Why You Should be Utilizing Medication-Assisted Treatment for Opiate Use Disorder in Your Practice

Randy Stevens, M.D.
Union Health
Terre Haute, IN

Medications and Devices FDA Approved for those with a Diagnosis of Opioid Use Disorder

Methadone - can only be given in a Methadone Clinic approved by the DEA and the State; it is a full Opiate agonist.

Buprenorphine / Naloxone (Suboxone) - can only be given by a physician / NP / PA with a special license approved by the DEA; it is partial agonist.

Naltrexone (Vivitrol) - can be given at any clinic; it is a complete Opiate antagonist.

Naloxone (Narcan) is an Opiate antagonist used to reverse an overdose.

Lofexidine (Lucemyra) is a central alpha 2 agonist that binds to receptors on adrenergic neurons, approved 2018.

NSS-2 Bridge Cranial Nerve Stimulator FDA approved in 2017

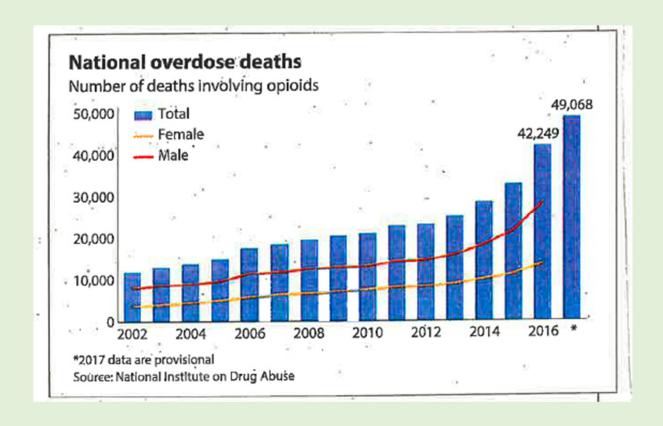
Wearable Opioid Addiction Treatment

The FDA has cleared a new auricular neurostimulation device (Drug Relief, DyAnsys, Inc.), to be used as an aid to reduce the symptoms of opioid withdrawal without narcotics. Providers can prescribe the device for use during opioid detoxification. The wearable device sends electrical pulses through tiny needles inserted in the ear to alleviate symptoms such as anxiety, agitation, depression, nausea, opiate cravings, and more.

The Drug Relief device is a percutaneous electrical nerve field stimulator designed to administer auricular neurostimulation treatment over 120 hours. The nonaddictive treatment allows for continuous nerve stimulation over five days. According to providers, patients may see a reduction in the symptoms of opioid withdrawal within 30 to 60 minutes of beginning treatment.

The device eases the process of detoxification, which is the first step in a comprehensive rehabilitation program. The objective is to ease symptoms while opioids are cleared from a patient's system. It can be used to help stabilize a patient during the early stages of withdrawal without side effects. Stabilization is a necessary first step before treating the patient with medication-assisted therapies.

Source: DyAnsys, Inc., June 12, 2018■



U.S. life expectancy down; drug overdose, suicide spiking

BY KARI OAKES

verage life expectancy in the United States fell from 78.7 years to 78.6 years from 2016 to 2017, according to a new report on the nation's health. The decrease is primarily attributable to increases in suicide and drug overdose rates, according to new data from the Centers for Disease Control (CDC).

"The latest CDC data show that the U.S. life expectancy has declined over the past few years. Tragically, this troubling trend is largely driven by deaths from drug overdose and suicide," said CDC Director Robert Redfield, MD, in a statement.

Two subreports that looked specifically at suicide mortality and drug overdose deaths mapped out where, when, and for whom the sharpest increases in mortality are being seen.

For suicide, though rates have increased by 33% overall for both men and women since 1999, the greatest annual increases in suicide rates have happened since 2006, according to a new report from the CDC's National Center for Health Statistics (NCHS). counties was 53%, compared with an increase of 16% in suicide rates for the nation's most urban counties over the 1999-2017 time period.

Over the entire period studied, men were more likely than women to experience suicide, as rates rose among most age groups. For example, the rates of suicide for men aged 15-24 years rose from 16.8 to 22.7 per 100,000; for women in that age group, suicide rates went from 3.0 to 5.8 per 100,000.

Though suicide has remained the 10th leading cause of death overall in the United States, suicide was the second leading cause of death for adolescents and young adults (aged 10-34) in 2016, and the fourth leading cause of death for those aged 35-54 in that year.

These increases come despite a goal set by the CDC and a national coalition of health partners to reduce suicide rates to 10.2 per 100,000 by 2020, as part of the Healthy People 2020 initiative, noted Molly Hedegaard, MD, of NCHS, and her coauthors, in the suicide mortality data briefing.

Drug overdoses increased by nearly

100,000 individuals, said Dr. Hedegaard and the coauthors of the drug overdose mortality report.

Reflecting known national trends in opioid use disorder, age-adjusted drug overdose deaths were highest in the states of West Virginia, Ohio, and Pennsylvania, where rates were 57.8, 46.3, and 44.3 per 100,000 residents, respectively. The District of Columbia had the fourth-highest age adjusted drug overdose death rate, at 44 per 100,000.

Twenty states, clustered primarily in the Eastern half of the United States, "had age-adjusted drug overdose death rate that were statistically higher than the national rate," wrote Dr. Hedegaard and her coauthors.

Compared with 1999, more than six times as many adults in older midlife (aged 55-64 years) died from drug overdoses in 2017 (4.2 versus 28 per 100,000).

Adults aged 25-34 years, 35-44 years, and 45-54 years also had significant increases in drug overdose rates; in 2017, rates were 38.4, 29, and 37.7 per 100,000, respectively. Adolescent and young adults died from drug overdoses at a rate of

just 0.3 per 100,000 deaths. Synthetic opioids include fentanyl and fentanyl analogs, such as carfentanyl.

Deaths involving heroin remained stable from 2016 to 2017, at 4.9 per 100,000.

Deaths attributable to natural and semisynthetic prescription opioids, such as oxycodone and hydrocodone, also were the same in 2017 as 2016, at 4.4 per 100,000.

As for trends over time since 1999, the rate of increase in drug overdose deaths had risen slowly since 1999 and stabilized in the mid-2000s. However, beginning in 2012, rates have increased steeply, particularly for males.

"Male rates were significantly higher than female rates for all years," reported Dr. Hedegaard and her coauthors (P less than .05). Though female drug overdose death rates have climbed from 3.9 to 14.4 per 100,000 since 1999, the male death rate has gone from 8.2 to 29.1 per 100,000 during the study period.

"Life expectancy gives us a snapshot of the nation's overall health and these sobering statistics are a wakeup call that we are losing too many Americans, too early and too

Overshadowed by opioids, meth is back, hospitalizations up

BY ANNA GORMAN, KAISER HEALTH NEWS

he number of people hospitalized because of amphetamine use is skyrocketing in the United States, but the resurgence of the drug largely has been overshadowed by the nation's intense focus on opioids.

Amphetamine-related hospitalizations jumped by about 245% during 2008-2015, according to a recent study in the Journal of the American Medical Association. That dwarfs the rise in hospitalizations from other drugs, such as opioids, which were up by about 46%. The most significant increases were in Western states.

The surge in hospitalizations and deaths from amphetamines "is just totally off the radar," said Jane Maxwell, PhD, an researcher at the Addiction Research Institute at the University of Texas at Austin, "Nobody is paying attention,"

Lupita Ruiz, 25, started using methamphetamine in her late teens but said she has been clean for about 2 years. When she was using, she said, her heart beat fast, she would stay up all night, and she would forget to eat.

Ms. Ruiz, who lives in Spokane, Wash., said she was taken to the hospital twice after having mental breakdowns related to methamphetamine use, including a month-long stay in the psychiatric ward in 2016. One time, Ms. Ruiz said, she yelled at and kicked police officers after they responded to a call to her apartment. Another time, she started walking on the freeway but doesn't remember why.

"It just made me go crazy," she said. "I was all messed up in my head."

The federal government estimates that more than 10,000 people died of meth-related drug overdoses last year. Deaths from meth overdose gencrally result from multiple organ failure or heart

are meth users. Some act so dangerously that they require sedation or restraints. He often sees people who have been using the drug for a long time and are dealing with the downstream consequences.

In the short term, the drug can cause a rapid heart rate and dangerously high blood pressure. In the long term, it can cause anxiety, dental problems, and weight loss.

"You see people as young as their 30s with congestive heart failure as if they were in their 70s," he said.

Jon B. Lopey, the sheriff-coroner of Siskiyou County in rural Northern California, said his officers frequently encounter meth users who are prone to violence and in the midst of what appear to be psychotic episodes. Many are emaciated and have missing teeth, dilated pupils, and a tendency to pick at their skin because of a sensation of something beneath it.

"Meth is very, very destructive," said Sheriff Lopey, who also sits on the executive board of the California Peace Officers Association. "It is just so debilitating the way it ruins lives and health."

Nationwide, amphetamine-related hospitalizations were primarily from mental health or cardiovascular complications of the drug use, the JAMA study found. About half of the amphetamine hospitalizations also involved at least one other drug.

Because there has been so much attention on opioids, "we have not been properly keeping tabs on other substance use trends as robustly as we should " said study auch on Thele M. T. I.

We have really undercut treatment for methamphetamine.

Meth has been completely overshadowed by opioids. 99 REVIEW



Backstories on the US Opioid Epidemic. Good Intentions Gone Bad, an Industry Gone Rogue, and Watch Dogs Gone to Sleep



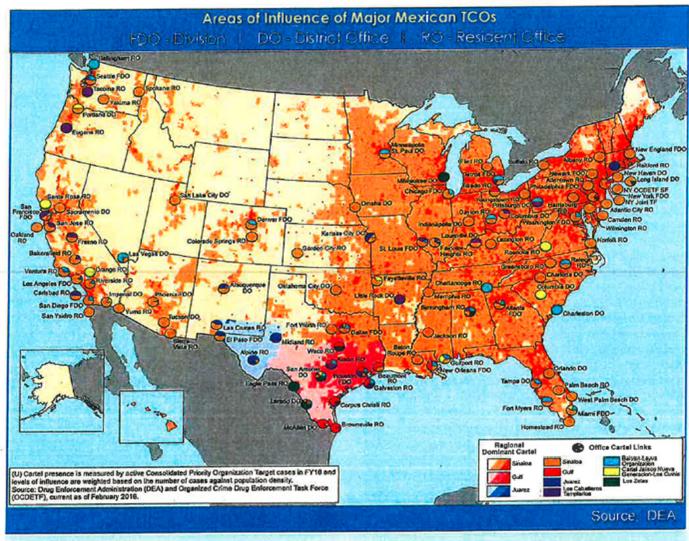


Figure 3 Present locations of drug cartels operating in the United States. Adapted from Reference 23.



The Changing Face of Teenage Drug Abuse — The Trend toward Prescription Drugs

Richard A. Friedman, M.D.

X Then Eric, an 18-year-old who lives in San Francisco, wants to get some Vicodin (hydrocodoneacetaminophen), it's a simple matter. "I can get prescription drugs from different places and don't ever have to see a doctor," he explained. "I have friends whose parents are pill addicts, and we 'borrow' from them. Other times I have friends who have ailments who get lots of pills and sell them for cheap. As long as prescription pills are taken right, they're much safer than street drugs."

Eric's habits reflect an emerging pattern in drug use by teenagers: illicit street drugs such as "ecstasy" (3,4-methylenedioxymethamphetamine) and cocaine are decreasing in popularity, whereas the nonmedical use of certain prescription drugs is on the rise. These findings were reported in

the Monitoring the Future survey, which is sponsored by the National Institute on Drug Abuse and designed and conducted by researchers at the University of Michigan.1 The study, which began in 4975,

"We're living in a time that seems decidedly more apocalyptic.... Maybe we need something to slow down."

annually surveys a nationally representative sample of about 50,000 students in 400 public and private secondary schools in the United States.

Overall, the proportion of teens

who reported having used any illicit drug during the previous year has dropped by more than a third among 8th graders and by about 10 percent among 12th graders since the peaks reported in the mid-to-late 1990s, according to the 2005 survey. Alcohol use and cigarette smoking among teens are now at historic lows. In contrast, the number of high-school students who are abusing prescription pain relievers such as oxycodone (OxyContin), a potent and highly addictive opiate, or sedatives is on the rise. A total of 7.2 percent of high-school seniors reported nonmedical use of sedatives in 2005, up from a low of 2.8 percent in 1992 (see graph). Reported use of oxycodone in this group increased from 4.0 percent in 2002 to 5.5 percent in 2005.

The survey did not ask teenag-





TO TREAT OPIOID USE DISORDER

A practical guide

Consider these exercises for chronic musculoskeletal pain

CDC recommendations for the 2018-2019 flu season

CASE REPORT

Chest tightness in 24-year-old after smoking marijuana • Dx?

Time to stop glucosamine and chondroitin for knee OA?

CLINICAL INQUIRIES

Hypomagnesemia: How often is it really an issue with PPIs?

CLINICAL INQUIRIES

Do statins after the risk
or progression of dementia?

PROTO ROUNDS
Painful facial blisters, fever, and conjunctivitis • Dx?



Buprenorphine to treat opioid use disorder: A practical guide

Medication-assisted treatment is demonstrably superior to abstinence and counseling in maintaining sobriety.

Study Examines Physicians' Readiness to Treat Opioid Use Disorder

A study published in Annals of Family Medicine examined whether physician, residency, and practice characteristics are associated with adequate preparation during residency to provide buprenorphine treatment and with currently providing buprenorphine treatment. After analyzing data from 1,979 family physicians who completed residency in 2013, the authors found that only 10% of these early-career family physicians felt adequately trained to prescribe buprenorphine for opioid use disorders, and only 7% reported providing buprenorphine in their current practice. Of family physicians who reported currently providing buprenorphine, 46% said they were trained to do so during residency; however, more than two-thirds are not doing so in practice. Family physicians who said they felt prepared to provide buprenorphine were more likely to be engaged in research or practice-based research network (PBRN) activities and to have trained in the Northeast or West. Family physicians who currently provide buprenorphine therapy were more likely to feel prepared to provide this treatment, to be engaged in research or PBRN activities, to work in a federally qualified health center, and to practice in the Northeast or West. For more information, go to https://www.aafp.org/ news/health-of-the-public/20181003buprenorphine.html.

November 1, 2018 • Volume 98, Number 9

Surgeon General Updates Opioids Report

The report "Facing Addiction in America: The Surgeon General's Spotlight on Opioids" recaps data on the prevalence of opioid misuse, opioid use disorders, and opioid overdoses. It also offers recommendations on combatting the opioid crisis for health care professionals. These recommendations include addressing substance use-related health issues with the same care as other chronic health conditions; following the Centers for Disease Control and Prevention's recommendations for prescribing opioids for chronic pain; assessing for behavioral risk factors to help inform treatment decisions in collaboration with mental health professionals; checking prescription drug monitoring programs before prescribing opioids; referring patients to opioid treatment professionals when necessary; and becoming qualified to prescribe buprenorphine for the treatment of opioid use disorders. Supplementary materials released with the report include a digital postcard that highlights actions to raise awareness and prevent opioid misuse, and an advisory on naloxone and opioid overdose. For more information, go to https://www.aafp.org/news/health-of-thepublic/20181002opioidsspotlight.html.

States in 2016, and opioid overdoses have quintupled since 1999. Among the causes behind these statistics is increased opiate prescribing by physicians—with primary care providers accounting for about one half of opiate prescriptions. As a result, the Centers for Disease Control and Prevention has issued a 4-part response for physicians, which includes careful opiate prescribing, expanded access to naloxone, prevention of opioid use disorder (OUD), and expanded use of medication-assisted treatment (MAT) of addiction—with the goal of preventing and managing OUD.

TABLE 1

DSM-5 criteria for OUD5*

Opioid use disorder (OUD) is "a problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least 2 of the following, occurring within a 12-month period."

- Opioids are often taken in larger amounts or over a longer period than was intended
- There is a persistent desire or unsuccessful efforts to cut down or control
 opioid use
- A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects
- Craving, or a strong desire or urge to use opioids
- Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home
- Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids
- Important social, occupational, or recreational activities are given up or reduced because of opioid use
- Recurrent opioid use in situations in which it is physically hazardous
- Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance

- Tolerance,* as defined by either of the following:
 - A need for markedly increased amounts of opioids to achieve intoxication or desired effect
 - A markedly diminished effect with continued use of the same amount of an opioid
- Withdrawal, as manifested by either of the following:
 - The characteristic opioid withdrawal syndrome*
 - Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms

DSM-5, Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.

*The severity of a patient's OUD is specified as mild (2 or 3 symptoms), moderate (4 or 5 symptoms), or severe (26 symptoms).

[†]This criterion is not considered to be met for patients taking opioids solely under appropriate redical supervision.

*Refer to Criteria A and B of the criteria set for opioid withdrawal provided in the DSM-5.

CASE >

Fred R, a 55-year-old man who has been taking oxycodone, 70 mg/d, for chronic pain for longer than 10 years, visits your clinic for a prescription refill. His prescription monitoring program confirms the long history of regular oxycodone use, with the dosage escalating over the past 6 months. He recently was discharged from the hospital after an overdose of opiates.

Mr. R admits to using heroin after running out of oxycodone. He is in mild withdrawal, with a score of 8 (of a possible 48) on the Clinical Opioid Withdrawal Scale⁴ (COWS, which assigns point values to 11 common symptoms to gauge the severity of opioid withdrawal and, by inference, the patient's degree of physical dependence). You determine that Mr. R is frightened about his use of oxycodone and would like to stop; he has tried to stop several times on his own but always relapses when withdrawal becomes severe.

How would you proceed with the care of this patient?

In our experience, a common induction method is to give 2 to 4 mg buprenorphine, followed by a 1-hour assessment of withdrawal symptoms.

CASE >

After you and Mr. R discuss his addiction, you decide to initiate treatment that includes buprenorphine. You have a specimen collected for a urine toxicology screen and blood drawn for a baseline liver function panel, hepatitis panel, and human immunodeficiency virus screen, and provide him with resources (nearby treatment center, an NA meeting location) for treating OUD. You write a prescription for #8 buprenorphine and naloxone, 2 mg/0.5 mg. films, and instruct Mr. R to: take 1 film when withdrawal symptoms become worse; wait 1 hour; and take another film if he is still experiencing withdrawal symptoms. He can repeat this dosing regimen until he reaches 8 mg/d of buprenorphine (4 films). You schedule followup in 2 days.

At follow-up, the patient reports that taking 3 films alleviated withdrawal symptoms, but that symptoms returned approximately 12 hours later, at which time he took the fourth film. This helped him through until the next day, when he again took 3 films in the morning and 1 film in the late evening. He feels that this regimen is helping relieve withdrawal symptoms and cravings. You provide a prescription for buprenorphine and naloxone, 8 mg/2 mg daily, and request a follow-up visit in 5 days.

At the next visit, Mr. R reports that he still has cravings for oxycodone. You increase the dosage of buprenorphine and naloxone to 12 mg/3 mg daily.

At the next visit, he reports no longer having cravings.

You continue to monitor Mr. R with urine drug screening and discussion of his recovery with the help of his family and support network. After 3 months of consistent visits, he fails to show up for his every-2-or-3-week appointment.

Four days later, Mr. R shows up at the clinic, apologizing for missing the appointment and assuring you that this won't happen again. Rapid urine drug screening is positive for morphine. When confronted, he admits using heroin. He reports that his cravings had increased, for which he took buprenorphine and naloxone above the prescribed dosage, and ran out of films early. He then used heroin 3 times to prevent withdrawal.

Mr. R admits that he has been having cravings for oxycodone since the start of treatment for addiction, but thought he was strong enough to overcome the cravings. He feels disappointed and embarrassed about this; he wants to continue with buprenorphine, he tells you, but worries that you will refuse to continue seeing him now.

Using shared decision-making, you opt

to increase the buprenorphine dosage by 4 mg (to 16 mg/d—ie, 2 films of buprenorphine and naloxone, 8 mg/2 mg) to alleviate cravings. You instruct him to engage his support network, including his family and NA sponsor, and to start outpatient group therapy. He tells you that he is willing to go back to weekly clinic visits until he is stabilized.

PRACTICE RECOMMENDATIONS

- > Use signs of intoxication, signs of withdrawal, urine drug screening, and diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, to screen for, and diagnose, opioid use disorder. (C)
- > Offer and institute medication-assisted treatment when appropriate to reduce the risk of opioid-related and overall mortality in patients with opioid use disorder. (A)
- Identify and treat comorbid psychiatric disorders in patients with opioid use disorder, which provides benefit during treatment of the disorder.

Strength of recommendation (SOR)

- A Good-quality patient-oriented evidence
- B Inconsistent or limited-quality patient-oriented evidence
- Consensus, usual practice, opinion, disease-oriented evidence, case series

