

# The Opioid Crisis: Roots, Evolution, and Contributors

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## Introduction

Between 1999 and 2017, 400,000 people died from drug overdoses involving opioids in the United States (American Society of Addiction Medicine, 2016, p. 1). This is merely a symptom of a greater, concerning trend. Opioids are a class of drugs which includes heroin, but also licit prescription pain relievers such as morphine. Since the 1990s, opioid consumption has risen dramatically, with opioids being increasingly prescribed to patients suffering from chronic pain and other injuries. The prescribing rates for opioids have soared: sales of prescription pain relievers in 2010 were four times those in 1999 (American Society of Addiction Medicine, 2016, p. 1). This is extremely worrying. Opioids are known for their highly addictive nature. The seemingly harmless prescription of certain pain relievers has led thousands of patients to life-long dependency on opioids. In addition, this crisis has the potential to affect every single one of us if we are ever in need of prescription pain relievers.

My research in this paper focuses on the opioid crisis that has been affecting the United States since the turn of the century. I draw on scholarly articles, written by opioid crisis experts such as physician Art Van Zee and Stanford Management Science & Engineering Professor Margaret Brandeau, and on non-scholarly sources, such as advertising campaigns and the extensive work conducted by opioid crisis journalist Chris McGreal. In my work, I first define the opioid crisis. In particular, I trace back its historical roots and the circumstances that triggered it, and I highlight the symptoms of the crisis today. The US government and the pharmaceutical and insurance industries have played a crucial role in this crisis, particularly because of the different ways in which they portrayed the opioid epidemic to the public. Hence, my research will address the following questions:

- What is the **opioid crisis**?
- What role has the **US government** played in the crisis?
- What role have the **pharmaceutical and insurance industries** played in the crisis?
- What are the **differences** in the portrayals of the opioid crisis by the US government and by the private sector?

Why do these specific questions matter? The ways in which the US government and pharmaceutical and insurance industries have responded to the crisis have been very influential in shaping its

evolution. On one hand, the US government has raised awareness on the highly addictive nature of opioids, through powerful ad campaigns and effective policy making. Yet at the same time, the private sector has pushed against these efforts, repeatedly encouraging the use of opioids for pain relief. These conflicting views on the opioid crisis are crucial. Both responses have influenced the public's perception -- and consumption -- of opioids. These responses will determine for how much longer the crisis will go on, and more importantly, when it will end.

### Defining the opioid crisis

**What is the opioid crisis?** How did it come about? The crisis can be distilled into three phases. The first phase spans the mid-1990s to 2010. From the 1990s onwards, pain increasingly became recognized as something requiring extensive medical treatment. Chris McGreal, British journalist and author of *American Overdose: The Opioid Tragedy in Three Acts*, describes this as the 'zero pain goal' (McGreal, 2018, p.1). In 1995, the American Pain Society, a physicians' organization based in Chicago, Illinois, even defined pain as a 'fifth vital sign' (DeWeerd, 2019, p. 1). To this group of doctors, pain should be monitored as closely as the four main vital signs: body temperature, pulse rate, respiration rate, and blood pressure. At the time, opioids were not believed to be addictive. Opioid painkillers started increasingly being prescribed by doctors to treat pain. In the mid-1990s, pharmaceutical companies introduced opioid-based products, with OxyContin (produced by PurduePharma) being the most popular one. The use of opioids to treat pain became widespread. At the same time, deaths due to prescription-opioid overdoses increased dramatically. Moreover, a black market of opioid painkillers started emerging. Users amassed opioid prescriptions, and illegally sold their excess to other users. This was an unusual phenomenon: the users themselves were 'responsible for the drugs entering the black market' (DeWeerd, 2019, p. 2).

We then entered the second phase of the opioid crisis, from 2010 to 2015. In 2010, following the rise in overdose deaths from opioid prescription painkillers, regulatory agencies made it more difficult for physicians to prescribe these products. New, stricter guidelines regulating this were implemented by the Centers for Disease Control and Prevention (CDC) and even led some physicians to 'refuse to see chronic pain patients for fear of having to prescribe an opioid' (Jay, 2018, p. 454). At the same time in the United States, for unclear reasons, the supply of heroin – another, illicit opioid – rose, and its price fell (DeWeerd, 2019, p. 3). Heroin became easier to obtain and cheaper than prescription opioids. Many patients addicted to opioids who formerly consumed prescription opioids turned to heroin to satisfy their needs. According to a study conducted by Cerdá, 'people with a history of using prescription opioids are 13 times more likely to start using heroin than those with no history of prescription opioid misuse' (DeWeerd, 2019, p. 3). Prescription opioids became a 'gateway' to

heroin. Hence, heroin consumption became widespread and overdose deaths from heroin skyrocketed.

Since 2015, we are experiencing the third phase of the crisis, which involves the consumption of synthetic opioids such as fentanyl. To increase their profits, in the past few years, heroin dealers have been mixing many of their street drugs with synthetic opioids. These opioids are much more potent, addictive, and deadly than heroin, resulting in additional numbers of overdose deaths. According to the CDC, between 2013 and 2016, overdose deaths from fentanyl and similar molecules increased by 88% per year. Furthermore, the CDC Rapid Release Overdose Data suggests that, from August 2019 to August 2020, deaths from synthetic opioids rose by 52% year-on-year.

Today, symptoms of the opioid crisis include thousands of opioid overdose deaths on a national level. The magnitude of this public health crisis is unprecedented. In 2017, more people in the United States died from overdoses involving opioids than people died from HIV- or AIDS-related illnesses at the peak of the AIDS epidemic (DeWeerd, 2019, p. 1). The crisis significantly affects states concentrating many blue-collar jobs, such as Virginia. In manual jobs, workers can physically injure themselves, and are likely to be prescribed addictive opioid painkillers if they do. Huntington, West Virginia, is a compelling example of this. It is particularly affected by the crisis: its opioid overdose death rate is ten times the national average. The award-winning Netflix documentary *Heroin(e)* depicts the day-to-day consequences of the opioid crisis in Huntington, Virginia. In the documentary, an overwhelmed local firefighter asserts that approximately seven opioid overdoses happen there *daily*, both in rural and wealthier areas.

In conclusion, the opioid crisis can be summarized in three phases. From the 1990s to 2010, opioid-based painkillers became increasingly prescribed to treat pain, and overdose deaths related to these painkillers rose dramatically. This explains why from 2010 to 2015, the prescription of opioid painkillers became more difficult. Addicted patients started turning to an illicit but cheaper and more accessible option, heroin. Finally, since 2015, the consumption of fentanyl and other extremely potent synthetic opioids has become more frequent. Symptoms of the national opioid crisis include thousands of overdose deaths involving opioids in the whole country.

### The role of the US government in the crisis

Now that we have a better understanding of the roots, phases, and symptoms of the opioid crisis, we will turn to my second research question: **What role has the US government played in the crisis?** The government has been an important element throughout this crisis through its regulatory agencies, its legal system, and ad campaigns.

Firstly, regulatory agencies such as the Food and Drug Administration and the Centers for Disease Control and Prevention have played a crucial role in this crisis. The FDA has been a prominent actor in the crisis, ever since its beginnings in the mid-1990s. This agency regulates the advertising and promotion of prescription drugs,

and ensures that it is truthful. Pharmaceutical companies' materials are submitted to the FDA for review, but (very surprisingly!) *it is not required for these materials to be approved prior to their use*. Indeed, the FDA has a very limited number of staff overseeing these materials. For instance, in 2002, only 39 FDA staff members had to review 34,000 pieces of promotional material. Therefore, the FDA does not have the capacity to review everything before advertising materials are put out into the market. This has been a problem in the opioid crisis because it has enabled pharmaceutical companies to publicize untruthful facts on the addictiveness of opioids (Van Zee, 2019, p. 5). In addition, the CDC has played a key role in the opioid epidemic. As mentioned above, around 2015 the CDC put in place stricter conditions to prescribe opioid painkillers. Out of 'fear' of violating these regulations, many physicians were discouraged from prescribing opioids to treat pain (Jay, 2018, p. 455). It is important to note that this had an unintended, negative consequence stated previously: with opioid painkillers more difficult to access, addicted patients started consuming less expensive, illicit heroin.

In addition, the legal system has played an important role in the opioid crisis. First, in some states, the laws in place have prevented a reduction of the opioid crisis. For instance, in Wisconsin, one of the states most affected by the crisis, there is a 'Len Bias law' in place since 1986. When someone dies from an opioid overdose, this law prosecutes the drug dealer(s) and opioid addict(s) who helped the deceased person acquire opioids (O'Brien, 2020, p. 1). A 'Good Samaritan Overdose Law' (GSOL), enacted in 2014, coexists with the 'Len Bias Law' in Wisconsin. According to the GSOL, if a person calls for help when another person is overdosing, both people are exempt from prosecution linked to drug-related charges. Yet this person calling for help might be a drug dealer or an opioid addict who enabled the consumption of opioids by the person overdosing. Hence, currently the Len Bias law prevents the GSOL from saving addicts from deadly overdoses. Whenever someone summons help for an overdose victim, that person is faced with the possibility of a criminal prosecution, in the likely case where a judge would place more importance on the Len Bias law instead of the GSOL (O'Brien, 2020, p. 2). Therefore, addicts do not summon help when other addicts are overdosing, and deadly overdose rates are not diminishing in Wisconsin. Second, the Department of Justice has tried to limit the opioid crisis by prosecuting retail pharmacists easily giving out prescription opioids. According to *The Economist*, in January 2021, the DOJ accused Walmart of fueling the opioid crisis by accepting questionable prescriptions for opioid-based painkillers. Walmart was also prosecuted for receiving thousands of suspicious opioid orders which it did not report. As of now, Walmart has denied these allegations.

Lastly, the government has released effective advertisement campaigns to raise awareness on the dangers of opioids and combat the opioid crisis. For instance, in 2018, the White House produced an ad campaign entitled 'Know the Truth, Spread the Truth'. It consisted of a

sequence of 30-second shocking videos realistically illustrating the negative, life-damaging consequences of opioid addiction. It also included a startling fact: ‘Every 15 minutes, someone in America dies from an opioid overdose.’ The goal of the campaign was, quite clearly, to deter people from opioid consumption. Here, the US government used its advertisement influence in a ‘positive’ way, to address a national health problem.

Overall, the government has played a multi-faceted role in this crisis, both positive and negative. The CDC has helped diminish the prescription of opioid painkillers, while the FDA has been unable to prevent pharmaceutical companies from publicizing untruthful information on opioids. Moreover, certain state laws have been ineffective in limiting the opioid crisis, but the Department of Justice has prosecuted retail pharmacists such as Walmart for accepting suspicious prescriptions of opioid painkillers. Lastly, the White House has produced effective, shocking ad campaigns to discourage the public from consuming opioids.

The private sector in the crisis: pharmaceutical & insurance industries

The US government has played a crucial role in the opioid crisis; however, it is important to note that **the pharmaceutical and insurance industries** have been just as important in shaping the crisis’ evolution.

First, the insurance industry has been a major contributor to the opioid crisis. Indeed, since the early 1990s, insurance companies have decided to stop paying for non-drug related treatments for pain management, such as physical therapy, psychological services, and yoga. Instead, they have only left pain medications (opioids) ‘in the toolbox’ (Jay, 2018, p. 459) to treat pain. The only good that they now pay for is the use of opioid pain medication. Because of this, thousands of patients unable to afford to treat their pain with non-drug related treatments have been forced to start consuming opioid painkillers. Many of them have become addicted to these, and this has greatly reinforced the opioid crisis.

The pharmaceutical industry has contributed even more than insurance companies to the opioid crisis. In particular, Purdue Pharma has fueled the opioid crisis through promoting its opioid-based prescription painkiller OxyContin. The product was initially introduced in 1996 and was very aggressively marketed and promoted. Thanks to this, OxyContin reached a ‘blockbuster drug status’ and its sales grew from \$48 billion in 1996 to nearly \$1.1 billion in 2001 (Van Zee, 2009, p. 1).

Purdue Pharma’s marketing strategy for OxyContin was complex. The company lobbied lawmakers (including the World Health Organization), sponsored medical education courses, and sent sales representatives to visit individual doctors (DeWeerd, 2019, p. 2). It is estimated that between 1996 and 2000, Purdue Pharma increased its internal sales force from 318 representatives to 671, and its physician call list from 33400 to 94000 (Van Zee, 2009, p. 2). In addition,

Purdue Pharma distributed promotional items to healthcare professionals, such as OxyContin fishing hats and stuffed toys (Van Zee, 2009, p. 2). Purdue Pharma even collected and used sophisticated data on prescribing patterns of physicians nationwide to influence physicians' prescribing of OxyContin (Van Zee, 2009, p. 2). Lastly, Purdue Pharma coined the powerful term 'opiophobia' to negatively portray physicians 'unreasonably' afraid of prescribing opioids due to their supposedly addictive nature. Overall, as stated by University of Pennsylvania Professor Abby E. Alpert, the extensive marketing of OxyContin explains 'a substantial share of [opioid] overdose deaths over the last two decades' (Alpert, & Powell, 2019, p. 1).

Throughout this marketing campaign, Purdue Pharma systematically emphasized that OxyContin was efficient and that it had a low addiction risk. However, Purdue Pharma knew then that 'opioids are not particularly effective for treating pain', compared to other non-drug alternatives (DeWeerd, 2019, p. 2). At the time, it was unclear whether opioids truly reduced pain on the long term. Additionally, Purdue Pharma trained its representatives to say that the risk of addiction to OxyContin was 'less than one percent' (Van Zee, 2009, p. 2). Nevertheless, Purdue Pharma was aware that OxyContin was a lot more addictive than this, as it disclosed in a 2007 lawsuit that resulted in a \$636 million fine (DeWeerd, 2019, p. 2). Hence, Purdue Pharma was actively lying to doctors and patients about the risks related to the drug it was producing.

Insurance companies reinforced the opioid crisis since the 1990s, when they decided to cover opioid drugs and no other pain treatment options. The pharmaceutical industry also fueled the crisis, in particular the firm Purdue Pharma with its opioid painkiller OxyContin. Purdue Pharma marketed this product aggressively, and actively lied to doctors and patients about its effectiveness and risks.

After examining the roles of the US government and the pharmaceutical and insurance industries in the opioid crisis, we are equipped to respond to our last research question: **What are the differences in the portrayals of the opioid crisis by the US government and by the private sector?** We can see that through powerful ad campaigns (among other things), the US government has repeatedly portrayed the opioid crisis as a public health problem that must be solved. It has warned the public on the dangers of opioid addiction, in order to prevent the crisis from continuing. On the other hand, it seems that the private sector has systematically praised the effectiveness of opioids in treating pain, although it was not scientifically proven. It has continuously ignored and/or underreported the dangers of opioid-based painkillers, and promoted their consumption to advance financial goals, regardless of their negative impact on the opioid crisis. By only covering opioid medication to treat pain, insurance companies ignored the dangers of opioids and forced many financially constrained patients into addiction. In addition, pharmaceutical companies such as Purdue Pharma repeatedly lied about the known dangers linked to opioid painkillers and marketed

them aggressively, encouraging the public to consume them, and further aggravating the opioid crisis.

### Conclusion

We have defined the opioid crisis, its roots, and its various stages since the 1990s. During the first stage of the crisis, opioids were praised as pain relievers, and increasingly prescribed to patients, which led to addiction and many overdose deaths. The second stage of the opioid crisis was when the prescription of opioid painkillers became more difficult. Addicted patients turned to a more accessible, cheaper, and illicit opioid, heroin. Lastly, the third stage of the crisis, which we are still living through today, is when patients started turning to fentanyl and other synthetic, extremely potent illicit opioids. It is also important to note that this crisis is a national problem, but it disproportionately affects states such as Virginia which concentrate manual jobs in which physical injuries are frequent occurrences. Furthermore, the US government has played a multi-faceted role in this crisis, through its regulatory agencies (in particular the CDC and the FDA), legal institutions (both at the state- and national level), and effective, shocking ad campaigns to discourage the public from opioid consumption. The pharmaceutical and insurance industries have been major contributors to the crisis, advancing their financial interests by repeatedly encouraging patients to use opioids to treat their pain, although they were often aware that opioids were extremely dangerous. Overall, we can see that the US government and private sector have responded to and portrayed the opioid crisis very differently.

It is interesting to think about what this might imply for the image and reputation of pharmaceutical companies more broadly. Recently, the development of vaccines against COVID-19 in the context of the current pandemic has significantly benefited pharmaceutical companies such as Pfizer and Moderna and portrayed them as the ‘saviors’ of a world devastated by coronavirus. However, the opioid crisis has certainly shattered the image of the pharmaceutical industry, making it come across as profit-driven and unethical. Moreover, certain big pharmaceutical firms have been heavily criticized for their harsh treatment of employees and work culture. For example, Moderna’s stressful work environment has led ‘at least a dozen highly placed executives’ to quit in the past four years, including heads of finance, technology, and finance (Garde, 2016, p. 1). Moderna employees also mention a toxic ‘culture of secrecy’ surrounding and within the firm, in which even prospective employees must sign non-disclosure agreements before taking part in job interviews (Garde, 2016, p. 1). Which of these perceptions of Big Pharma will survive in the public? Will Big Pharma be viewed as a group of private institutions promoting public health and pushing science to its limits? Or of ruthless monopolies merely driven by financial incentives?

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