

Drug Overdoses and Potential Socioeconomic Correlations

Group 9:
Jason Casperson, Desmond
Workman, Jair Navarrete, and
Rachel Dabbs





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Project Overview

Determining the count of drug-related deaths across the nation, identifying the specific types of drugs involved, and exploring whether or not a connection exists between the number of overdose fatalities, the quantity of students, and school funding.

Research Questions to Answer

Overdose Death Count by Drug Type

What drug overdose was the leading drug overdose death type in the U.S.?

Overdose Death Count by State

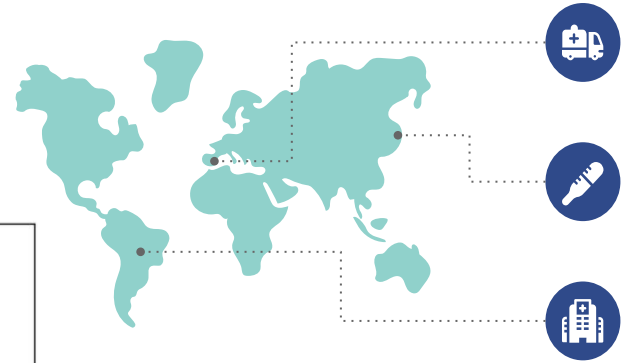
How many drug overdoses are there in the U.S. and which state has the highest death count?



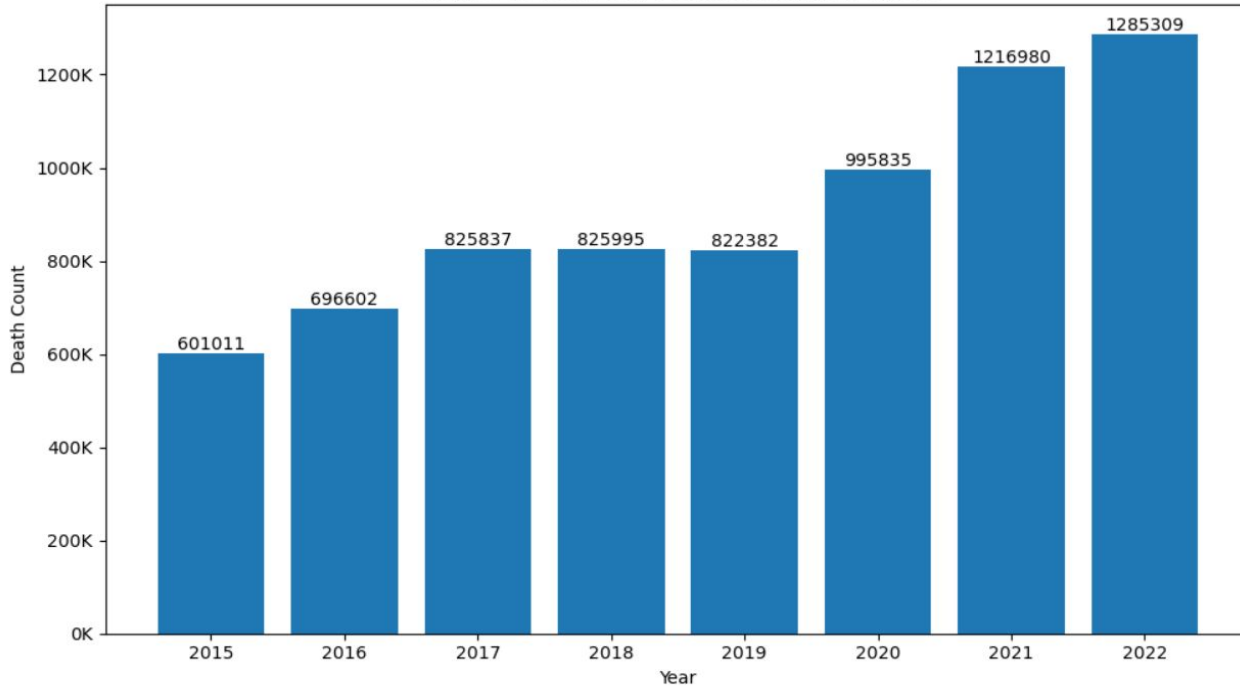
Drug Overdoses vs. Funding per Student

Is there a correlation between primary/secondary educational funding and drug overdoses?

Total Drug Overdose Deaths in the U.S.



Number of Total Drug Overdose Deaths in the US



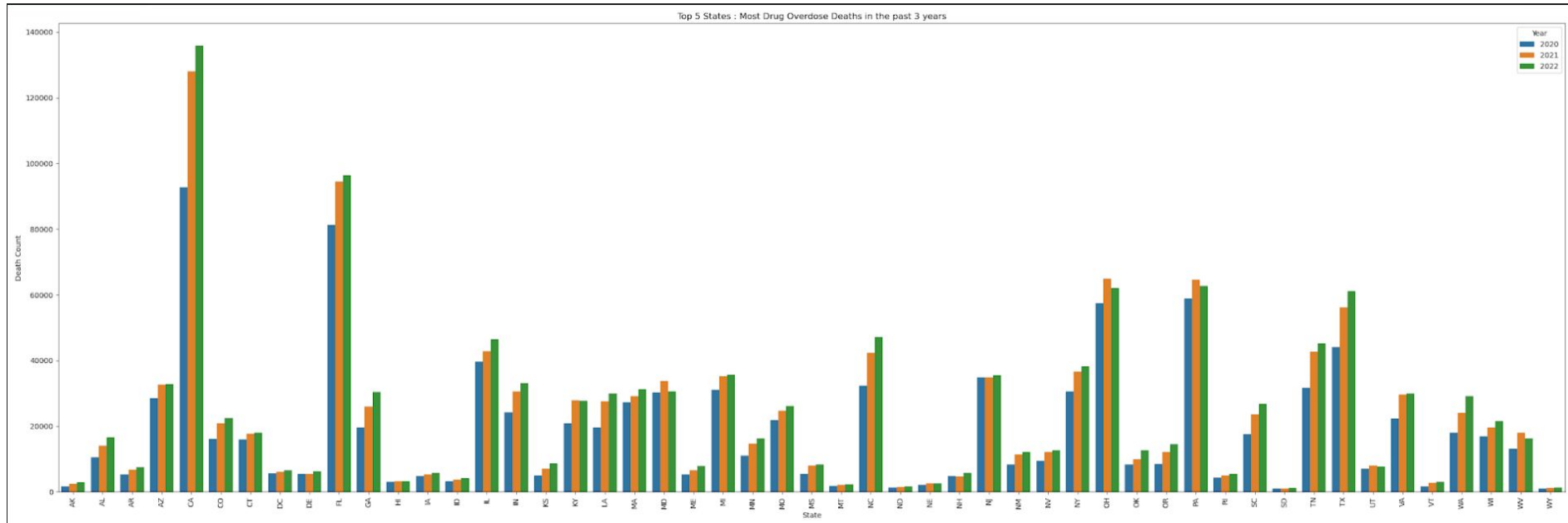


Visualization I Summarization

- **113.86 %** increase in US overdose deaths from 2015-2022
- From 2018-2019 we see a decrease in US drug overdose deaths by **0.43%**
- We see the biggest jump in overdose deaths in between 2020 and 2021 with a total of **221,145** deaths or an increase of **22.21%**
- The total death count for the years tested is **7,269,951**

Most Drug Overdose Deaths by State in the Past 3 Years

Top 5 States : Most Drug Overdose Deaths in the past 3 years





Visualization 2 Summarization

The top 5 states with the most overdose deaths combined for all three years are as follows:

1. **California** : 356,691 Deaths
2. **Florida** : 272,273 Deaths
3. **Pennsylvania**: 186,224 Deaths
4. **Ohio**: 184,468 Deaths
5. **Texas**: 161,322 Deaths

The average combined, 2020-2022 overdose death count for all states is **22,296**

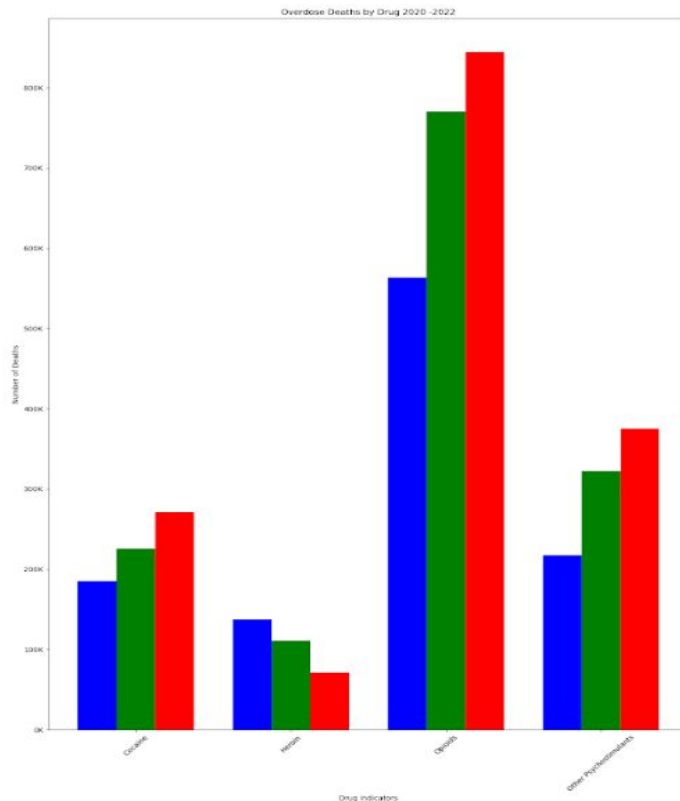
Overdose Deaths by Drug 2020-2022

Which drugs are responsible for the most deaths in the United States

After organizing the the data and filtering for the top 5 lethal drugs we found that these were the most lethal:

1. Opioids (a sum of all Natural/Synthetic ect)
2. Psycho Stimulants(with abuse potential)
- 3.Cocaine
- 4.Heroin
5. Methadone

Four of the 5 most lethal drugs in the US are classified as opioids.



Deaths Over Time by Drug

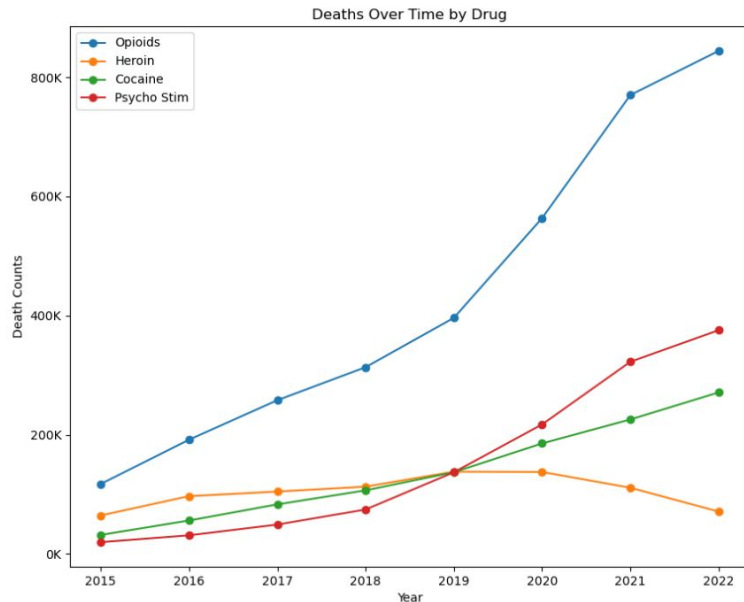
Is there an Opioid Crisis in the US

Opioid deaths had the highest total in the last 3 years, but what did these trends look like over a longer time period of time?

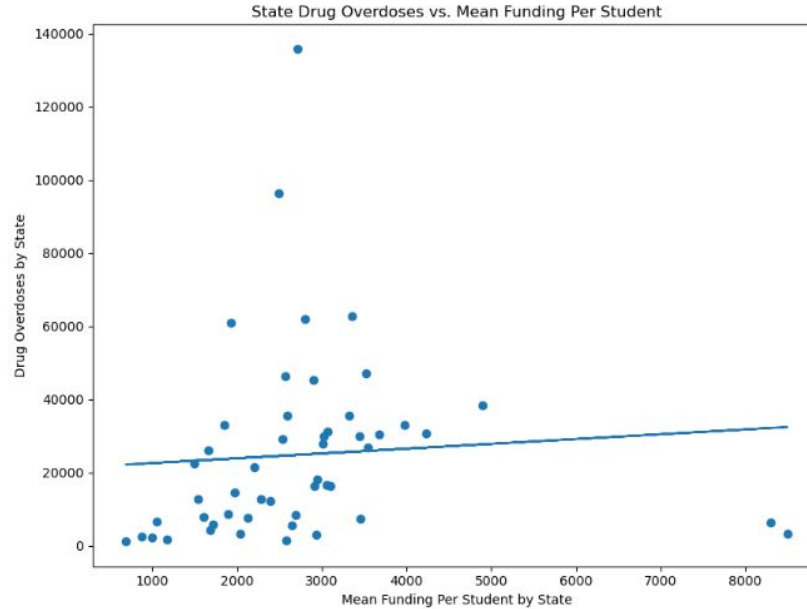
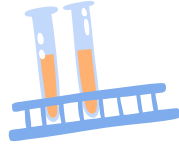
Opioid deaths have increased from under 200k to over 800k in only 7 years (300%)

According to our data drug overdose deaths across all opioid types outside of heroin are increasing.

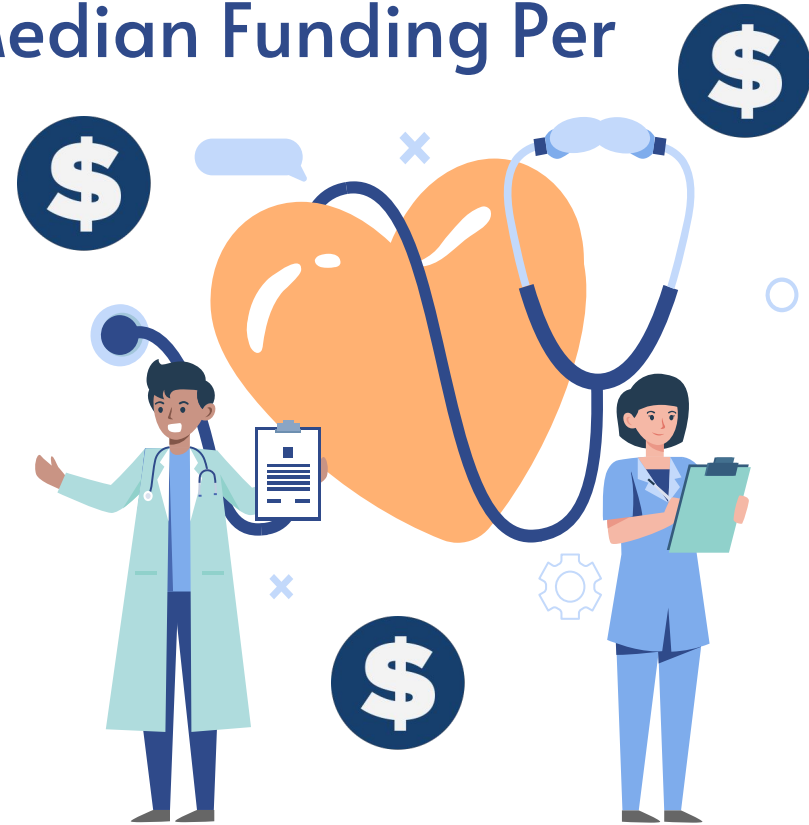
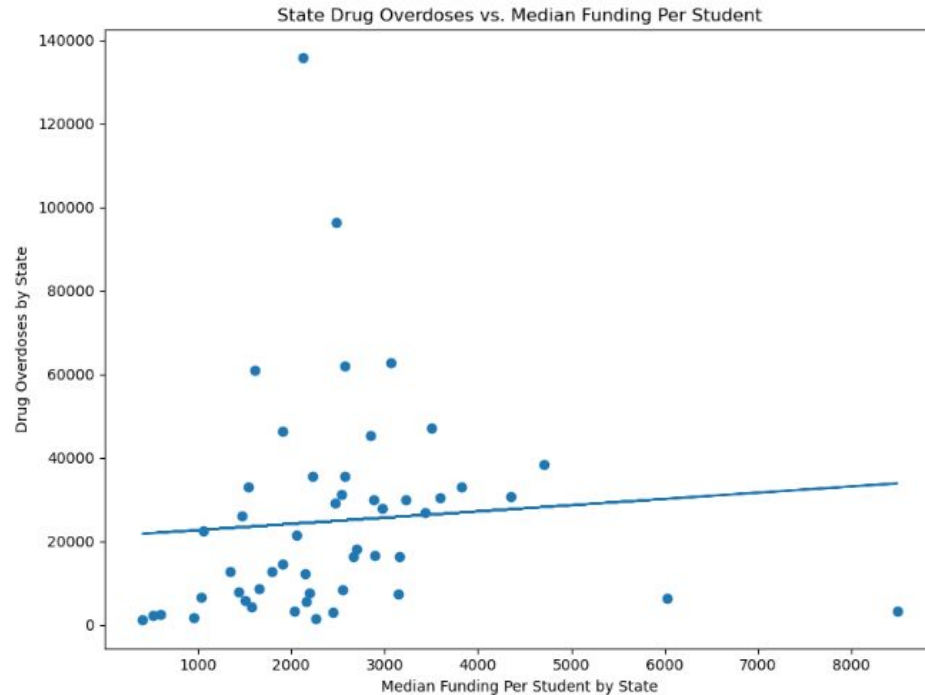
There was a significant rise in drug overdose deaths in 2019.



State Drug Overdoses vs. Mean Funding Per Student



State Drug Overdoses vs. Median Funding Per Student



Conclusions

“Is there currently a drug opioid crisis happening in the United States ”

Yes

“What drug overdose was the leading drug overdose death type in the U.S.?”

Opioids

“How many drug overdoses are there in the U.S. and which state has the highest death count?”

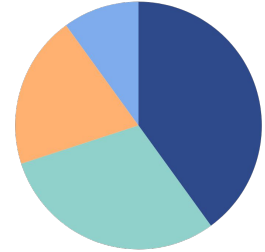
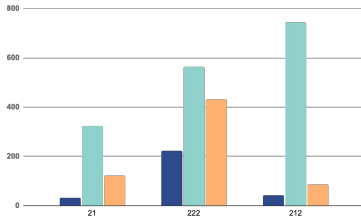
7,269,951 :California

“Is there a correlation between primary/secondary educational funding and drug overdoses?”

No

Information Databases Used

CDC



Rutgers School
Funding Fairness
Data System



RUTGERS

School of Public Health

Limitations

- Data has pending investigations which means death count may be incomplete
- School funding info is mean information, unknown best time frame for trend



A stylized illustration of a computer monitor with a dark blue frame. The screen is white and displays the text "Thank You!" in a large, dark blue, sans-serif font. Surrounding the monitor are various icons: a blue folder with a white label on the top left; three blue gears of different sizes at the top; a pair of orange lungs on the right side; a blue stethoscope on the bottom right; and an orange first aid kit with a white cross on the bottom left. There are also small blue circles and 'x' marks scattered around the monitor. The entire illustration is set against a light blue background with a large, light green shape behind the monitor.

Thank
You!