Opioid Overdose Prevention

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**Abstract**

The goal of this project was to aid the DEA and Sunrise Recovery Centers in identifying states that have been and will be the most afflicted by the current drug epidemic in America. I was able to work with data from the CDC’s National Vital Statistics System (NVSS) and the DEA’s National Forensics Laboratory Information System (NFLIS). In identifying the states at most risk, the clients would be able to allocate education and funding at the state level that would trickle down and lead to a flattening of the curve in total overdose deaths.

**Design**

Data was acquired from the CDC and DEA information systems on overdose deaths, positive drug tests upon arrest, and the specific substances associated with them. The goal was to aggregate death counts for each state and identify top results by state. Next, I made a per capita adjustment to account for large populations. I then determined the percent increase per year in each state to identify to state with the most rapid increases in overdoes deaths. Lastly, I calculated the proportion of total positive drug tests for each class of major drug, and determined those on the rise.

**Data**

The data collected contained information on overdose deaths and their related substances. These included cocaine, heroin, opiates, synthetic opioids, other opioids, etc. Over 50k rows of data over the course of 6 years from 2015-2021 across all U.S. states and territories.

**Algorithms**

Used data cleaning and aggregation within Microsoft Excel and Tableau to create appropriate visualizations.

**Communications**

See next page.

