

Communiversality Developed and Tested Toolkit for Opioid Abuse Abatement



Module 1

Opioids 101 - History and Terminology

This chapter is meant for everyone wanting to learn more about this epidemic and make an impact or a difference. It can be used by parents, children, and the general public. The last section shows how systemic racism and laws use Black and Brown people's drug misuse as a trap to reinforce racism and disempower this community.

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Opioids 101 and Addiction: History and Terminology

Substance misuse keeps people dis-empowered by reinforcing racism, poverty, isolation, a broken self, broken families, and devastated communities. The health of an individual, particularly a parent, is directly related to the health of our children and families, the neighborhood in which we live, and society at large.



Terminology

Opioids are natural or human-made chemicals that interact with nerve cells in the body and brain to reduce the intensity of pain. Opioids may be prescribed — or bought illegally. They are highly addictive.

- **Prescription opioids**, when legally prescribed by a doctor and used as directed, can relax the body and relieve symptoms of an illness, injury, or surgical procedure. For example, they may be used to lessen postsurgical pain or severe pain due to trauma or disease.
- **Opioid misuse or abuse** is when people use opioids in any way other than prescribed. Misuse may be in a manner, situation, amount, or frequency that can cause harm to self or others. An overdose is when a person hurts or poisons him- or herself by taking too much of a drug. An overdose may cause respiratory failure, leading to coma, brain damage, and, too often, death.

How Opioids Affect a Person

- Opioids are not meant for long-term use. They change the brain's chemistry and lead to drug tolerance, which means a person must take a higher quantity or use them over longer periods to get the same effect.
- Some people become dependent on the drug. When they stop taking it, they experience withdrawal (Shah & Hucker, 2022). Opioid withdrawal occurs when someone dependent on opioids suddenly reduces or stops taking opioids. A person withdrawing from opioids needs treatment because withdrawal may be difficult or even life-threatening. Signs of withdrawal may include muscle cramping, diarrhea, and anxiety.
- A small percentage of people become addicted. They experience a compulsive and continued need for the drug.

Opioid Basics

National Institute on Drug Abuse (NIDA/NIH)
<https://youtu.be/ks5wG1UbUMY?si=cpd5gmJYIsUOrR5W>



What Happens When Our Brains Are Hooked on Opioids?

Our brains decide what gives us pleasure. The way this occurs is through our neurons — nerve cells in our brain that send messages all over our body, much like a general directing his troops. These messages allow us to do everything — breathing, talking, eating, and thinking.

The brain sends and receives chemical and electrical signals throughout our body. Different signals control different processes, and our brain interprets each. Now, think of a coach calling the plays for a game. Some signals, for example, make you feel tired, while others make you feel pain.

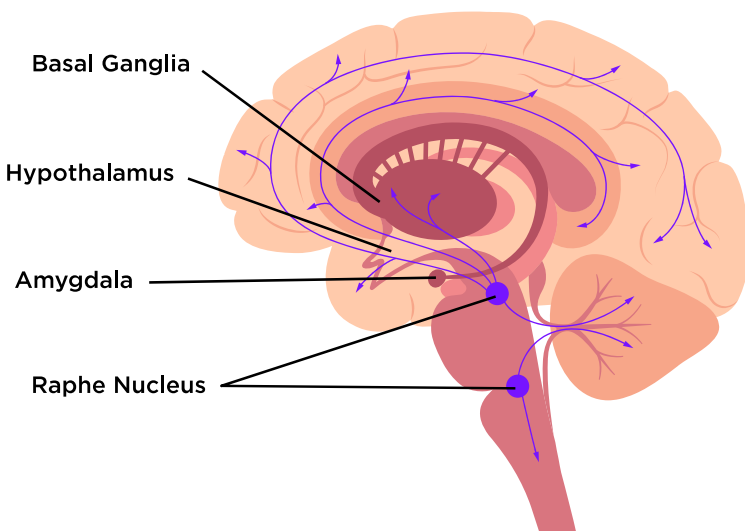
Some messages are kept within the brain, like in the coach's playbook, while others are relayed through the spine and across the body's vast network of nerves to distant parts of the body. The body has its own Uber system — the central nervous system, to get these messages out and relies on billions of neurons (nerve cells) — the Uber drivers.

The brain has many players, including the GABA neurons. These are the best players. They are the gatekeepers and decide what gets into your brain. GABA neurons can slow down the messages your brain gets, which regulates your mood and anxiety. If GABA can't do its job, you might have problems with mental health.

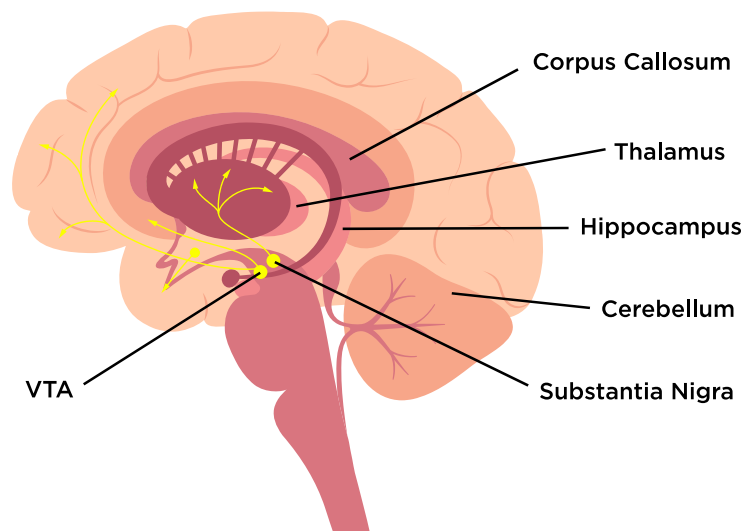
When a person takes opioids, these drugs hold back the GABA neurons. They can't get out on the field. So, the home team, dopamine, another messenger group of neurons, can't get onto the field. Dopamine does a lot of things when it's able to circulate in our body. It gives us pleasure and is also responsible for many other things that we take for granted: learning, motivation, heart rate, sleep, and control of nausea and vomiting, among many other roles. So, if the dopamine routes are blocked, the body tries to do an end-run around the problem but gets blocked.

When opioids block or shut out the GABA neurons, the dopamine neurons demand attention. They lure the person to increase the opioids because they feel so good. So, the GABA can't do its job of regulating the mood and other important duties of the body. Just like the coach would bench a player who showed up drunk, the brain on opioids is like that drunk player — unable to make the needed plays.

SEROTONIN

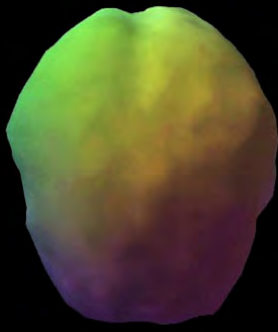


DOPAMINE



There are healthy ways to increase our dopamine level so we feel good (Julson, 2022), like getting enough sleep, eating well, listening to music, and walking outdoors. When we reward our brain with dopamine, the craving for addictive opioids is reduced or may disappear.

Healthy Brain

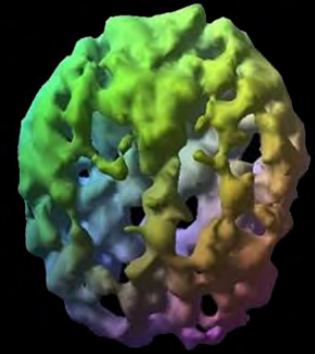


The image comparison shows a healthy brain scan and a brain scan from a 38-year-old person who has used opioids for seven years.

The wavy appearance of the image on the right indicates oxygen and blood flow restriction, often referred to as “scalloping” or perfusion. It is associated with opioid abuse.

Source: *Frontiers in Psychology*.
<https://www.frontiersin.org/articles/10.3389/fpsy.2021.715315/full>

Brain on Opioids



This is What Happens to Your Brain on Opioids



NatGeo: https://www.youtube.com/watch?v=NDVV_M__CSI

How a Brain Gets Hooked on Opioids



PBS NewsHour: <https://www.youtube.com/watch?v=fVdXlB89QOA>

Brain Reward Pathway



Neuroscientifically Challenged: <https://www.youtube.com/watch?v=f7E0mTJQ2KM>

Fentanyl: What You Should Know

Doctors prescribe pharmaceutical fentanyl to treat severe pain, for example, for advanced-stage cancer treatment. However, **illicitly manufactured fentanyl (IMF)** is illegally manufactured and distributed through drug markets for its heroin-like effect and is most involved in overdose deaths. The availability of black-market fentanyl and fentanyl analogs led to a U.S. opioid epidemic that causes thousands of overdose deaths each year and destroys families and communities. President Biden, in November 2023, talked with the head of China about curbing the production of fentanyl and its analogs, but it is still very available through your local drug dealer.

- Fentanyl is very powerful, and a little bit of it sprinkled in with other drugs may be enough to kill you or your loved ones.
- Fentanyl is cheaper than other opioids, powerful, addictive, and dangerous.
- Fentanyl (IMF) is available in different forms (e.g., nasal sprays, eye drops, and dropped onto paper or small candies). It can be liquid or powder and is commonly mixed with heroin, cocaine, and methamphetamine.
- Determining if pills were legally produced for pharmaceutical distribution or illegally produced for illegal drug sales is difficult.
- Drugs may contain very little fentanyl, not detectable by taste, sight, or smell, and it is nearly impossible to detect a fentanyl-laced drug without using fentanyl strips to test for fentanyl.
- Beware: a negative test interpretation should be done cautiously because the fentanyl strip might not detect potent fentanyl-like drugs, such as carfentanil (Bergh et al., 2021).
- Counterfeit prescription medications, such as a fentanyl-laced Xanny bar or counterfeit Xanax, were reportedly made at a “pill mill” or by illegal pill presses.

Opioids 101 and Addiction: History and Terminology—Part 2

The Dangers of Fentanyl

Fentanyl is a potent synthetic opioid drug approved by the Food and Drug Administration for use as an analgesic (for pain relief) and as an anesthetic. It is approximately 100 times more potent than morphine and 50 times more potent than heroin as an analgesic.

<https://www.dea.gov/factsheets/fentanyl>

PRINCE died of an accidental overdose of the opioid fentanyl, according to a medical examiner. CNN: <https://www.youtube.com/watch?v=rvwoduQ3vVE>



Protect Yourself from the Dangers of Fentanyl



CDC: https://www.youtube.com/watch?v=zu_WtBrmScs

Your Brain on Fentanyl



AsapSCIENCE: <https://www.youtube.com/watch?v=C0tW8FWBm1g>

Xylazine

Xylazine is a non-opioid veterinary tranquilizer not approved for human use; it been called “an emerging threat” due to its role in the ongoing opioid crisis. Xylazine is increasingly being combined with the powerful synthetic opioid fentanyl in illicit drugs.

PBS NewHour: <https://www.youtube.com/watch?v=GDXLyNhoNdo>

Xylazine News



Carfentanil: drug more deadly than heroin



CBC News: <https://www.youtube.com/watch?v=fInwIOSqBmo>

Carfentanil is a dangerous synthetic opioid, approximately 10,000 times more potent than morphine and 100 times more potent than fentanyl. Only properly trained and outfitted law enforcement professionals should handle any substance suspected to contain fentanyl or a fentanyl-related compound (McPhillips, 2023).

Nitazenes Is a New Threat

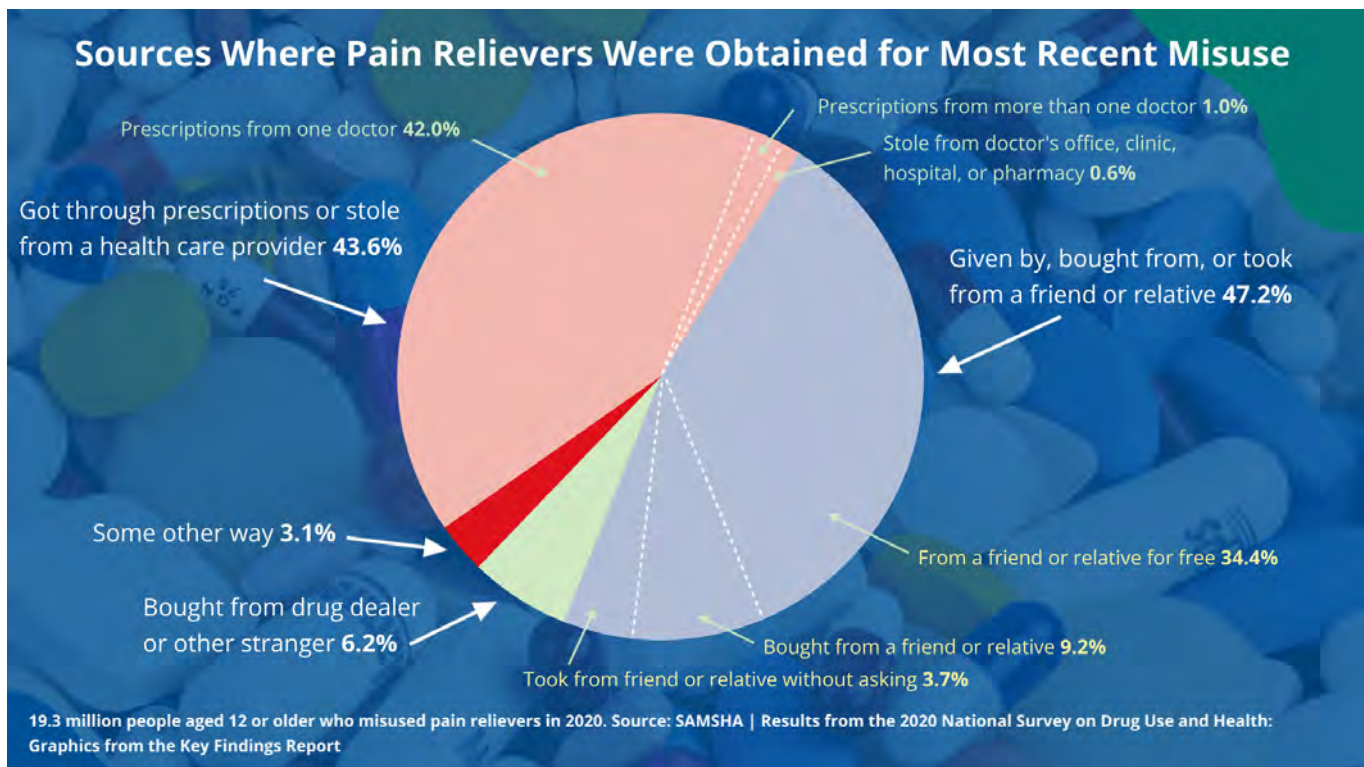
Willow Grove Lab Is the First in the World to Identify Nitazene Opioid



An emerging group of synthetic opioids may be more potent than fentanyl, study warns.

From CBS Philadelphia: <https://youtu.be/36N1p5kX61Mwatch?v=flnwIOSqBmo>

Where Do Opioids Come From?*



Safeguarding Prescription Opioids

At times, people are prescribed more pain medication than they need. Misuse of opioids or other drugs may occur when someone has a leftover prescription at home. You can properly dispose of extra medication by taking it to a drop box.

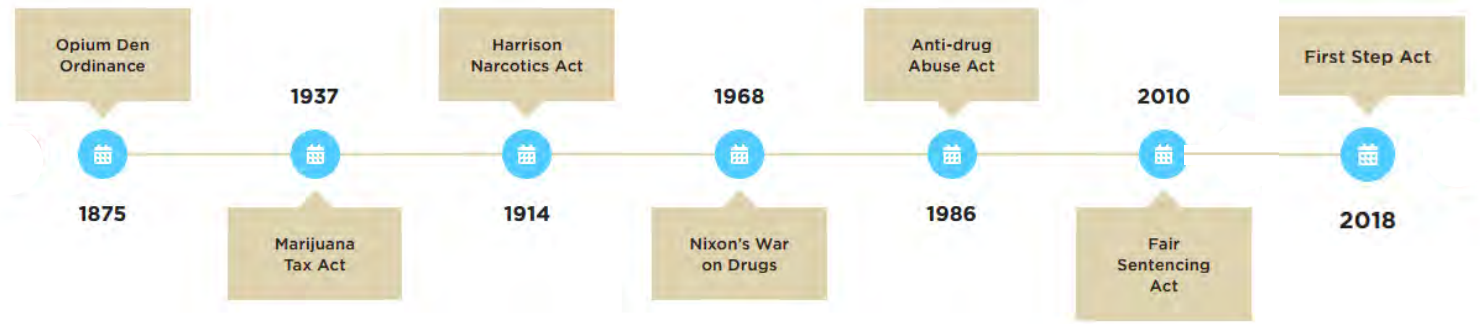
- Permanent drop boxes are located at police substations. The sheriff's office collects opioids twice

a year. You can also take them to the Justice Center downtown, the NCCU substation, or Carolina Behavioral Health Pharmacy (paid for by TRY).

- There is a drop box at the Health Department. <https://www.morepowerfulnc.org/get-involved/pill-disposal/>

Opioids 101 and Addiction: History and Terminology—Part 3

History of the Opioid Epidemic



Racial Disparity

Black Americans use illicit drugs at similar rates as Whites but are six to ten times more likely to be incarcerated for drug offenses (Bigg, 2007; Gross, 2022), leading to a higher proportion of Blacks in prison (Ghandnoosh; Drug Policy Alliance, 2023).

Hispanic/Latinos are one of the fastest growing minority populations— expected to comprise nearly 30 percent of the U.S. population by 2060(5) — it becomes imperative to understand the unique sociocultural factors that influence drug use and access to prevention, treatment, and recovery in this population.

1875 — Opium Den Ordinance

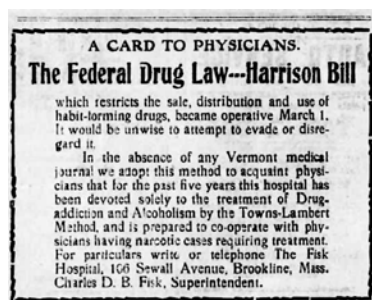
The 1875 Opium Den Ordinance was the nation’s first anti-drug law, banning opium dens. The ordinance was directed at Chinese immigrants and led to racial disparities in drug policies and addiction treatment (Pascual, 2021).

1910—Mexican Revolution

The Mexican Revolution in 1910 led to the immigration of Mexicans to the U.S. Southwest. Some immigrants brought marijuana with them. Texas police officers claimed that marijuana aroused a “lust for blood,” leading to violent crimes. In 1914, El Paso, Texas was the first city to ban the sale or possession of marijuana (Schlosser, 1994).



Poster promoting the movie *The Weed with Roots in Hell* (1936)



1914 — Harrison Narcotics Act

In 1914, the U.S. Congress passed the Harrison Narcotics Tax Act, imposing “a special tax” upon all persons who produce, import, manufacture, compound, deal in, dispense, sell, distribute, or give away opium or coca leaves, their salts, derivatives, or preparations, and for other purposes.” This law banned doctors from prescribing opioid-based drugs, leading to the arrest and imprisonment of many doctors, which led to underground markets of opioids and cocaine and increased police enforcement, according to the Institute of Medicine, 1992.

1937—Marijuana Tax Act

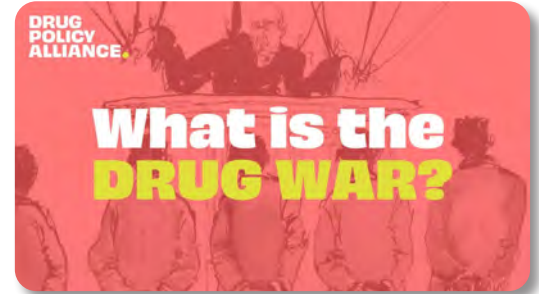
The Marijuana Tax Act of 1937 targeted Mexican Americans, with increased penalties for drug possession.

1968 — Nixon’s War on Drugs

The Comprehensive Sentencing Act of 1970 (US Sentencing Commission, 1991), signed by Richard Nixon, was a precursor to his declaration of the War on Drugs a year later, which contained punitive sentencing guidelines. The War on Drugs in 1971 *reversed mid-century civil rights and Great Society commitments*, which focused on social programs to address poverty and, subsequently, crime.

The drug war legislation *expanded the scope of criminal justice* and culminated in decades-long mass incarceration (Hodge & Dholakia, 2021) via:

- Increasing mandatory minimum sentencing
- The use of plea-bargaining
- The implementation of drug raids and asset forfeiture
- Allocating funds for policing and the building of state prisons
- The broadening of state surveillance



The Drug Policy Alliance has teamed up with artists Jay-Z and Molly Crabapple to tell the brief history of how the Drug War went from prohibition to the gold rush of the legalized cannabis industry. Do you know your history? <https://youtu.be/HSozqaVcOU8>

1986 — Anti-Drug Abuse Act

Systemic racism in drug policy is also recognizable in the Anti-Drug Abuse Act of 1986, “which enacted a 100-fold greater sentencing disparity for water-soluble cocaine base (‘crack’) versus powder cocaine,” according to ASAM’s policy statement.

- The distribution of five grams of crack, mainly used by Black people, carried a minimum of a five-year sentence in federal prison.
- Distributing 500 grams of powder cocaine (mainly used by White people) had the same sentencing.

The law resulted in the arrest of a disproportionate number of Blacks compared to Whites.

- Triggered by the abolition of slavery, many Whites advocated that formerly enslaved people be sent back to Africa or remain under control. Whites’ fear for their safety led them to seek ways to control the Black population. Part of this was through the war on drugs.
- The war on drugs reinforced racial hierarchies through differential enforcement and perception

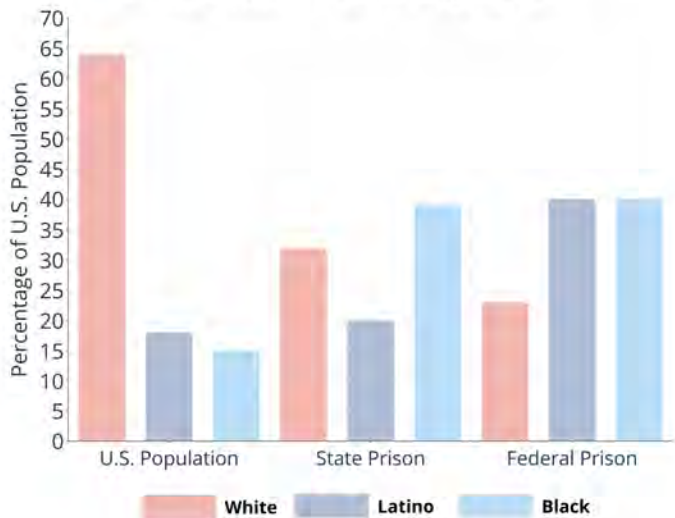
about what constitutes addiction (Netherland & Hansen, 2017). It subjected millions to criminalization, incarceration, and lifelong criminal records, disrupting or eliminating access to adequate resources and support to live healthy lives (Cohen et al., 2022).

- The effects of the war on drugs include the expenses families suffer from the loss of the economic contributions of incarcerated family members and the need for extra help for the children of incarcerated parents (Wagner & Rauby, 2017; Sawyer, & Wagner, 2023). What is more, these children of incarcerated parents are subject to additional risk factors of substance misuse, as seen in the ACEs module.
- Further, in the case of opioids, addiction treatment is being selectively “pharmaceuticalized” to preserve a protected space for White opioid users while leaving intact a punitive system for Black and Brown individuals who use drugs (Netherland & Hansen, 2017).

Please read this article: “The War on Drugs That Wasn’t: Wasted Whiteness, ‘Dirty Doctors,’ and Race in Media Coverage of Prescription Opioid Misuse.” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5121004/>

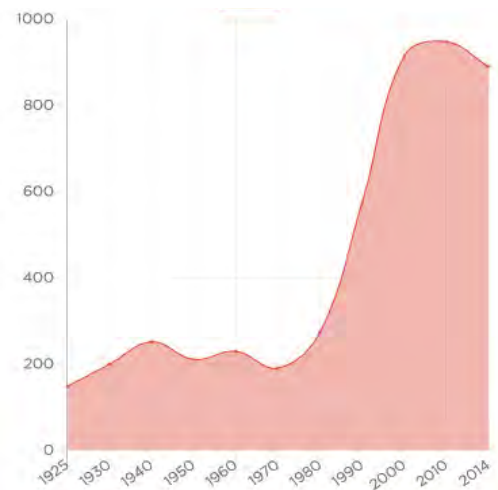
Disproportionate Impact of Drug Laws on Black and Latino Communities

US Population vs. Percentage of People in State or Federal Prison for Drug Offenses



Carson, "Prisoners in 2013," Table 14; Bureau of Justice Statistics, "Federal Justice Statistics Program."

Male Incarceration Rates of Sentenced Prisoners under State and Federal Jurisdiction per 100,000 Population, 1925-2016



Perry, Mark. (June 14, 2018). The Shocking Story Behind Richard Nixon's 'War on Drugs' that targeted Blacks and anti-war activists. <https://www.aei.org/carpe-diem/the-shocking-and-sickening-story-behind-nixons-war-on-drugs-that-targeted-blacks-and-anti-war-activists/>

2010 – Fair Sentencing Act; 2018 First Step Act

In 2010, Congress passed the Fair Sentencing Act, reducing the sentencing disparity between crack and powder cocaine to 18 to 1. The amount of powder cocaine triggering a minimum sentencing of five and ten years remained unchanged.

In 2018, the First Step Act was signed into law, making sentencing reforms of the Fair Sentencing Act retroactive, but left out those previously arrested for low-level offenses that involved 0 to 5 grams of crack cocaine.



President Barack Obama at the signing ceremony for the Fair Sentencing Act. (Photo by Pete Souza) from Washington, DC. Public Domain

Test Your Knowledge (answer yes or no)

1. Children of incarcerated parents are often substance users.
2. The Drug War began many punitive actions by the government that have continued.
3. One of the reasons for the great expansion of incarceration in the United States was caused by drug war legislation, which increased mandatory minimum sentencing.
4. Every group is incarcerated for drug offenses at the same rate.
5. Many groups today are fighting to decrease the opioid problem in the United States.

Answers: 1 = Yes. 2 = Yes. 3 = Yes. 4 = No. 5 = Yes.