Final Project Proposal

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Story Pitch for Final Project Proposal: Drug overdose deaths over the years

For our final project we would like to display information on drug overdoses in the United States and how the numbers of occurrences have risen over the years.

What is a drug overdose? A drug overdose is when someone takes a toxic/poisonous amount of drugs or medications, not all drug overdoses are fatal but can do serious harm to the user.

Why this topic? Living in the state of Washington and being in the city of Seattle, the numerous amounts of drug overdoses that are reported in the news and open use of paraphernalia in our area is very common. The problem doesn't just happen in Seattle but as well as all around the state such as Yakima, Spokane, Tri-cities and many other counties throughout, also in every state throughout the United States. Overdose death and injuries remain one of the leading causes of death and self harm, per the CDC, also per the National institute on drug abuse reports that over 96,000 people die every year from drug overdose and opioids are a factor in 7 out of 10 overdose deaths and since 1999 drug overdoses have taken the lives of more than a million people.

Why is this data important? Drug overdose is a fairly new topic and has only been recorded since around 1999, there are many different ways to present data for this topic. We can break down the data by age, sex, and per state as well as fatal overdoses and non-fatal. The numbers of reported cases continue to increase year after year, for example: "preventable opioid overdose deaths increased 41% in 2020 and another 18% in 2021. The 35- to 44-year age group is experiencing the most opioid overdose deaths – 20,137 – a 20% increase from 2020, and a 73% increase since 2019. Currently, 71% of preventable opioid deaths occur among those ages 25 to 54, and the number of deaths among individuals 55 and older is growing rapidly. Few opioid deaths occur among children younger than 15. Seven out of 10 preventable opioid overdose death victims are male, 53,992 compared to 21,793 female deaths in 2021. However, since 1999, female opioid overdose deaths have increased at a faster pace than male deaths – 1,608% for females versus

1,076% for males". There are many categories that can be made for this topic, the data is readily available and published by credible sources.

While speaking with my team about which topic to choose we came to an agreement for this topic and we all feel that this topic is very important to show information with not just words but with visuals as well. This topic I hold a bit closer than others given that I have first hand experiences with others who have overdosed during my time as a Firefighter/EMT, I have seen how it devastates families and communities, I have seen fatal and nonfatal occurrences, It is a topic that I would like to present to others and learn about.

"Drug Overdose Death Rates." *National Institutes of Health*, U.S. Department of Health and Human Services, 25 Sept. 2023, nida.nih.gov/research-topics/trends-statistics/overdose-death-rates.

"Drug Overdose Deaths." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 22 Aug. 2023, www.cdc.gov/drugoverdose/deaths/index.html.

"Drug Overdoses." *Injury Facts*, 27 Sept. 2023, injuryfacts.nsc.org/home-and-community/safety-topics/drugoverdoses/.

"Opioid Overdose." *World Health Organization*, World Health Organization, www.who.int/news-room/fact-sheets/detail/opioid-overdose. Accessed 29 Oct. 2023.

Finding Data:

Data set 1: "Drug overdose, death rates, by drug type, sex, age, race, and Hispanic origin: United States "https://catalog.data.gov/dataset/drug-overdose-death-rates-by-drug-type-sex-age-race-and-hispanic-origin-united-states-3f72f

The data set was downloaded from data.gov., it was published by the United States, Centers for Disease Control and Prevention, a component of the U.S. Department of Health and Human Services.   It reflects the drug type and demographic patterns of deaths from drug overdose in the United States. Demographic categories include, age, race, and sex. The data

was collected by the National Vital Statistics report. Standards set by the Office of Management and Budget were used to categorize race. Trends in death rates were evaluated using joinpoint software and comparisons were made by z test. The data set has 6229 rows and 14 columns.

Spencer MR, Miniño AM, Warner M. Drug overdose deaths in the United States, 2001–2021. NCHS Data Brief, no 457. Hyattsville, MD: National Center for Health Statistics. 2022. DOI: https://dx.doi.org/10.15620/cdc:122556

 Data set 2: "Prescription Monitoring Program (PMP) Public Use Data"

This data set is from the United States Department of Justice and was accessed from data.gov. The principal investigators are Patrica Freeman and Karen Blumenschein from the University of Kentucky. The data explores criminal cases involving prescription drug abuse in 9 states from the point of view of Law enforcement officers. The data reflects the use of prescription drug monitoring programs; they report the officers personal believe on the efficacy of the programs, the ease of use of the programs, rates of application, and morethe Also included are number of cases that are related to Nurses, Doctors, dentist, Pharmacist, individual patients, and other health care professionals. There are 166 rows and 8 columns.

Freeman, Patricia, and Blumenschein, Karen. Optimizing Prescription Drug Monitoring Programs to Support Law Enforcement Activities, United States, 2013-2014. Inter-university Consortium for Political and Social Research [distributor], 2018-07-19. https://doi.org/10.3886/ICPSR36043.v1

Background Research/Inspiration:

- https://injuryfacts.nsc.org/home-and-community/safety-topics/drugoverdoses/data-details/
  - Interactive graph shows many different ways to categorize the data this would be an important factor to include in our project as it helps to show which groups may be most vulnerable
  - Our project would likely also look at specific states that may be more affected especially since it is a local issue and we may want to look at Washington specifically
- https://apnews.com/article/us-overdose-deaths-cdc-3c3848da5f8aa01d7b9f232ba5a34152
  - This article specifically mentions COVID which would be an important factor to mention in our project
  - Our project would ideally include more visualizations
  - Talks about history of problem which is important background and helps invest whoever is looking at our project
- https://www.cfr.org/backgrounder/fentanyl-and-us-opioid-epidemic

- Focuses only on opioids
  - Our project would likely look at a wider range of drugs but a highlight on the opioid epidemic would be important
  - Cites a lot of percentages
  - Discusses legal and law enforcement actions which may not be a part of our project
- https://www.king5.com/article/news/health/washington-highest-drug-overdose-death-increase/281-cadc59d5-8462-426a-a1a7-9439d6636948
  - Article specifically looking at Washington in the current state. Shows how close the problem is to home which is something to emphasize in our project
  - Discusses test strips, an important aspect of drug safety and something that may be interesting to look at. Potentially look at if correlation to lower drug deaths in areas that give out test strips exsists.
  - Our project would have a broader geographical focus
- https://www.pewresearch.org/short-reads/2022/01/19/recent-surge-in-u-s-drug-overdose-deaths-has-hit-black-men-the-hardest/
  - PEW research center has great formatting and use of data on their articles, would be a great source of inspiration for design
  - Another article that highlights a specifically vulnerable group that would be important to discuss in our project
  - Discusses covid and how the issue is progressing and getting worse