

How to Wean Off Opioids

Analysis by Dr. Joseph Mercola



August 03, 2023

STORY AT-A-GLANCE

- > Guidelines for tapering off opioids recommend gradually reducing 5% to 10% of the morphine-equivalent dose every two to four weeks and switching from immediaterelease opioids to extended-release on a fixed schedule
- > Research shows 15% of complex surgical patients develop severe postoperative pain leading to extended use of opioids. Implementing a transitional pain program helped nearly half of those who had not used opioids prior to surgery to wean off the drugs. Among those who had already used opioids prior to surgery, 1 in 4 was able to guit
- > To help patients manage their pain, the program uses a variety of methods, including nonopioid medications, exercise, acupuncture and mindfulness training
- > Opioids killed 33,000 Americans in 2015 and nearly 42,250 in 2016. The death toll is still trending upward, as overdose cases admitted into emergency rooms increased by more than 30% across the U.S. between July 2016 and September 2017
- > Studies show addiction affects more than 1 in 4 of those using opioids for chronic noncancer pain, and 1 in 550 patients die from opioid-related causes within 2.5 years of their first prescription

Editor's Note: This article is a reprint. It was originally published October 25, 2018.

Opioids, narcotic painkillers, killed 33,000 Americans in 2015,^{1,2,3} and nearly 42,250 in 2016 — over 1,000 more deaths than were caused by breast cancer that same year⁴ — and the addiction trend shows absolutely no signs of leveling off or declining.

On the contrary, statistics suggest the death toll is still trending upward, with more and more people abusing these powerful narcotics. According to data⁵ from the U.S. Centers for Disease Control and Prevention (CDC), overdose cases admitted into emergency rooms increased by more than 30% across the U.S. between July 2016 and September 2017. Overdose cases rose by:

- 30% among men
- 31% among 24- to 35-year-olds
- 36% among 35- to 54-year-olds
- 32% among those 55 and older

Considering opioid overdose is now the No. 1 cause of death of Americans under the age of 50, it's quite clear we need safer alternatives to pain management and more effective ways to wean off these extremely addictive drugs.

Risk of Addiction Is Very High

Studies show addiction affects about 26% of those using opioids for chronic noncancer pain, and 1 in 550 patients on opioid therapy dies from opioid-related causes within 2.5 years of their first prescription.⁶

Despite the drugs' high risk of addiction, a 2016 NPR health poll⁷ indicated less than one-third of people said they questioned or refused their doctor's prescription for opioids. The most common drugs involved in prescription opioid overdose deaths include⁸ methadone, oxycodone (such as OxyContin®) and hydrocodone (such as Vicodin®).

However, as noted by Dr. Deeni Bassam, board-certified anesthesiologist, pain specialist and medical director of the Virginia-based The Spine Care Center, "There's very little difference between oxycodone, morphine and heroin. It's just that one comes in a prescription bottle and another one comes in a plastic bag."

Indeed, many addicts find the transition from prescription opioids to street drugs like heroin to be a relatively easy one. When a prescription runs out, the cost to renew it becomes unmanageable or a physician refuses to renew a prescription, heroin, which is often cheaper and easier to obtain than opioids, is frequently a go-to solution.

Postsurgical Intervention Lowers Patients' Risk of Addiction

Unfortunately, many patients are still under- or misinformed about the addictive nature of these pills, and are often not told how to get off them. Addiction can occur within weeks of use, and if a patient is prescribed a narcotic for long-term or chronic pain, addiction is extremely likely. In one 2016 Canadian study, 15% of complex surgical patients developed severe postoperative pain leading to extended use of opioids.¹⁰

To minimize the risk of addiction, the Transitional Pain Service at Toronto General Hospital includes follow-up meetings twice a month for the first two months following surgery, and then monthly meetings for another four months. As explained by Science Daily, the goal of these meetings is to "prevent acute pain from becoming chronic post-surgical pain and taper opioid use or wean to zero if possible."

11

To help patients with their pain, the program uses a variety of methods, including nonopioid medications, exercise, acupuncture and mindfulness training, the latter of which has been shown to help patients with pain-related stress and disability, thereby allowing them to successfully wean off higher doses of opioids.¹²

In the U.S., Stanford University offers a similar program, called the Comprehensive Interdisciplinary Pain Program. These kinds of programs are really crucial, as expecting patients to quit cold turkey is a recipe for disaster. Many state authorities and insurance companies are now cracking down on opioid use, restricting how much a doctor can prescribe.

While this is needed, it leaves long-term opioid users in a pinch. Many who are now unable to refill their prescriptions receive no guidance on how to quit or support to help them find other ways to relieve their pain.

Little Is Known About How to Safely Wean Off Opioids

As noted in Scientific American,¹³ "... [T]here's very little research on how best to taper opioids for chronic pain patients. For example, although studies show that drugs such as buprenorphine can help addicts recover, little is known about their value in the context of chronic pain."

One scientific review,¹⁴ which included 67 studies on tapering opioids for pain patients found only three of the studies to be of high quality; 13 were found to of "fair" quality while the rest were weak. Still, the evidence available suggested that tapering off the dosage does improve both pain and quality of life.

However, the strongest evidence was for multidisciplinary care with close patient monitoring and follow-up — methods that are not widely available and rarely covered by insurance. Scientific American reports:¹⁵

"One thing seems clear from research and clinical experience: Reckless restriction is not the right response to reckless prescribing. 'Forced tapers can destabilize patients,' says Stefan Kertesz, an addiction expert at the University of Alabama at Birmingham School of Medicine. Worried clinicians such as Kertesz report growing anecdotal evidence of patient distress and even suicide.

The brightest rays of light in this dark picture come from a burst of new research. In May a team led by Stanford pain psychologist Beth Darnall published the results of a pilot study¹⁶ with 68 chronic pain patients. In four months, the 51 participants who completed the study cut their opioid dosages nearly in half without increased pain.

There were no fancy clinics, just an attentive community doctor and a self-help guide written by Darnall. A key element was very slow dose reduction during the first month. 'It allows patients to relax into the process and gain a sense of trust with their doctor and with themselves that they can do this,' Darnall says."

Canadian Study Shows Tapering Dosage Post Surgery Helps

A study¹⁷ evaluating the success rate of Toronto General Hospital's Transitional Pain Service found nearly half of those who had not used opioids prior to surgery successfully weaned themselves off the drugs. Among those who had already used opioids prior to surgery, 1 in 4 was successful. As reported by Science Daily:¹⁸

"The study followed patients at high risk for developing chronic pain and problematic opioid use for six months after surgery. In patients who did not take opioids for a year before surgery, the study found that 69 percent were able to reduce their opioid consumption, with 45 percent of them being able to stop completely.

Those patients who were taking a prescription opioid before surgery reduced their opioid use by 44 percent, with 26 percent of them weaning off completely.

'The assumption is that all patients after surgery are fine with their opioid use, but we have found that in a high-risk segment of patients, that is not the case,' says Dr. Hance Clarke, director of the Transitional Pain Service at [Toronto General Hospital].

'We need better ways of identifying these patients, and then helping those who are having difficulty in reducing or eliminating their opioid use. Otherwise, we run the risk of de-escalating patients too fast and having them look elsewhere for opioids or other drugs if we don't guide them' ...

One of the strongest predictors in the study of remaining on opioids long-term after hospital discharge is the dose upon discharge: the higher the dose, the more likely the patient will remain on opioids long-term.

For patients who were on opioids before surgery, emotional distress factors such as anxiety or depression, and pain catastrophizing — excessive pain-related worry, along with an inability to deflect thoughts from pain — were important factors in how well these patients could wean off opioids."

Guidance on Opioid Tapering

Guidance on opioid tapering published in the March/April issue of the Canadian Pharmacist Journal includes the following highlights:19

- Adult patients with chronic noncancer pain who are on a 90-milligram (mg)
 morphine equivalent dose daily or greater should consider opioid tapering to the
 lowest effective dose and discontinue use if possible
- Other reasons to consider tapering include lack of improvement in pain and/or function, nonadherence to the treatment plan, signs of addiction, serious opioidrelated adverse effects or patient request
- Prescribers are urged to collaborate with pharmacists to support and monitor patients during opioid tapering
- A multidisciplinary approach is associated with success in weaning patients off opioids
- Benefits of tapering include relief of withdrawal symptoms (e.g., pain, sweating or anxiety), reduction in opioid adverse effects and improvements in overall function and quality of life

The Guideline urges physicians to discuss tapering with their patients, and to "prepare them by optimizing nonopioid therapy as appropriate for their pain and comorbidities." This includes the use of acetaminophen, nonsteroidal anti-inflammatory drugs, gabapentinoids²⁰ and cannabinoids, just to name a few. The guideline also recommends:

"... [O]ptimizing nonpharmacological therapy and psychosocial support, setting realistic functional goals, creating a schedule of dose reductions and frequent follow-up and having a plan to manage withdrawal symptoms."

To taper opioids for chronic noncancer pain, the guideline recommends:

 Gradually reducing 5% to 10% of the morphine-equivalent dose every two to four weeks, with frequent follow-up

- Switching from immediate-release opioids to extended-release on a fixed schedule
- Collaborating with the patient's pharmacist to assist with scheduling of the dose reductions

Two alternative methods include doing a medically supervised rapid dose reduction at a withdrawal center, as withdrawal symptoms can be severe and/or dangerous, or switching to methadone or buprenorphine (naloxone), followed by gradual tapering of these drugs.

How Kratom Can Help With Opioid Withdrawal

Two other alternatives I want to address here are kratom and medical cannabis. It's a toss-up as to which one is more controversial, but there's evidence to support both. In the video above, I interview Christopher McCurdy, professor of medicinal chemistry at the University of Florida College of Pharmacy about the use of kratom for pain relief and opioid withdrawal.

McCurdy, a former postdoctoral fellow in opioid chemistry at the University of Minnesota under a National Institutes of Health (NIH) postdoctoral training fellowship, has spent nearly 15 years investigating how kratom affects opiate addiction and withdrawal, and is convinced it may be of tremendous benefit.

Kratom (mitragyna speciosa) is part of the coffee family, but has a very different chemistry than coffee beans. It's been used in traditional medicine in Thailand and Malaysia for centuries, both as an energy booster and opium substitute. The plant contains a number of alkaloids, a primary one being mitragynine, which has opioid activity.

It and many other alkaloids in the kratom plant were called out as opioids by the Food and Drug Administration (FDA) commissioner. "A lot of people were upset about that at first, but I think they need to understand that an opioid is any molecule that can interact with opioid receptors or those proteins in the body," McCurdy says.

In other words, an opioid is not identical to an opiate, derived from opium poppy, such as morphine, oxycodone or oxymorphone. Opioid is a generic term that includes even endogenous endorphins that bind to opioid receptors in your body. And, while mitragynine has opioid activity, it's very different from other opioid molecules.

McCurdy's research shows that compared to methadone and buprenorphine (two drugs used to treat opioid addiction and opioid withdrawal), kratom had a much cleaner profile and was milder in its action. Whereas buprenorphine and methadone are full agonists or activators of opioid receptors, mitragynine appears to be only a partial agonist. McCurdy explains:

"We initially sent out purified alkaloid of mitragynine for a screen across a whole panel of central nervous system drug targets ... What we found was a really remarkable profile of this molecule. Mitragynine binds with opioid receptors ... but it also interacts with adrenergic receptors, serotonin receptors, dopamine receptors and adenosine receptors.

Adenosine receptors are the target for caffeine. It kind of explains why some of these alkaloids in the plant might cause this stimulant-like effect. It also interacts with alpha-2 adrenergic receptors, [which] are ... used in opioid withdrawal. Agents that activate alpha-2 receptors, like clonidine, are used in opioid withdrawal treatment to stop withdrawal symptoms such as shaking, sweating and heart racing ...

In all honesty, when I got the report back from the company that screened the molecule, I thought, 'Wow. We just found nature's answer to opiate addiction' because here it was interacting with many of the same targets that we would target pharmacologically on an individual basis."

How Kratom Curbs Opiate Addiction

As explained by McCurdy, there are three traditional opioid receptors: mu, delta and kappa, all three of which are associated with numbing or dulling pain. In other words,

they're analgesic receptors. They block or slow pain signal transmissions at the spinal cord level, so your brain doesn't process the pain signals as much.

- The Mu receptor was named for its ability to interact with morphine. The mu
 receptor is responsible for the euphoric effects associated with opiates. It's also
 primarily responsible for respiratory depression.
- The delta receptor is also a target for selective analgesics, and does not appear to
 have as strongly addictive capabilities as the mu receptor. Unfortunately, the delta
 receptor is linked to convulsions, and many drug trials aimed at the delta-selective
 opioid receptor had to be halted due to seizures that could not be resolved. Kratom
 does not appear to significantly interact with delta receptors.
- The kappa receptor, while good for killing pain, causes dysphoria or aversion, meaning when you take a compound that activates kappa, it makes you feel so awful you don't want to take it again. For this reason, kappa-activating pain drugs have repeatedly failed in clinical trials and people don't want to continue the drug.

Kratom appears to be a partial agonist for all of these receptors, only weakly affecting delta and kappa. And, while the mu receptor is the primary target of kratom, animal trials suggest the abuse potential of kratom is quite low. To learn more, see "Kratom as an Alternative for Opium Withdrawal" or listen to McCurdy's interview.

Medical Cannabis - Another Effective Pain Reliever

Medicinal cannabis is another effective pain reliever which, unlike narcotic pain killers, cannot kill you.²¹ The reason a cannabis overdose remains nonlethal is because there are no cannabinoid receptors in your brain stem, the region of your brain that controls your heartbeat and respiration.

Statistics bear this out as well. In states where medical marijuana is legal, overdose deaths from opioids decreased by an average of 20% after one year, 25% after two years and up to 33% by years five and six.

In 2010, the Center for Medical Cannabis Research released a report²² on 14 clinical studies about the use of marijuana for pain, most of which were FDA-approved, double-blind and placebo-controlled. The report revealed that marijuana not only controls pain but in many cases, it does so better than pharmaceutical alternatives.

Cannabis has also been shown to ease withdrawal symptoms in those trying to wean off opioids. CNN Health reports²³ Dr. Dustin Sulak, a renowned integrative medicine physician based in Maine, has helped hundreds of patients wean off opioids using cannabis, as has Dr. Mark Wallace, a pain management specialist and head of the University of California, San Diego Health's Center for Pain Medicine who started studying cannabis in 1999 with a state grant.

"He looked at the literature and realized that pot had a long history of therapeutic use for many disorders including ... pain. Within a decade, there were enough studies to convince him that marijuana was a real alternative to use in his practice. He estimates that hundreds of his patients ... have been weaned off pills through pot," CNN reporter Nadia Kounang writes, adding:

"According to the Drug Enforcement Administration, marijuana is a Schedule I drug, meaning it has no medical use and a high potential for abuse. 'We have enough evidence now that it should be rescheduled,' Wallace said. Sulak wonders, 'When will the medical community catch up with what their patient populations are doing?"

Nonopioid Pain Relievers Work Just as Well

If a person comes to the emergency room with severe acute pain, most physicians will prescribe them an opioid to relieve pain. However, research²⁴ published in JAMA suggests opioid-free options may work just as well. This is valuable information, considering the fact that many get hooked on opioids when prescribed an opioid for acute pain caused by a sports injury or oral surgery, for example.

The study evaluated the effects of four different combinations of pain relievers — three with different opioids and one opioid-free option composed of ibuprofen (i.e., Advil) and acetaminophen (i.e., Tylenol) — on people with moderate to severe pain in an extremity due to bone fractures, shoulder dislocation and other injuries.

The patients had an average pain score of 8.7 (on a scale of zero to 10) when they arrived. Two hours later, after receiving one of the pain relief combinations, their pain levels decreased similarly, regardless of which drug-combo they received.

"For patients presenting to the ED [emergency department] with acute extremity pain, there were no statistically significant or clinically important differences in pain reduction at two hours among single-dose treatment with ibuprofen and acetaminophen or with three different opioid and acetaminophen combination analgesics," the researchers concluded.

Speaking to Vox, the study's lead author, Andrew Chang of the department of emergency medicine at Albany Medical College, Albany, New York, said,²⁵ "Some (not all) physicians reflexively think fractures require opioids, but this study lends evidence that opioids are not always necessary even in the presence of fractures."

Considering the steep risks involved — even when taken as directed, prescription opioids can lead to addiction as well as tolerance, along with other issues like increased sensitivity to pain, depression, low levels of testosterone and more²⁶ — the less you expose yourself to opioids, the better.

Please understand though that although nonopioid pain relievers are not likely to cause addiction, they are fraught with their own problems. Tylenol taken even for a few days can cause severe liver and kidney problems in susceptible people. Taking N-acetyl cysteine (glutathione precursor) can alleviate many of the problems though.

It is also important to recognize that opioids do have a legitimate purpose for those in acute pain, but the evidence is beyond overwhelming that they are being prescribed indiscriminately in many cases as a result of greedy drug companies and doctors that are paid to prescribe opioids, resulting in tens of thousands dying from addiction.

These numbers are so high that they have actually resulted in a loss of two years in the average life expectancy of the average American. So, if you know someone that is on these dangerous medications, do everything you can to warn and plead with them to get off opioids as soon as possible.

Sources and References

- 1 CDC Morbidity and Mortality Weekly Report December 30, 2016 / 65(50-51);1445-1452
- 2,8 National Institute on Drug Abuse. Drug Overdose Death Rates June 30, 2023
- ³ Washington Post April 2, 2017
- 4 CNN December 21, 2017
- ⁵ CDC.gov, Opioid Overdoses Treated in ERs
- ⁶ New England Journal of Medicine 2016; 374:1501-1504
- ⁷ NPR March 3, 2017
- ⁹ Epoch Times, September 27, 2016
- 10, 11, 12, 18 Science Daily August 20, 2018
- ^{13, 15} Scientific American October 2018
- ¹⁴ Annals of Internal Medicine 2017 Aug 1;167(3):181-191
- ¹⁶ JAMA Internal Medicine 2018;178(5):707-708
- ¹⁷ Canadian Journal of Pain 2018; 2 (1): 236
- ¹⁹ Canadian Pharmacist Journal 2018 Mar-Apr; 151(2): 114-120
- ²⁰ J Clin Psychopharmacol. 2011 Oct;31(5):593-6
- ²¹ Center for Medicinal Cannabis Research, Report to the Legislature and Governor of the State of California, February 11, 2010 (PDF)
- ²² CNN Health April 29, 2018
- ²³ JAMA 2017;318(17):1661-1667
- ²⁴ Vox November 9, 2017
- ²⁵ CDC. Opioid Basics