop an opioid use disorder, or overdose from these powerful drugs.
- After Washington State introduced voluntary opioid guidelines in 2007, prescription opioid-related overdose deaths among injured workers dropped by half.¹²
- In 2016, the Centers for Disease Control and Prevention (CDC) released a national Guideline for Prescribing Opioids for Chronic Pain: <http://www.cdc.gov/drugoverdose/prescribing/guideline.html>



National Institute
on Drug Abuse

www.drugabuse.gov

GUIDELINE FOR OPIOID PRESCRIBING FOR PAIN¹³

The CDC led the effort to develop guidelines for opioid prescribing for treating adult patients with chronic pain in primary care settings.

Long-term Opioid Use Often Begins with Treatment of Acute Pain

- Providers should prescribe the lowest effective dose possible.
- Providers should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioid pain relievers (3 or fewer days will usually be sufficient).

Determining When to Initiate or Continue Opioids for Chronic Pain

- Non-opioid therapies are preferred for chronic pain (including nonpharmacologic therapy). If opioids are prescribed, they should be used in combination with non-opioid therapy such as cognitive behavioral therapy, exercise therapy, physical therapy and/or non-opioid pharmacologic therapy such as nonsteroidal anti-inflammatory drugs and acetaminophen.
- Establish treatment goals—discuss risks, realistic benefits, and therapy discontinuation.
- Reassess risks and benefits throughout treatment.

Opioid Selection, Dosage, Duration, Follow-up & Discontinuation

- Prescribe immediate-release opioids instead of extended-release/long-acting opioids.
- Start low and go slow—prescribe opioids with the lowest possible effective dose; reassess individual benefits and risks when considering increasing dosage to ≥ 50 morphine milligram equivalents (MME)/day; avoid increasing dosage to ≥ 90 MME/day unless justified.
- Evaluate benefits and harms within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. If benefits do not outweigh harms, discuss considerations for discontinuation of opioid therapy.

Assessing Risk and Addressing Harms of Opioid Use

- Prior to beginning opioid therapy and during therapy, evaluate risk factors for opioid-related harms. Risk factors include pregnancy, kidney disease, being 65 years of age or older, mental health conditions, substance use disorder, prior nonfatal overdose, and others.
 - Incorporate strategies to mitigate risk; offer naloxone when a patient is at increased risk of opioid overdose.
 - Use a validated screening tool, such as the single question screener, the Drug Abuse Screening Test (DAST), or the Alcohol Use Disorders Identification Test (AUDIT), to find out about a patient's substance use.
- Use Prescription Drug Monitoring Programs (PDMPs) to determine concurrent opioid use
- Use urine drug test screening to test for concurrent illicit drug use.
- Avoid concurrent prescribing of other opioids and benzodiazepines if possible.
- Offer evidence-based treatment for opioid use disorders.

SOLUTIONS DRIVEN SCIENCE

PDMPs CAN REDUCE PRESCRIPTION OPIOID MISUSE and DIVERSION

PDMPs—available in most states—can help detect patients who are misusing or diverting opioid pain relievers for illegal sale. PDMP use was among the policy changes credited with lowering prescription opioid overdose deaths in Florida by 27%.¹⁴ PDMP use helped reduce the number of patients receiving opioid prescriptions from multiple prescribers by 75% in New York and 50% in Tennessee.¹⁵

WHERE CAN I GET MORE INFORMATION?

- [Health and Human Services Safe Opioid Health Professionals Resources](#)
- [NIDA Opioid & Pain Management CMEs/CEs](#)
- [NIDA Centers of Excellence \(COE\) for Physician Information](#)
- [NIDA Opioid Prescribing Resources](#)

References

1. Mezei L & Murinson BB. *J Pain* (2011).
2. Wood E, et al. *JAMA* (2013).
3. Bohnert ASB, et al. *JAMA* (2011).
4. Baumbatt AG, et al. *JAMA Intern Med* (2014).
5. Edlund MJ, et al. *Clin J Pain* (2014).
6. *The Express Scripts Lab*, (2014).
7. Muhuri PK, et al. *CBHSQ Data Review* (2013).
8. Volkow N & McLellan T. *NEJM* (2016).
9. *National Institutes of Health*. (2014).
10. Lee M, et al. *Pain Physician* (2011).
11. Larochelle MR, et al. *Ann Intern Med* (2016).
12. Franklin GM, et al. *Am J Ind Med* (2012).
13. *CDC Guideline for Prescribing Opioids for Chronic Pain*. (2016).
14. Delcher C, et al. *Drug Alcohol Depend* (2015).
15. *PDMP Center of Excellence* (2016).



www.drugabuse.gov