

Drug Link: Incarceration Insights

...

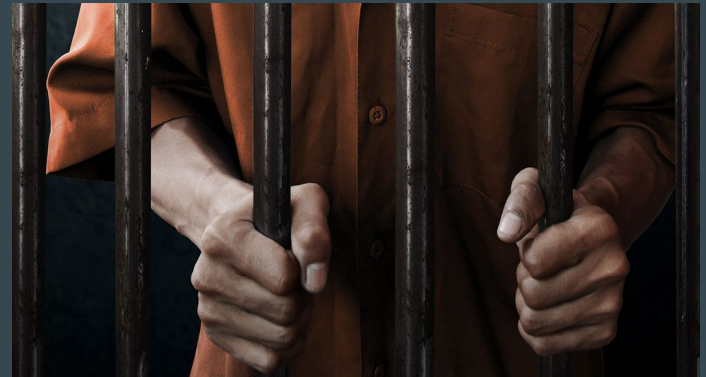
Juliana Broussard, Sarah Huang, Arshita Sharma



Introduction

- 85% of the prison population falls victim to drug use, possession, trafficking, & other drug-related crimes^[4]
- Current epidemic is the Opioid & Fentanyl Epidemic
- Various drug epidemics throughout the years
- Opioids were the cause of 14.8% of former prisoner deaths from 1999 to 2009^[4]

[4] S. Salmond and V. Allread, "A Population Health Approach to Americas Opioid Epidemic," *Orthopaedic Nursing*, vol. 38, no. 2, pp. 95–108, Mar. 2019, doi: <https://doi.org/10.1097/nor.0000000000000521>.



Background

Objective: How do the incarceration rates from the last 20 years correlate with the Opioid and Fentanyl Epidemic overdose rates? Should substance abuse prevention be more readily available?

Motivation: Interest in true crime and understanding the detrimental impacts of the opioid epidemic on people and families



Data

- Bureau of Justice Statistics
- Compiled into one cohesive file for easy use
- Data includes: date, estimate or actual, federal or state, offense, all inmates, male, female, White, Black, Hispanic, other, American Indian/Alaska native, and Asian



The screenshot displays the Bureau of Justice Statistics (BJS) website. The header features the BJS logo, the Department of Justice seal, and a 50th Anniversary seal for the National Crime Victimization Survey (NCVS) from 1973 to 2023. Navigation links include 'Contact Us', 'Subscribe', 'Sign In', and a search bar. The main navigation menu includes 'About BJS', 'Topics', 'Publications', 'Data', 'Funding & Awards', 'Programs', 'News', and 'Resources'. The 'Publications' section is highlighted, and the breadcrumb trail shows 'Home / Publications & Products'. The main heading is 'Prisoners in 2021 – Statistical Tables'. Below this, the NCJ Number is 305125, the author is E. Ann Carson, PhD, BJS Statistician, and the date published is December 2022. The publication series is 'Prisoners'. A 'Downloads' box on the right offers a 'Press release, (PDF 238K)' for download.

Prisoners in 2021 – Statistical Tables

NCJ Number: 305125
Author(s): [E. Ann Carson, PhD, BJS Statistician](#)
Date Published: December 2022
Publication Series: [Prisoners](#)

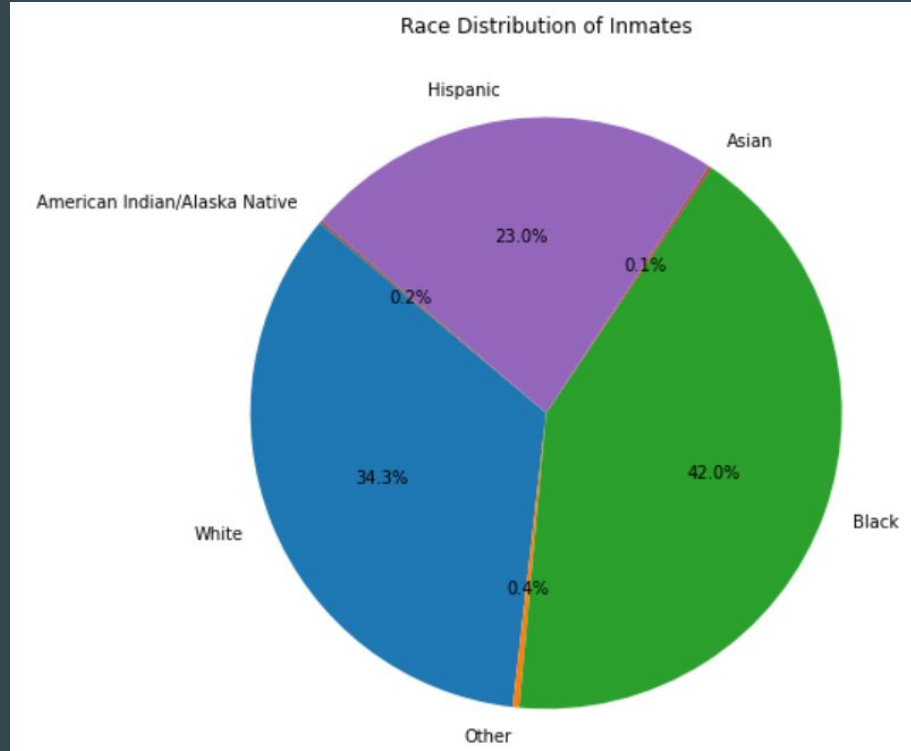
Downloads
[Press release, \(PDF 238K\)](#)

Process

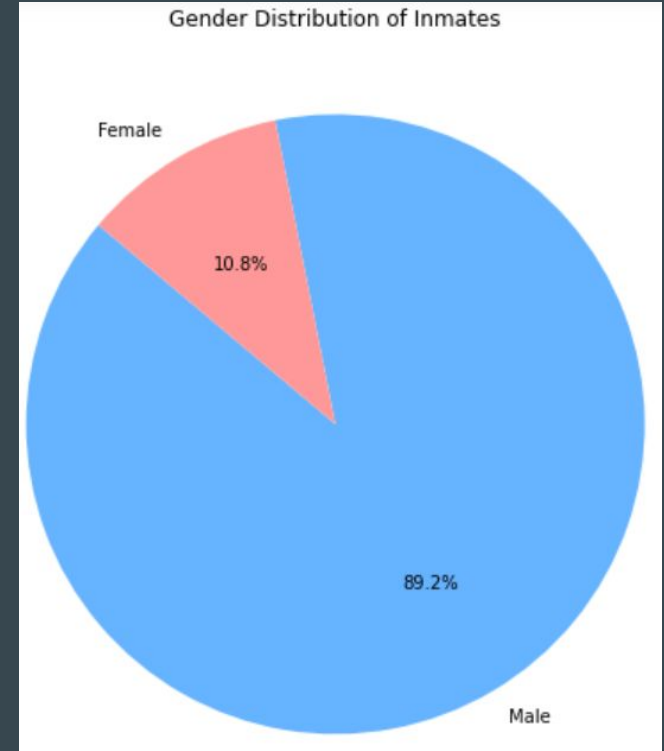
1. Researching & finding the data
2. Searching through 45+ CSVs to determine the usable data
3. Compiling the usable data into one file
4. Use pandas to read in the data & determine best graphics
5. Create graphics/charts of the data
6. Analyze the results

| Spreadsheet | Date | Estimated or Actual | Federal or State | Offense | All inmates | Male | Female | White | Black | Hispanic |
|--------------------|------------|---------------------|------------------|--|-------------|--------|--------|-------|--------|----------|
| p12tar9112at10_new | 9/30/2002 | Actual | Federal | Other (Includes trafficking, possession, and other drug offenses.) | 80986 | 74823 | 6163 | NA | NA | NA |
| p09at16a | 12/31/2006 | Estimated | State | Drug | 264300 | 238600 | 26200 | 71700 | 118300 | 53600 |
| p09at16b | 12/31/2007 | Estimated | State | Drug | 273600 | 247000 | 26600 | 70300 | 124400 | 57000 |
| p09at16c | 12/31/2008 | Estimated | State | Drug | 251400 | 225900 | 25500 | 68300 | 113900 | 48500 |
| p10at16a | 12/31/2008 | Estimated | State | Drug | 255700 | 229800 | 25800 | 76900 | 130300 | 43300 |
| p11at07 | 12/31/2008 | Estimated | State | Other (Includes trafficking, possession, and other drug offenses.) | 258000 | 232600 | 25900 | 69400 | 121600 | 50200 |
| p10at16b | 12/31/2008 | Estimated | State | Drug | 243800 | 218000 | 25800 | 73000 | 123600 | 44100 |

Results - Race & Gender Distribution



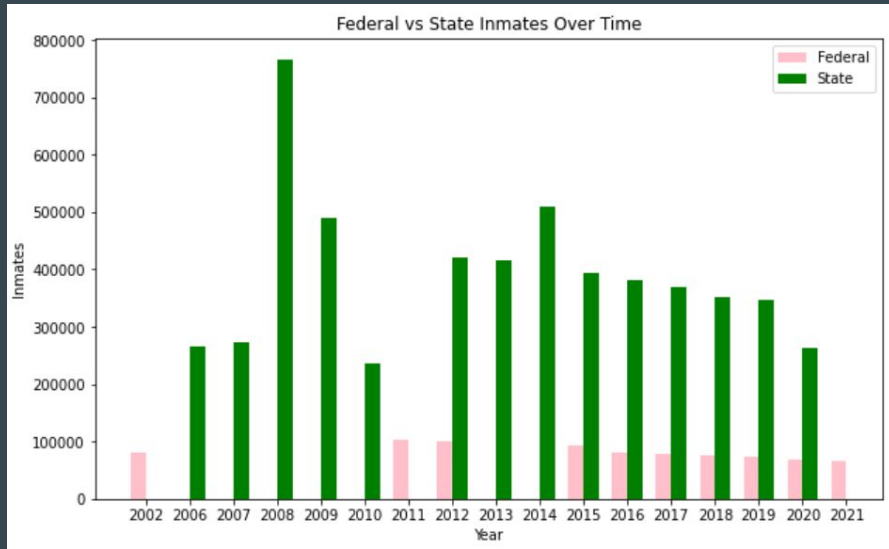
Race Distribution of Inmates



Gender Distribution of Inmates

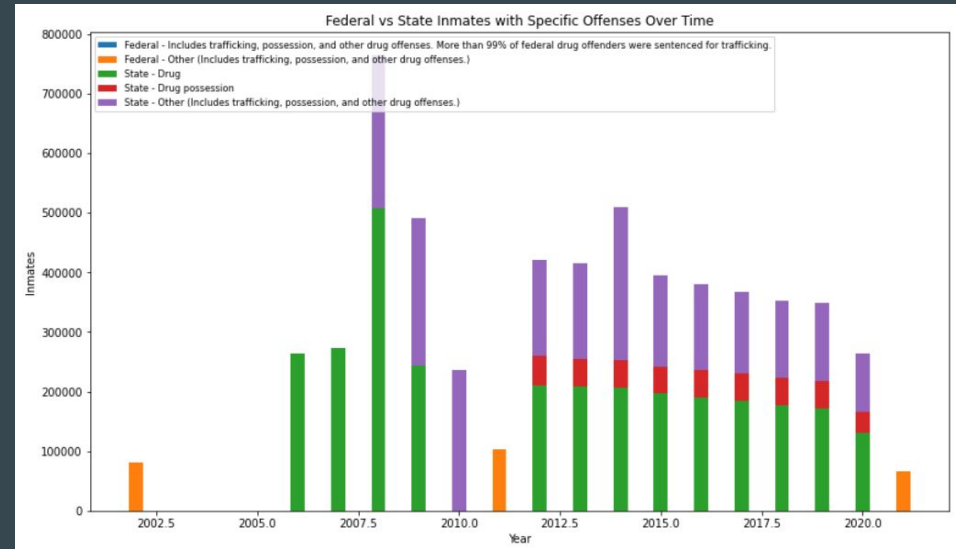
Results - Federal vs State

Federal Vs. State Inmates over Time



- 2008 was the Great Recession
- 2010 rise in Heroin Overdose Deaths^[7]
- 2013 rise in Synthetic Opioid Overdose Deaths^[7]

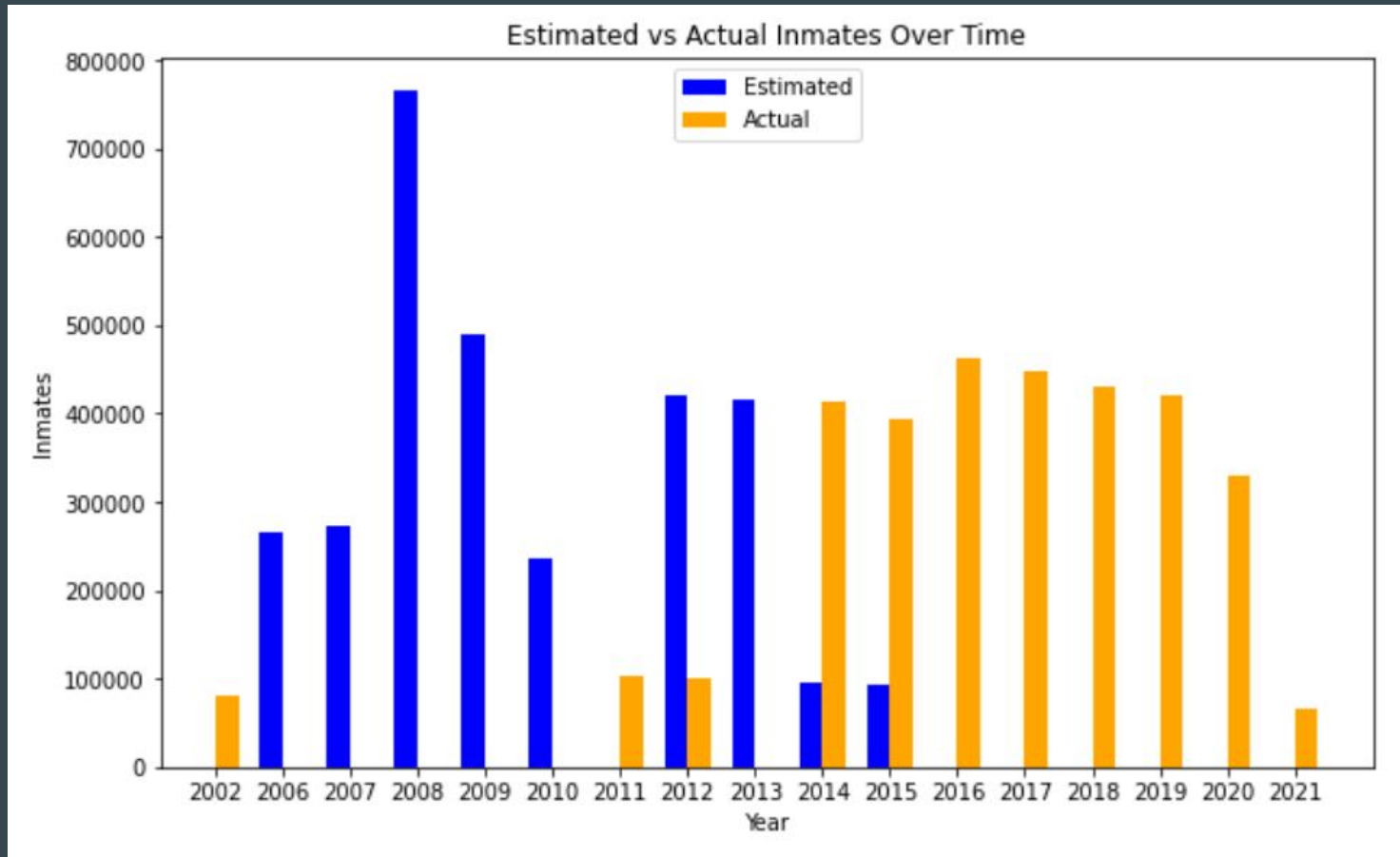
Federal Vs. State Inmates by Offense over Time



[7]Centers for Disease Control, "Understanding the epidemic | CDC's response to the opioid overdose epidemic | CDC," [www.cdc.gov](https://www.cdc.gov/opioids/basics/epidemic.html), Jun. 17, 2021. <https://www.cdc.gov/opioids/basics/epidemic.html>

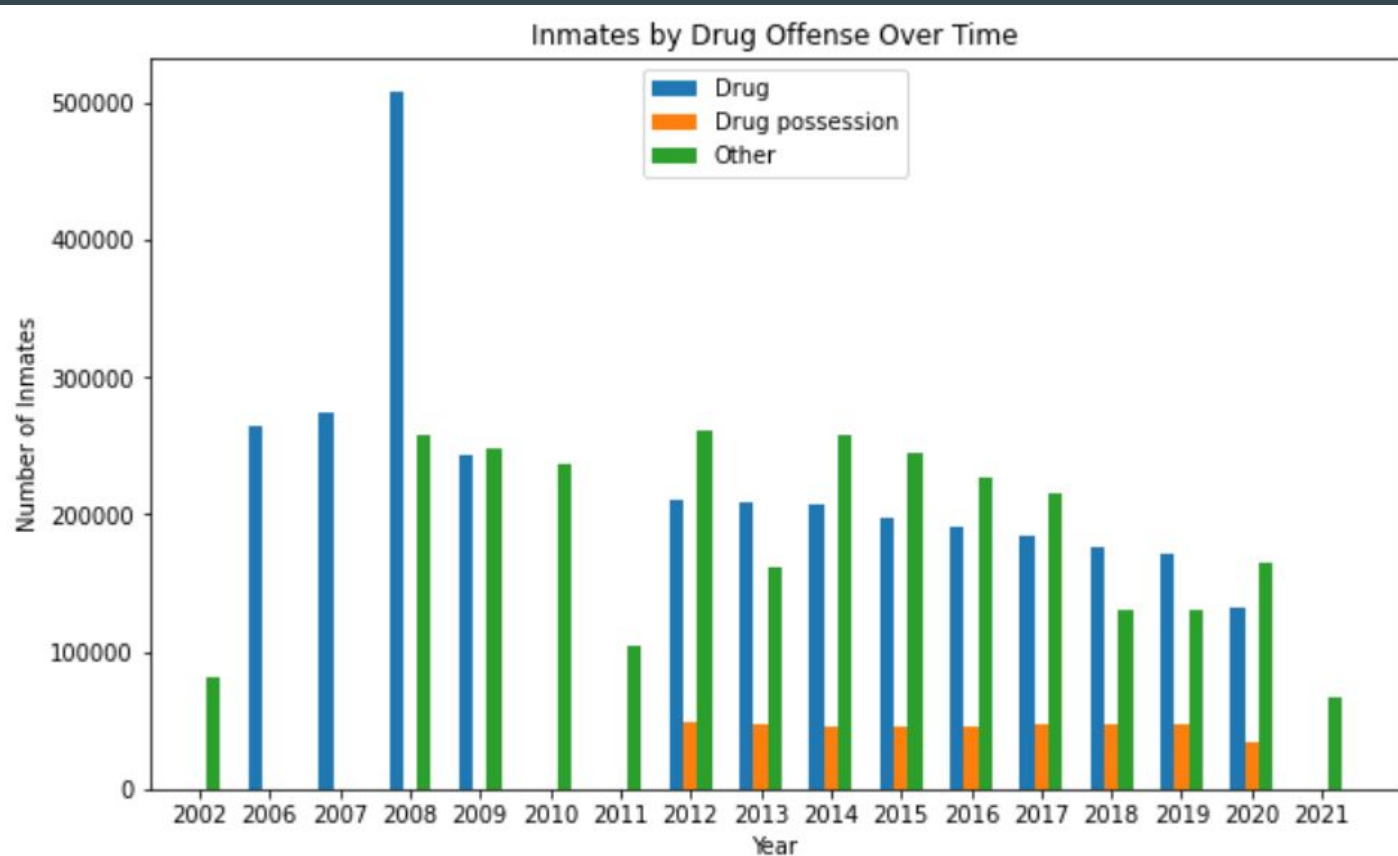
Results

Estimated vs. Actual Inmates Over Time



Results

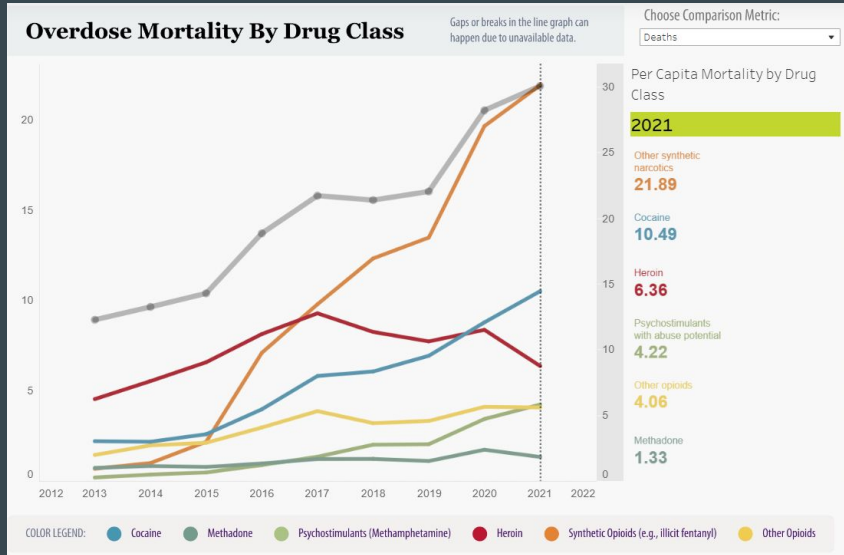
Inmates by Drug Offense Over Time



Issues

- Structure of the data
 - 2003, 2004, & 2005 are not accounted for
 - No data before 2002
 - No data after 2021
 - Missing estimated vs. actual data
- Study drug epidemic trends because data was very vague
 - Only knew percentages of drug, drug possession, and other (includes trafficking, possession, and other drug offenses.)
 - Had to make interpretations through comparing other data about overdoses, key heights in epidemic timelines
- Incomplete data
 - Not every field had information

Conclusion

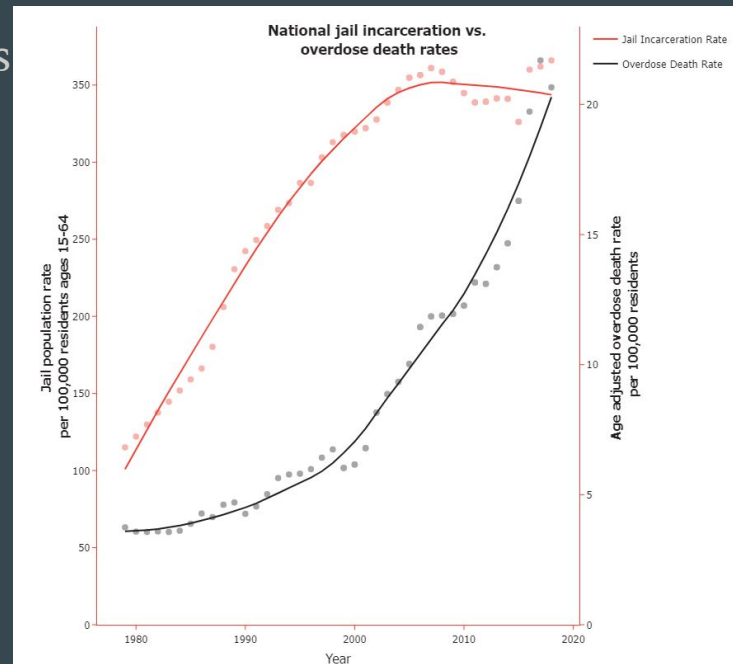


- Using information from “End the Epidemic” dashboards, we drew correlations between our data and their available information^[5]
- Correlation exists between drug epidemics and incarceration rates
 - Seen through our data
 - Compared to overdose deaths
- The estimated vs actual inmate numbers do not correlate with each other

[5] “Data Dashboard,” AMA End the Epidemic, <https://end-overdose-epidemic.org/data-dashboard/> (accessed Nov. 28, 2023).

Conclusion

- Despite rates of incarceration for drug-related causes going down, there are still over 100,000 inmates.
- “Data from 2007 to 2009’s National Inmate Surveys estimated that 58 percent of people incarcerated in state prisons and 63 percent of people serving sentences in jails met the criteria for a substance use disorder.”^[6]
- There is a need for Substance Abuse Prevention programs.

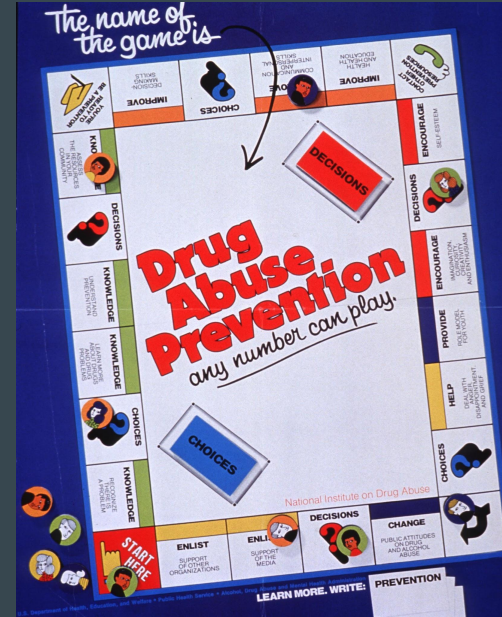


[6] “Overdose Deaths and Jail Incarceration - National trends and racial...,” *Vera Institute of Justice*.

<https://www.vera.org/publications/overdose-deaths-and-jail-incarceration/national-trends-and-racial-disparities>

Future Work

- Wish to continue exploring other drug epidemics impact on incarceration rates
- Find data from 1960s to 2000s
- Study how overdoses for other drug epidemics correlate with incarceration rates
- Investigate current substance abuse prevention programs and study the trends of re-admittance



Thanks!
Any questions?
...

