

Gabby Willard

Data Visualization Hackathon – Gabby Willard’s Contributions

(Only my contributions are on this document. A lot was deleted off of the team submissions for unexplained reasons.)

Opioid Abuse in a Global Context

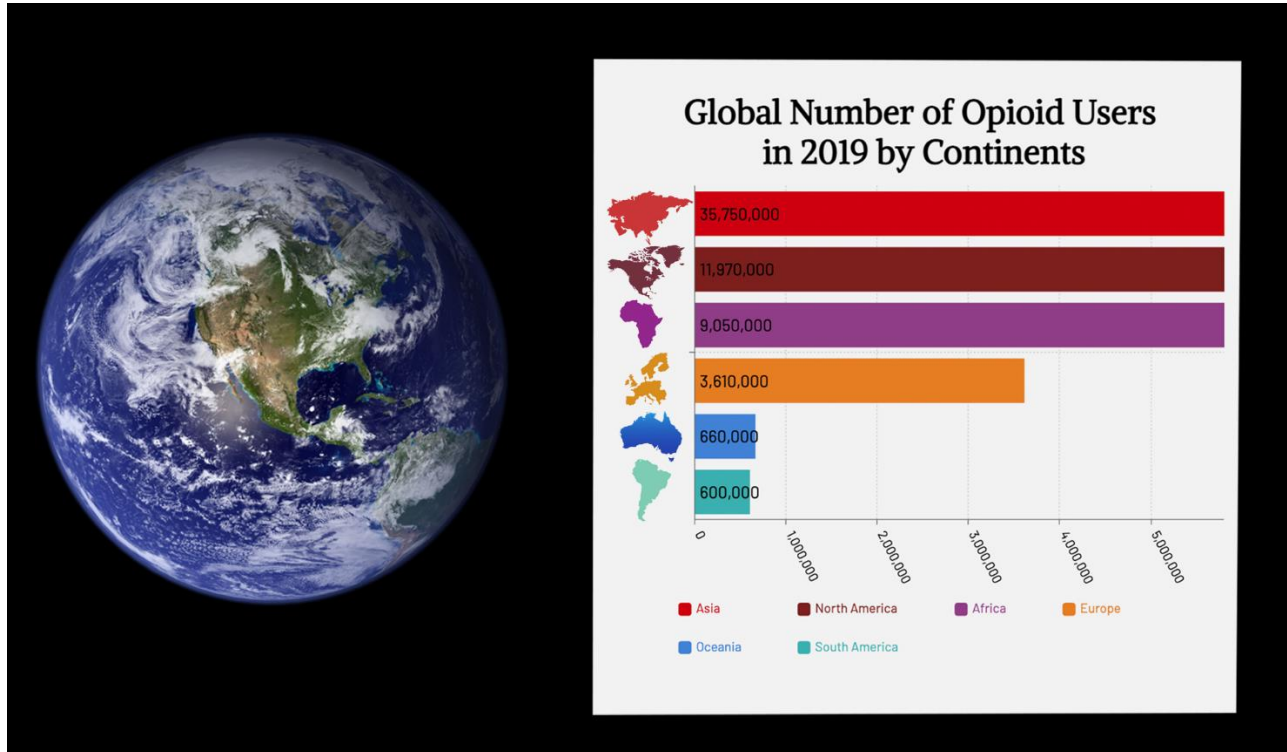


Figure 1. (A main visualization I made for the group project that got deleted for unexplained reasons.) This visualization serves a purpose of introducing the topic, opioid abuse in a global context, to the audience by showing how many opioid users there were in each continent of the world in the year 2019. The dataset used for this visualization is from the United Nations Office on Drugs and Crime (UNODC) 2021. World Drug Report 2021. Pg. 105.

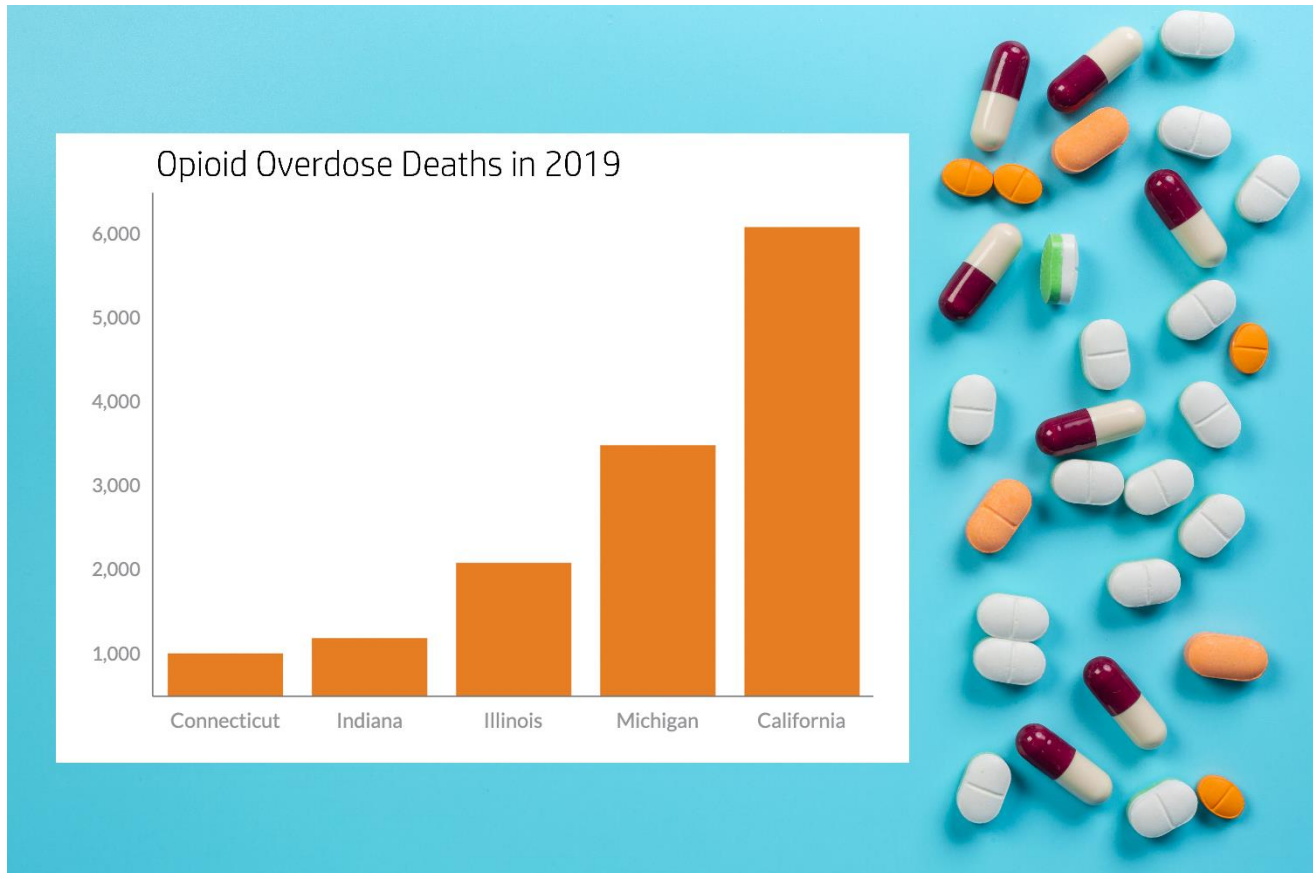


Figure 2. (A main visualization I made for the group project that got deleted for unexplained reasons.) This visualization serves the purpose of introducing the audience to the more specific topic of opioid deaths in the year 2019 in the five specific states that were analyzed and discussed as a group. The dataset used for this visualization is also from the United Nations Office on Drugs and Crime (UNODC) 2021. World Drug Report 2021. Pg. 105.

Team name: Visualizers

Name (full name)	Purdue Email address
Gabby Willard	gwillard@purdue.edu

Opioid Abuse in a Global Context

Introduction

(An introduction I wrote for the group project that got deleted for unexplained reasons.)

As a team, we were interested in analyzing and comparing the opioid abuse on a state and global context. The states Illinois, California, Michigan, and Connecticut are four of our group member's hometowns and the country Singapore is one of our group member's home country. We do expand the opioid crisis in a global lens because it would be unfair to compare the opioid crisis for the entire country of Singapore to four United States. Our goal is to help our audience understand how the opioid crisis has different affects everywhere around the world.

Discussion and Conclusion

(A portion of the discussion I wrote for the group project that got deleted for unexplained reasons.)

With insight from the visualization, the number of opioid abusers in Illinois has increased since 2015 and has been staying around 2,000 since 2016. The number of opioid abusers has drastically risen in Illinois from 2013 to the present day. The number of opioid deaths in Illinois compared to Indiana, Illinois is making a slight decline in their numbers while Indiana is making a bigger incline. Even Connecticut appears to have an increase while California has the highest numbers. It would be recommended to keep an eye out for places with significant inclines in opioid overdoses correlating to opioid abusers. The places with the most problems should have their local government raise more awareness about the problem and promote programs to help people struggling with opioids.

References

1. <https://www.unodc.org/unodc/data-and-analysis/wdr2021.html>
2. <http://idph.illinois.gov/opioiddatadashboard/>

Appendix A – Resources Used

Datasets

The dataset used for both of the main visuals on the front pages is from the United Nations Office on Drugs and Crime (UNODC) 2021. World Drug Report 2021. Pg. 105. The dataset used for the Illinois visual is from the Illinois Department of Public Health Opioid Dashboard from 2013 to 2019. Both of these datasets have links provided in the References section above.

Tools Used

Tool/Application	Description
Tableau	Data Visualization
Microsoft Excel	Data cleaning and combining
Adobe Photoshop	Data Visualization Editing
Google Slides	Presentation Slides

Appendix B

Individual Contributions

In the table below list each team member's full name, their contribution (body of work), and their % of the work completed. The total must add up to 100%

Team Member	Description	Contribution
Gabby Willard	Created two main visualizations (the world visual and the states visual) for the front pages for the purpose of introducing the audience to our topic along with information about the visualizations. Wrote the introduction and a big portion of the discussion. Provided references to all of the datasets that I used to make all of my visualizations (world visual, states visual, and Illinois visual). Created the visualization and story explanation for the state of Illinois. Also wrote a part of the diversity statement. I did complete all of my work in time.	22%
Haemi (Alice) Lee		16%
Shreya Vasant		21%
Joy (Chia-Hua) Lin		25%
Wei Yi Tan		16%
Total		100%

Appendix C – Individual Contributions

In this appendix each team member must contribute a one-page document relating the team's topic/data to their home town or home country. The one-page document must contain: (1) a description of the problem, (2) a comparison of the team's findings with insights about your home town/country related to the hackathon data (3) a visualization to support items (1) and (2).

Each person should create their individual page and make it available to the designated team member who will upload the final document.

This will be viewed and assessed as part of each person's individual contribution.

Leave this page as is.

Start adding individual page content on the next page.

REMOVE any blank pages before submitting.

Team Member #1: Gabby Willard

My Hometown/City/Country: Illinois

Hackathon Topic (dataset): Opioid Abuse

The opioid crisis has been on an incline in numbers overall in Illinois. The number of non-fatal overdoses has always been way more than fatal overdoses. The number of fatal overdoses started at around 1,000 in 2013 and reached 2,000 in 2016 and remains around 2,000 to this present day. The non-fatal overdoses are getting worse as time goes on, starting around 6,000 in 2013 and getting worse in the year 2016 with over 11,000 non-fatal overdoses. Once the number of non-fatal overdoses reaches over 13,000 in 2017, the number in 2018 does not increase as much as the previous years would have predicted.

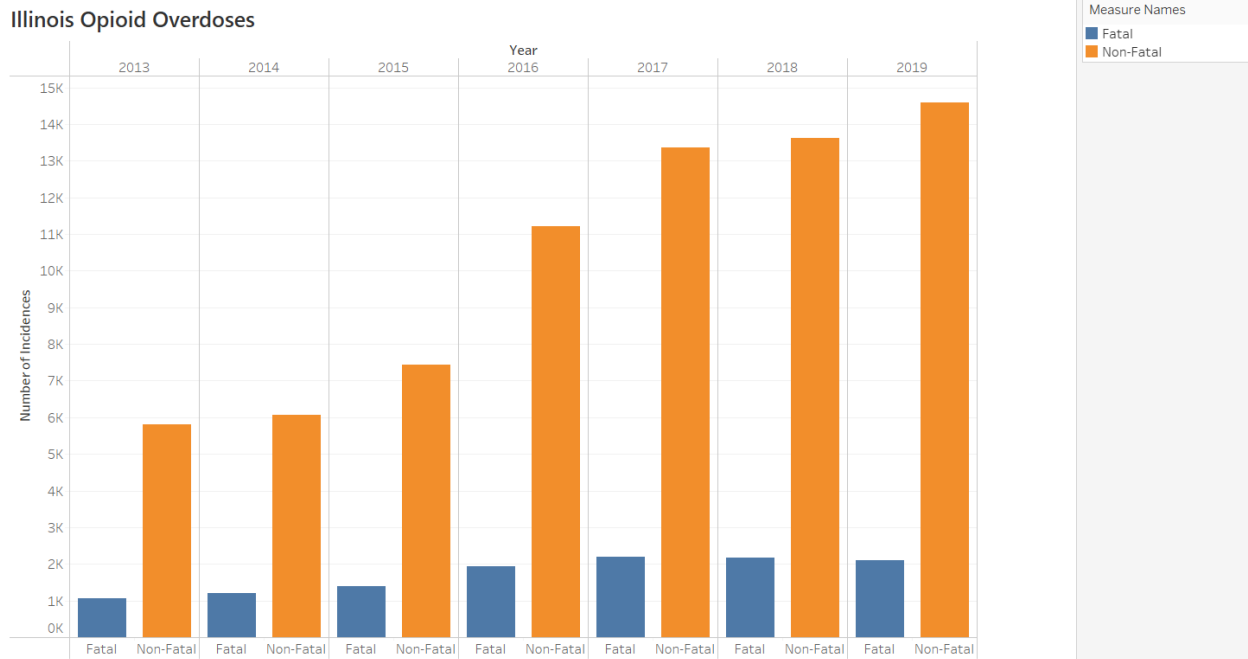


Figure 3. Visualization created to inform the audience about the opioid overdoses in Illinois from 2013 to 2019. The dataset used for this visualization is from the Illinois Department of Public Health Opioid Dashboard from 2013 to 2019.

Appendix D – Diversity Statement

(A part of the diversity statement I made for the group project that got deleted for unexplained reasons.)

There are many unique perspectives in our group with visualizing data to be able to compare to each other. We all have different ways of looking at the best ways to represent the solution to a problem using data. We are able to collaborate ideas to understand what would work best for everyone as a whole.

Gabby Willard

Appendix E – Team Consensus

Team Consensus

I have read and approve of the content as a representation of the team's work and my contribution.

Team Member (full name)	Signature	Date
Gabby Willard	<i>Gabby Willard</i>	12/11/21