OPIOIDS IN THE U.S.

AN EMPLOYERS' PRIMER FROM KRESS

If you haven't yet heard of the opioid crisis plaguing America, you haven't been paying attention. It has been the subject of presidential debates, State of the Union addresses, endless HR and employment articles, and much speculation by the public. Everyone is impacted by the opioid crisis in the U.S., whether as a small business owner trying to hire consistent workers, as a community member dealing with the consequences of addiction, or as a family member or a friend of someone drowning in prescription drugs. All of us stand united in our desire to defeat this epidemic, but victory requires strategy. Education is the first step.

For more than 20 years, KRESS has helped employers across the country plan for and deal with the problem of drug abuse in the workplace and in the workforce. Opioids may be the greatest challenge we've ever seen. This comprehensive guide will take you through how we got here and how to prevent opioids from destroying your employees and your business.

KRESS offers fully customizable drug panels to target the opioids most commonly abused in your region or industry. Although a standard 5-panel urine drug test was once a sensible choice for most companies, if you are concerned about the abuse of prescription drugs and painkillers, a more extensive test may well be necessary.

Contact KRESS today at **(888) 636-3693** to discuss how we can help keep your employees and customers safe from opioid abuse on the job.

TABLE OF CONTENTS

- 2 A Brief History of Opioids
- 3 A New Perspective on Pain Management
- 4 The Pharmaceutical Case Study
- 5 An Ongoing Crisis



OPIUM made its way to the U.S.

A BRIEF HISTORY OF OPIOIDS

Opium in North America predates the United States. Some date the arrival of opium as early as 1775. Since then, opium has been used as a pain reliver in the Civil War, a recreational drug, and even a cough medicine distributed by Bayer. In the early 20th century, its use as a recreational drug became more prevalent—and problematic. Congress was motivated to act. Opiates were first limited only to pain relief use by the Harrison Narcotics Tax Act of 1914. The very real effects of addiction, first seen in mass after the Civil War with 400,000 veterans developing a critical dependency, were made public knowledge. From 1920–1950, Americans began to better understand addiction and started to step away from opioids, not only as required by law but also in medical treatment.

Throughout the '70s, doctors looked more and more to surgeries and alternative therapies for pain management. Then, between 1988–1998, there was a tide change which was caused by a number of events, including the approval of Percocet and Vicodin by the FDA. Although the World Health Organization recommended opioids only for cancer pain and if no other treatments were available, the tide was already turning in favor of the more powerful relief opioids could bring. The Opioid Epidemic was on the horizon, and the American people, the medical community, and pharmaceutical companies are all part of the narrative.

TODAY

There are 142 overdose deaths a day in the United States. This means every three weeks we have a loss equal to the loss we had on 9/11.

K

1860s

Started to be commonly used to treat soldiers in the Civil War (400,000 of those who received morphine for pain became **addicted to opioids**).

Late 1800s

Sharp rise in opioid addiction occurs due to an increase in over-the-counter availability. Bayer brands begins selling heroin for pain relief and coughs.

Early 1900s

Morphine and pain management

1910

Americans were crushing opioid pills and inhaling them for pleasure.

1914

Harrison Narcotics Act made opioids available only by perscription to limit recreational use.

1920-1950

In an attempt to avoid addiction, opioids are only prescribed to the dying for acute pain, rather than for chronic pain.

Early 1970s

With **strong stigmas and increasing fears** associated with opioid addiction, doctors turned to surgeries, nerve-blocking operations and other non-pharmaceutical methods to relieve chronic pain.

1970-1990

The American Pain Society advocated for pain relief, specifically nonaddictive treatment for cancer-related pain.

1976-1986

PERCOCET AND VICODIN are approved by the FDA

1986

The World Health Organization creates guidelines for treating cancer pain, recommending opioid use only if no other options are available.

1998

Purdue Pharma spent \$207 million on Oxycontin marketing.

1997-2002

Morphine prescriptions increase by 73-percent, Hydromorphone increase by 96-percent, Fentanyl prescriptions increase by 226-percent, and Oxycodone prescriptions increase by 402-percent.

200

Medical centers are required to examine their patients' pain levels.

Mid-2000s

The commonality of teens starting to use opioids after finding prescription medications in their parents' bathroom is first reported.

2010

FROM PILLS TO HEROIN

2013

27,000+ drug-dependent babies being born (Neonatal Abstinence Syndrome)

2015

National record of overdose deaths grows to 52,404.

2016

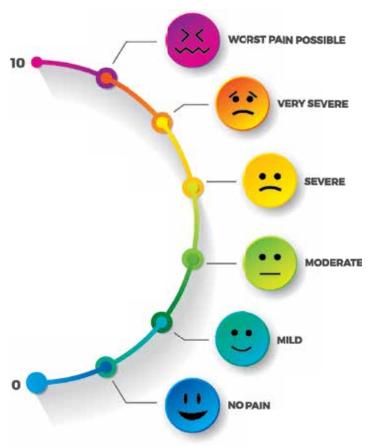
Surgeon General, Vivek Murthy, reports: "For far too long people have thought about addiction as a character flow or a moral failing. **Addiction is a chronic disease of the brain** and it's one that we have to treat the way we would any other chronic illiness: with skill, with compassion, and with urgency."

A NEW PERSPECTIVE ON PAIN MANAGEMENT

By 1995, attitudes about pain management were shifting in the United States. For most of human history, pain was understood to be an unfortunate fact of life. However, in the 1980s and '90s, people were no longer interested in the previous narrative on what life was. There was a massive influx of recreational drugs into the U.S. from South America, and the young and affluent began to realize that it was entirely possible to live in a state where pain does not exist. This state was far more desirable than the reality their parents and grandparents accepted—it was time for something new. The demand for a life free of pain was encroaching on the medical community's practice and treatment of disease. There was additional pressure from veterans at the VA hospitals and others suffering from chronic or post-operative pain. Physicians needed a way to understand and deal with their patients' demands. Enter "The Fifth Sign."

According to Physician's Weekly, "The [fifth sign] concept originated in the VA hospital system in the late 1990s and became a Joint Commission standard in 2001. Pain was allegedly being under-treated. Hospitals were forced to emphasize the assessment of pain for all patients on every shift with the (mistaken) idea that all pain must be closely monitored and treated. This is based on the (mistaken) idea that pain medication is capable of rendering patients completely pain-free. This has now become an expectation of many patients who are incredulous and disappointed when that expectation is not met."

In the medical community, signs are the first and most crucial step in determining treatment. A symptom can be faked or imitated; a sign is definitive. The four signs a physician typically checked were heart rate, blood pressure, respiratory rate, and temperature. Anyone who has been in an emergency room is familiar with this list—it's the first thing EMTs are trained to evaluate. However, in the 1990s, the fifth sign was introduced: Pain. No longer was pain simply a patient complaint—it was now as real to the diagnosis and treatment plan as pulse or respiration. Emergency rooms and physician's offices across all specialties now feature a row of smiley faces, and the technician asks about the perceived pain in every encounter.



According to Science Direct, chronic pain has become a crisis in the U.S. "Over 100 million Americans are living with chronic pain, and pain is the most common reason that patients seek medical attention. Despite the prevalence of pain, the practice of pain management and the scientific discipline of pain research are relatively new fields compared to the rest of medicine – contributing to a twenty-first century dilemma for health care providers asked to relieve suffering in the Fifth Vital Sign era."

In a case where a patient says his or her pain is a 10, and the toe is severed, the treatment is straightforward to relieving the pain. But, what does a physician do when there is no clear cause of pain and thus no clear path to relieving the pain?

THE PHARMACEUTICAL CASE STUDY

For decades, physicians had feared to use pain medication, especially opioids, because of the high addiction rates. This is no surprise to anyone who has studied history, such as the Opium Wars in China; or to a student of current events who has witnessed the devastation in Afghanistan and the Middle East due to opium production and use in the 21st century.

However, the increasing pressure from the American Pain Society and consumers was forcing a re-evaluation of standard medical treatment. According to an article published by Science Direct, "the American Pain Society (APS) initiated an influential campaign, "Pain, The Fifth Vital Sign," to raise awareness among health professionals of pain assessment and management. Although opioids were described as just one possible treatment option, the initiative did advocate a change in philosophy around use of opioids for chronic pain. Opioids were promoted as a way to improve quality at end of life. The Veteran's Health Administration (VHA), the largest government run health-care system in the US, adopted pain as the 5th vital sign initiative in 1999giving strong credibility to the campaign (Mularski et al., 2006),"

Most physicians were still hesitant to prescribe patients a highly addictive drug. But then, the rediscovery and mass acceptance of a single letter to the New England Journal of Medicine in 1980 assuaged physicians' fears. This letter was cited in hundreds of other articles, pharmaceutical publications, and its findings were circulated as gospel. The letter's headline? "Addiction rare in patients treated with narcotics."

"Purdue Pharma, which makes OxyContin, starting using the letter's data to say that less than one percent of patients treated with opioids became addicted. Pain specialists routinely cited it in their lectures. Porter and Jick's letter is not the only study whose findings on opioid addiction became taken out of context, but it was one of the most prominent. Jick recently told the AP, 'I'm essentially mortified that that letter to the editor was used as an excuse to do what these drug companies did."

The letter was only five sentences long, and it was a study of an extremely controlled group of patients for a very limited time frame. The study was not peer reviewed because it was published as a letter, and the findings were not meant to be conclusive, more of a point of interest from one physician to his community of peers.

Now, the myth that it was possible to take opioids without addiction was in circulation, and, according to pharmaceuticals, supported by the New England Journal of Medicine. Now, the drugs were available to physicians (developed in the 1990s), addiction had been downplayed, and leaders in the medical community were supporting prescription of opioids.

"Even my fellowship director was so bold as to say, 'Pain soaks up the euphoria, and therefore you can't become addicted to opioids," said Nathaniel Katz, M.D. in an interview with CNN.

Recent research shows that the medical community was, in many cases, motivated by outsized "thought leadership" profits to endorse opioids. According to research published by CNN, thousands of physicians were paid more than \$25,000 by opioid manufacturers in 2014 and 2015.

It was the perfect storm. Pain needed a solution. Opioids offered a definitive one. Prescription pads were at the ready.

AN ONGOING CRISIS

Transition to today, two decades after opioids swept through the U.S. Someone dies every 19 minutes from an accidental drug overdose. In 2012, enough opioids were prescribed for every American man, woman, and child to have a bottle in their possession. The opioid epidemic is impacting every American, and every community. Those most likely to become addicted to opioids are those in the poorest and most rural communities—areas already hit hard by poor health and poverty.

However, Americans have begun fighting back against the tide of prescription drugs flowing into their communities. People are using the judicial system to hammer physicians for prescribing opioids. A doctor can face a triple liability if he or she irresponsibly prescribes opioids: a civil lawsuit, state medical board action, and criminal prosecution for homicide.

The national government is on board for the fight against opioids. Bills are being passed by the legislative branch. In June, Congress passed legislation that combined 58 bills aimed at combatting the use of fentanyl, creating more pain management options, and limiting mail order services for opioids. The bill is called the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act. Even President Trump is acting to end the opioid crisis. His first public service campaign, begun in June of 2018, is dedicated to curbing opioid use, addiction, and accidental death in America's youth.

We have not yet begun to see the benefits of these efforts; the progress against the embedded foe is likely to be slow and painful. However, Americans were able to curb their heroin and opioid use at the beginning of the 20th century. Let us hope, for the sake of our nation, the health of our children, and the hope of our future, that we can do it again in the 21st.

11.5 M

People misused prescription opioids



116

People died every day from opioid-related drug overdoses



42,249

People died from overdosing on opioids



2.1 M

People misused prescription opioids for the first time



2.1 M

People had an opioid use disorder



17,087

Deaths attributed to overdosing on commonly prescribed opioids



170,000

People used heroin for the first time



19,413

Deaths attributed to overdosing on synthetic opioids other than methadone



948,000

People used heroin



15,469

Deaths attributed to overdosing on heroin



504 BILLION

in economic costs



