

PROJECT 1:

INVESTIGATING MATERNAL MORTALITY RATES

PROJECT PROPOSAL

Project title: INVESTIGATING MATERNAL MORTALITY RATES

Team Members: Mia Metni, Khadija Collymore, Christopher Wiggs,

Project Description/Outline:

Investigate some research question, provide visualizations to support/communicate validity of hypothesis

Research Questions to Answer:

QUESTION: Are maternal mortality rates of women in America highest among black women (as opposed to women having other racial backgrounds)?

Datasets to Be Used:

- **CDC** - developer portal - <https://open.cdc.gov/apis.html>
 - <https://www.cdc.gov/nchs/data/hestat/maternal-mortality/2020/maternal-mortality-rates-2020.htm> (Maternal Mortality Rates in the United States, 2020)
- NHS - developer portal: <https://digital.nhs.uk/developer>
- **NIH** - developer portal: <https://support.nlm.nih.gov/knowledgebase/article/KA-05317/en-us>
- NGO that focuses on maternal health (can point analysis to publicly sourced data)
- Kaggle
- **WHO** - <https://www.kaggle.com/datasets/utkarshxy/who-worldhealth-statistics-2020-complete>
- <https://www.pnas.org/doi/10.1073/pnas.1913405117> (Physician–patient racial concordance and disparities in birthing mortality for newborns)

Rough Breakdown of Tasks:

Please refer to section “Project Timeline” for rough estimation (mention of tasks to complete but mention currently excludes deadline/TOC)

ADDITIONAL:

Project Topic: Maternal Mortality Rates

QUESTION: Are maternal mortality rates of women in America highest among black women (as opposed to women having other racial backgrounds)?

(original, un-revised question: Why do certain racial backgrounds, particularly black women, exhibit higher maternal mortality rates compared to other racial groups in the United States?)

HYPOTHESIS: The elevated maternal mortality rates among black women in the United States compared to other racial groups stem from a complex interplay of healthcare disparities, socio-economic factors, and systemic biases, where limited access to quality healthcare, economic inequality, and racial biases within healthcare systems collectively contribute to this concerning disparity.

Project Timeline

- Create master notebook for analysis -
- Create google slide prez
- Divide sections -
 - ◆ Bar graph
 - ◆ Line graph
 - ◆ Scatterplot
 - ◆
- Data sources added Data section in this doc -
- Module 6 due - 2/7
- Team due date - 2/13
- Final presentation - 2/14

Potential Data Sources

- **CDC** - developer portal - <https://open.cdc.gov/apis.html>
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RESEARCH:

Maternal mortality medical causes: infections, high blood pressure, unsafe birth/ abortions