



**Issue:** Tackling the issue of the opioid epidemic

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## Introduction

The word opioid is used in reference to substances that act on the opioid receptors in the brain. Opioids are a class of drugs that include heroin, a drug that is illegal in most countries, synthetic opioids such as fentanyl, and those that are available to patients legally by prescription such as morphine, hydrocodone and oxycodone. They are quite commonly used for medical purposes and more specifically, are primarily used for pain-relief. Most opioids are derivations of opium, which gets extracted from the poppy plant.

The opioid epidemic has been a concerning issue in the United States for over 25 years. The epidemic, despite several attempts and various approaches to bring it to an end, has been rapidly evolving and it persists to this day. It is being called an epidemic because the vast number of deaths left in its wake are comparable to that of an actual outbreak of disease.



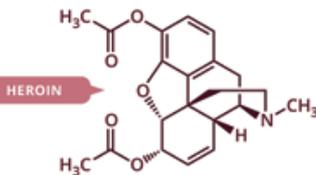
The start of the crisis dates back to 1991, when opioid-related deaths suddenly began to rise. This sudden upsurge in cases of opioid addiction and overdose originated from a proportional increase in the prescription of opioid and opioid-related medications. As an unforeseen consequence, some patients prescribed with these drugs became addicted to opioids. For some, it acted as a gateway drug: Once their doctors stopped prescribing them opioids, users that were addicted turned to illegal drugs such as heroin, and later, fentanyl. This only increased the death toll as unhygienic delivery methods increased the probability of infection and disease spread while heroin and fentanyl's highly potent nature made it easier for inexperienced or frequent users to overdose.

The influx of opioids has brought about an issue of national scale. In the recent years, there have been exceptionally high numbers of opioid-related overdose deaths. Heroin and fentanyl have been the cause of most of these cases, but prescription opioids are still a major cause of death. The current situation of the epidemic isn't any better than when it first started in 1991. The crisis has continually been growing ever since. To find a way to put an end to the opioid epidemic, this forum must discuss solutions alternative to what has been done before and plan a viable course of action.

# THE OPIOID EPIDEMIC

Opioid overdoses killed more than 33,000 people in the U.S. in 2015. Here we take a look at the drugs behind the opioid epidemic and available treatments for opioid overdose and addiction.

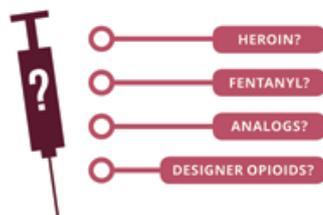
## HEROIN & OPIOIDS



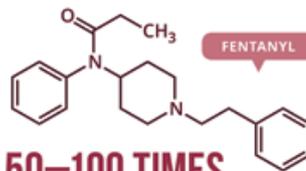
Like other opioids, heroin turns on opioid receptors to relieve pain and produce a feeling of euphoria. Opioids are highly addictive and at high doses can depress breathing, leading to death.

**63.1%** OF DRUG OVERDOSE DEATHS IN 2015 INVOLVED AN OPIOID DRUG

Street heroin is now being mixed with other opioids, making it more potent and dangerous. Users often do not know what the heroin they are using contains, increasing the risk of overdose.

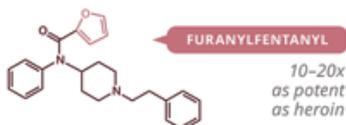
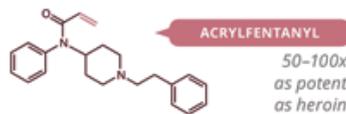
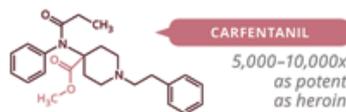


## FENTANYL & ANALOGS

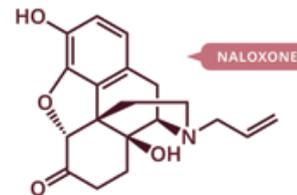


**50–100 TIMES AS POTENT AS HEROIN**

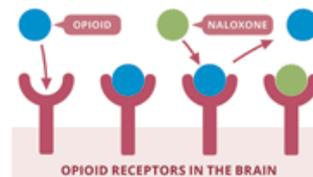
Fentanyl is a synthetic opioid that doctors prescribe to treat chronic pain. The fentanyl in street heroin is illicitly manufactured. Fentanyl analogs (selection shown below) are also increasingly common. Their higher potency increases the risk of overdose.



## OVERDOSE & TREATMENT



Naloxone reverses the effects of opioid overdoses. It has a stronger affinity for opioid receptors than opioids do and turns off the receptors. The antidote works within two minutes when injected.



Methadone eases withdrawal symptoms for people with opioid addiction getting sober. Its effects are similar to heroin's but are less intense and longer lasting.



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## Definition of Key Terms

### Epidemic

The dictionary definition of “epidemic” is an event where a disease spreads significantly in a community in a given time. However, the opioid epidemic is not a disease, the terms simply draws a comparison between the death tolls of epidemics and the opioid crisis.

### Gateway Drug

A gateway drug is a drug that isn't very potent or dangerous but leads its users to more addictive or dangerous drugs.

### Naloxone

Naloxone is a synthetic drug that can reverse the effects of opioid overdose. Hence, its availability is of dire consequence to opioid addicts.

## **Opioid**

A class of drugs that act on the opioid receptors in the brain.

## **Opioid Use Disorder**

A disorder in which patients exhibit a problematic pattern that shows addictive use of opioids.

## **Rx**

A doctor's prescription. The word is an abbreviation of the Latin word recipe, meaning take.

## **Telemedicine**

A method that is used to remotely diagnose and treat patients that cannot consult a physician in person by means of telecommunications technology.

## **War on Drugs**

A term coined by the media shortly after one of President Nixon's speeches in which he declared drug abuse "public enemy number one". Drug enforcement activities subsequently underwent a sharp increase.

## **General Overview**

The opioid epidemic is usually divided into three different periods of time which refer to key turning points in the history of the epidemic. These periods are also called waves. The first wave came in 1991, the second in 2010 and the last in 2013.

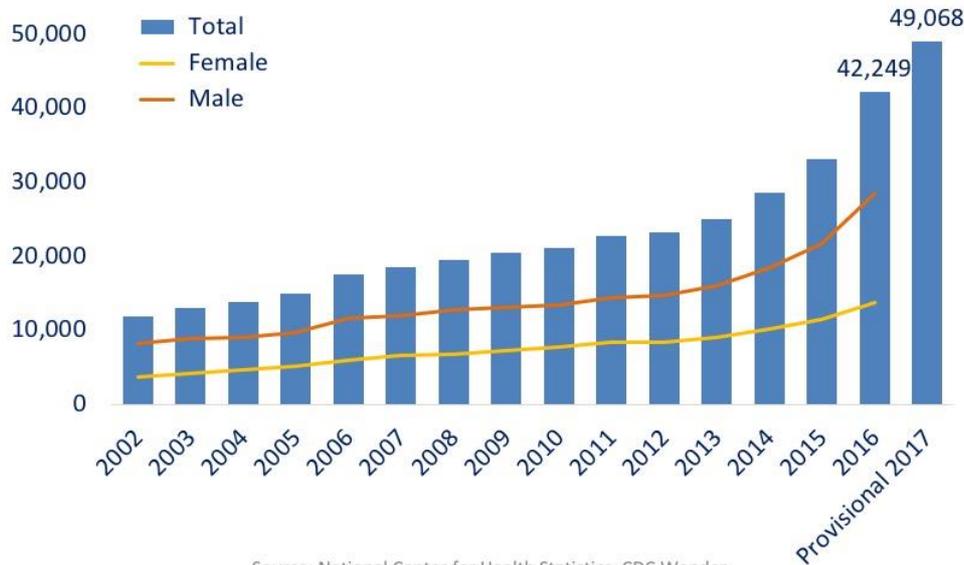
### **The First Wave**

The first wave of the epidemic began in 1991 as the opioid and opioid-related drugs started being prescribed more frequently. The pharmaceutical companies responsible with the production of these drugs strongly assured the medical community that the risk of a person getting addicted to prescribed opioids were quite low. As a result of this claim, doctors started prescribing the opioids more frequently to patients. Moreover, there were so many advertisements on TV for some of these drugs that people could simply request a prescription for the drugs by name. Naturally, their requests weren't turned down as the threat of addiction wasn't seen as a possible consequence. In fact, there were many incidents during this time period of doctors prescribing opioids to patients even if the causes of their pain weren't cancer-related (Opioids were believed to be most effective in cancer-related pain-relief). However, the effectiveness of opioids on patients not suffering from cancer was questionable due to a lack of research and data. By 1999, 86% of people prescribed opioids weren't using them because of cancer-related pain. By 2011, doctors were writing around 240 million prescriptions annually for opioid pain relievers.



# National Overdose Deaths

## Number of Deaths Involving Opioids



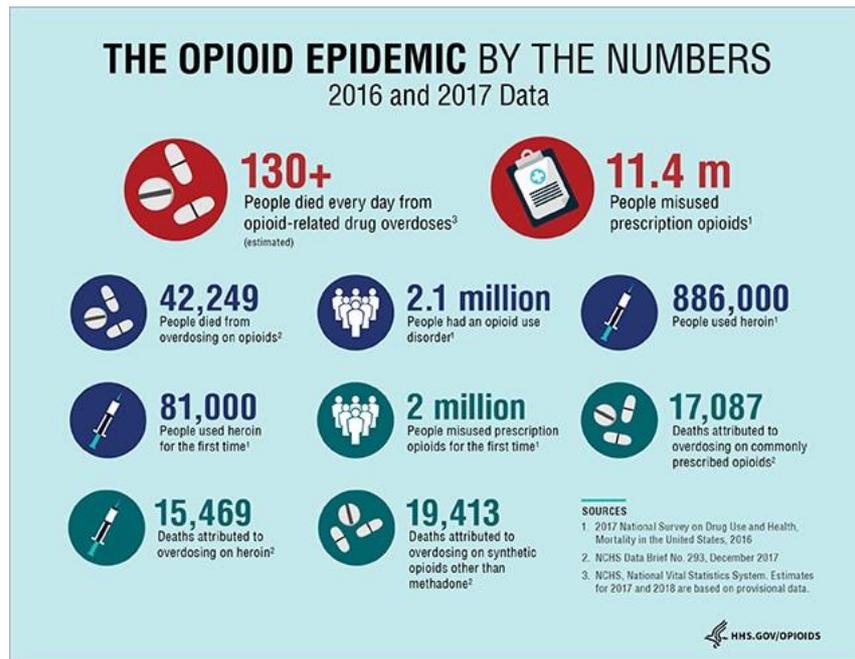
Source: National Center for Health Statistics, CDC Wonder

### The Second Wave

The epidemic was propelled into its second wave when measures to limit the accessibility of prescription opioids were put in place. Faced with overwhelming evidence that opioid users were very liable to become addicted and with an increasing number of deaths by opioid overdose, the government decided to make opioids harder to obtain and decrease opioid prescriptions. In short, the epidemic's second wave was caused by the drop in the supply of prescribed opioid analgesics. What this strategy that aimed to reduce opioid usage forgot to account for was those who had already been using these drugs. These users were cut off from their supply whilst they were still addicted to opioids and felt a craving for them. As a result, they went looking for other ways to satisfy their addictions, and heroin usage around the country increased massively. A rapid increase in deaths from heroin overdose followed. Specifically, deaths caused by heroin usage increased by 286% from 2002 to 2013. Around 80% of heroin users admitted to misusing the opioids they were prescribed before they turned to heroin. The most common delivery method of heroin is injection, which also put heroin users at risk for diseases that could be transmitted by the unhygienic use of needles. The increase in heroin use also led to a rise in the spread of HIV and Hepatitis B and C. Furthermore, deaths from prescription opioids kept increasing in this period.

### The Third Wave

The Third Wave of the opioid epidemic began in 2013. This wave started with the increase in deaths related to potent, synthetic opioids such as Fentanyl. Fentanyl is a synthetic opioid that is sometimes used as a strong painkiller. It is cheap to produce, 12.5 to 25 times more potent than heroin and 50 to 100 times more than morphine. Hence, it poses serious danger to inexperienced or unwary users, as it is much easier to overdose on Fentanyl, and the effects of the overdose is harder to reverse than an overdose caused by morphine or heroin. The steepest rise in these deaths occurred in 2016, with 20,000 people falling victim to overdoses caused by Fentanyl and similar drugs.



## Major Parties Involved

### United States of America

The United States of America is the largest stakeholder in the opioid epidemic. There is no country in the world that is affected by the abuse of prescription opioids more than the United States. It is estimated that 2.1 million American citizens are currently struggling with an opioid addiction. On further note, an average of 41.975 Americans fall victim to the epidemic on an annual basis. Naturally, the American government has been trying to combat the epidemic ever since its inception in 1991.

On June 18, 1971, President Nixon declared drug abuse “public enemy number one”. Ever since, the size and scale of federal drug control agencies have increased greatly, and the media started calling the activities done for drug regulation as the “War on Drugs”. Two later, in July 1, 1973, the Drug Enforcement Administration was created. The US government has been trying to put an end to drug smuggling into and distribution within the country for decades. However, it is an evident fact that the war on drugs has been majorly unsuccessful in fulfilling its mission.

The DEA's operation effectiveness is close to 1%. Despite the hard work of thousands of agents and employees, drug use throughout the years have kept increasing and countless attempts to decrease the supply of drugs have proven futile at best. The United States government has been following a policy of using force and mass incarceration to combat the increase in drug usage, which hasn't been particularly effective. Of course, the overall success achieved by the war on drugs reflects that of the measures taken against the opioid epidemic. Consequently, the United States' current course of action on the opioid crisis has been of little avail.

### Centers for Disease Control and Prevention

The CDC has been working on multiple fronts to prevent cases of opioid overdose and other harms brought about by the opioid epidemic. The CDC has many roles in the prevention of the epidemic. The organization has various programs in place to help patients and public safety officials implement strategies, and more.

In 2006, CDC initiated a program in order to track, collect and interpret data about the opioid epidemic. Their comprehensive data collection and analysis program helps the organization keep up with the trends of the epidemic and reach a better understanding of the methodology required to combat the epidemic. The data collected is used to identify problematic areas and made use of in the evaluation of current prevention strategies, which is why the CDC has been working to improve data quality over the years. In fact, it was a scientist from the CDC who identified prescription opioids as the primary concern in the epidemic in 2006. They fund efforts to improve data quality and implement evidence-based strategies according to the data gathered.

CDC is a body that is recognized nationally as an organization which works by collaborating with local communities and establishments to achieve its goals. CDC supports states by providing funding, resources and strategies to combat the epidemic. Another role CDC has in the epidemic is educating the public and reducing the probability of addiction among these people so that fewer people fall victim to addiction in the future. By raising awareness about the ways in which opioid can be misused, the risks, the damages it can cause and referring the public to safer alternatives that are available, CDC aims to educate everyone about the epidemic. In order to achieve this goal, they have launched the Rx Awareness campaign. To back up the public education program, CDC also ensures that patients have the opportunity to access pain treatments alternative to opioids.

The second and third waves of the epidemic introduced new dangers into an already concerning situation. With illegally obtained drugs such as heroin and fentanyl on the rise, some diseases have also started to spread faster due to the unhygienic and unprofessional delivery methods employed by inexperienced users. Diseases such as HIV and Hepatitis B/C have started to spread faster and infections due to unsanitary injections have become more frequent, which is a cause of concern for the CDC as well as the general public. However, there are few organizations as well-equipped and well-staffed as the CDC in dealing with diseases.

In 2019, CDC has received 475\$ to be used in opioid overdose prevention and surveillance programs. The organization is committed to their vision of a country free from opioid-related harms and overdoses.

## Timeline of Key Events

Date	Event
June 17, 1971	The Special Action Office for Drug Abuse Prevention (SAODAP) was created by Executive Order of President Richard M. Nixon.
June 18, 1971	President Nixon declares the “War on Drugs” and calls drug abuse “public enemy number one”.
July 1, 1973	The Drug Enforcement Administration was created.
1991	Start of the opioid epidemic’s first wave.
2010	Start of the opioid epidemic’s second wave. Sudden increase in heroin use around the country.
2013	Start of the opioid epidemic’s third wave. A sharp increase in fentanyl usage and overdose cases.
2016	Steepest rise in the deaths caused by drugs like fentanyl.
October, 2018	Senate passes the Substance Use Disorder Prevention That Promotes Opioid Recovery and Treatment for Patients and Communities (SUPPORT) Act.

## Previous attempts to resolve the issue

In the past, the United States government has made countless efforts to decrease the supply of illegally available drugs and has tried to reduce smuggling. However, despite every attempt by the government to achieve this goal, the supply of drugs on the street hasn’t gone down but only their sources have changed. This is similar to the chain of events that led to the second wave of the epidemic: When the government limited the availability of prescription opioids, this didn’t end up with addicts going to rehab, but they rather started looking for alternatives to their prescription drugs. This resulted in a sharp increase in heroin usage countrywide.

In October 2018, Senate passed a new legislative bill on the matter of the opioid crisis, called the Substance Use Disorder Prevention That Promotes Opioid Recovery and Treatment for Patients and Communities (SUPPORT) Act. The legislation addresses prevention, treatment, enforcement and recovery. It provides funding for research on nonaddictive painkillers alternative to opioids and for early intervention for children who have been exposed to traumatic events (children who’ve undergone trauma have been found to be especially at

risk for opioid use disorders). Additionally, the legislation requires the US Department of Health and Human Services to set rules which would allow doctors to prescribe medication to their patients via telemedicine, which is an especially important step to combat the opioid crisis in rural areas where access to treatment is particularly hard for opioid use disorder.

## Possible Solutions

There are two main fronts on which new solutions must be searched. Addicts that are considered a victim of the opioid epidemic either abuse prescription drugs or illegal drugs obtained from street dealers. The ways to reduce the usage of prescription drugs and illegal drugs differ in various ways.

One way to combat the abuse of prescription drugs would be to introduce alternatives to opioids. However, this isn't enough of a solution as there are people who are already addicted to prescription opioids. Addiction research can be a useful way to determine the best course of action to rehabilitate addicts. Additionally, it is very important that the availability of drugs that may help reverse the damages caused by drug abuse are increased. Naloxone is a drug that treats opioid overdose and reverses much of the damage done to the body. Using medical funds, it could be possible to provide free naloxone for up to one or two boxes per person in a defined interval. Suboxone and Vivitrol should be more available as well. These are drugs that help with opioid cravings and suboxone can also block opioids from working and manages the withdrawal symptoms. If these drugs become more available, rehabilitation would become easier.

If the United States' current approach to the War on Drugs has shown anything, it's that violence and brute force are not viable methods to decrease drug use. While it is possible for resolutions to be written that reflect the United States' current policy against illegal drug use, alternative solutions would prove much more effective. Even the very fact that the activities done to reduce drug use are coined a term that includes the use of the word war vilifies not only drug smugglers and dealers, but innocent citizens that do drugs from time to time and aren't harmful to society to a significant degree.

Since the inception of the war on drugs, the United States government has been following a policy of mass incarceration, where a single nonviolent drug law offense can land a citizen in prison. From 1980 to 1997, the number of people imprisoned for nonviolent drug law offenses has increased from 50,000 to 400,000. The current system in place focuses on punishing drug users for doing drugs and trying to reduce drug usage by making people fear going to prison. Because of this, there is a very real problem of stigma surrounding drug use which prevents drug addicts from feeling comfortable with contacting rehabilitation services and admitting they are addicted. Solutions that are to be employed could try to tackle this issue. In fact, if the stigma surrounding addiction is addressed, this would be beneficial to those addicted to prescription opioids as well. One of the problems with making the public fear the consequences of drug use is that people become more afraid to call health services and ask for help even if they realize they need to get help.

Furthermore, incarceration does little to contribute to the rehabilitation of these people. Life during and after prison doesn't make it any easier for drug addicts to be integrated back to society and pursue a healthier life. In fact, even if someone was imprisoned for a one-time drug law violation, being a former convict makes it extremely troublesome for them to find jobs once they get out of prison. Because of this, it becomes harder for these users to integrate themselves back to society and a lack of human connection caused by these events can be a reason for their relapse instead of rehabilitation. Solutions should focus on ways to facilitate the integration of drug addicts back to society. A comprehensive and reformative idea would be to decriminalize drugs and start spending the money that was previously being spent on the arrest and imprisonment of nonviolent drug users on rehabilitation centers or other addiction recovery and harm reduction programs. For example, after years of waging fierce war against drugs, Portugal decriminalized drugs in 2001. In many ways, the country is doing far better than it was before. For those who would consider a solution based on decriminalization, Portugal's policies can work as an example to how such a strategy might work.

## Appendix/Appendices

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