



CDC Places

Unlocking Health Insights: Analyzing
Indiana and Kentucky CDC PLACES
Data for Informed Public Health
Interventions

Project Introduction

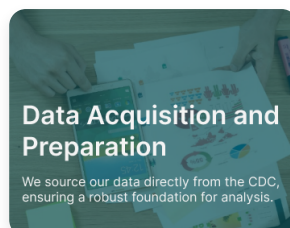
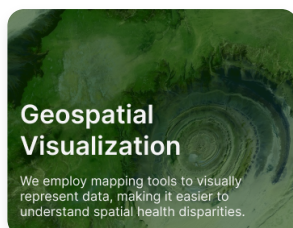
In this project, our objective is to identify outliers and analyze how health trends vary over time across different geographic areas, such as counties, places, census tracts, and ZIP Code Tabulation Areas (ZCTAs). By focusing on a detailed analysis of health trends across various geographic scales—from counties to ZIP Code Tabulation Areas (ZCTAs)—this initiative aims to provide actionable insights for improving community health outcomes.

Our analysis begins with a comprehensive acquisition of relevant health data from the CDC PLACES database, focusing primarily on Indiana. This data, representing a range of health metrics such as disease prevalence and access to healthcare, is meticulously cleaned and prepared to ensure accuracy and reliability in our findings.

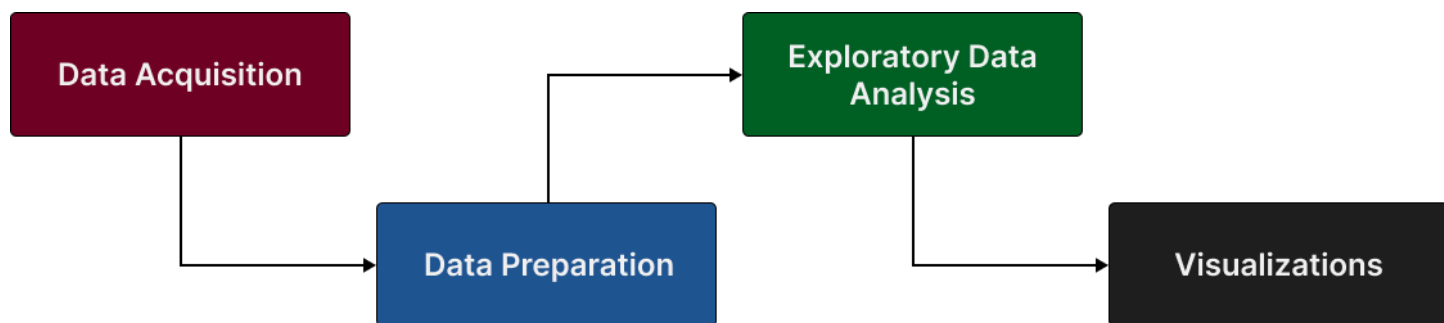
The project leverages advanced statistical and geospatial analysis methods to explore and illustrate the complex relationships between health outcomes and demographic factors. This approach not only highlights current health conditions but also helps predict future health trends, providing a crucial tool for policymakers and public health officials.

Project Methodology:

Our methodology encompasses several key stages:

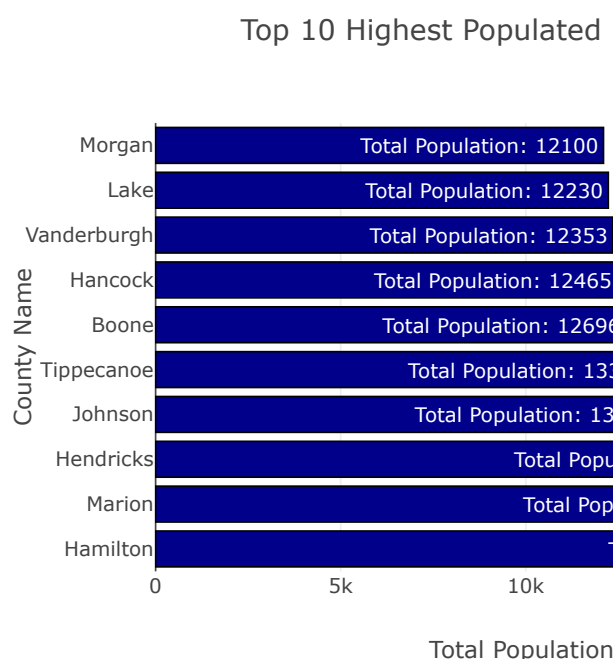


Workflow:



Results:

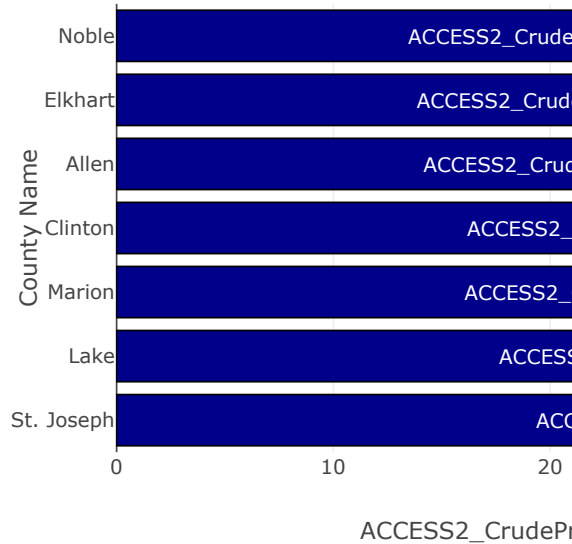
Our findings are presented through a series of detailed visualizations, each highlighting different aspects of public health in Indiana and Kentucky:



- 1. Data Sorting:** Code likely sorts counties by population to identify top 10.
- 2. Trace Assignment:** Each bar is assigned a separate trace, unusual for similar data.
- 3. Data Mapping:** Maps county names to y-axis and populations to x-axis values.
- 4. Dynamic Data Fetching:** Pulls population data dynamically, perhaps from an external source.
- 5. Interactive Elements:** Potentially interactive, allowing for detailed views on hover.

ACCESS2_CrudePrev ▼

Top 10 Highest Counties - ACCESS2_CrudePrev



1. Interactive Bar Chart: Visualizes top counties by a selected health condition.
2. Dropdown for Condition Selection: Allows filtering by different health metrics.
3. Dynamic Data Update: Chart updates based on selected health condition.
4. Color Coded: Each bar uses unique colors to distinguish between counties.
5. Hover Details: Shows precise values on hover, enhancing data readability.

1. Scatter Plot Visualization: Shows correlation between two identical health indicators.
2. Dual Dropdown Selection: Allows comparison of the same metric across different data sets.
3. Linear Relationship Display: Points align closely with a straight line, indicating strong correlation.
4. Interactive Elements: Users can select

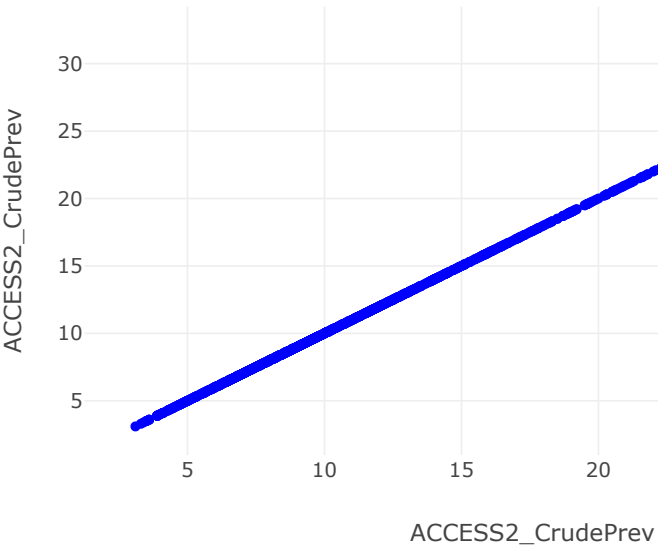
Health Indicator 1:

ACCESS2_CrudePrev

Health Indicator 2:

ACCESS2_CrudePrev

Scatter Plot for ACCESS2_CrudePrev vs



different indicators for comparison.

5. Clear Axis Labels: Each axis clearly labeled with the health indicator, enhancing understanding.

Deepak Rajput's Workspace

Untitled

Observable

Health Indicator 1:

ACCESS2_CrudePrev

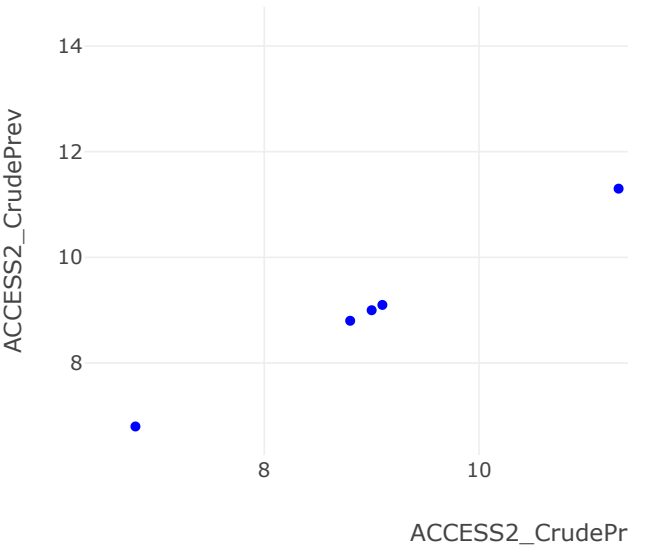
Health Indicator 2:

ACCESS2_CrudePrev

County Name:

Adams

Scatter Plot for ACCESS2_CrudePrev vs AC



- 1. Comparison of Two Metrics: Visualizes the same health indicator (ACCESS2_CrudePrev) across two axes.
- 2. Identifies Outliers and Clusters: Helps to easily spot variations or consistencies in the data.
- 3. Interactive Tooltips: Hovering over points provides exact values for easier data interpretation.
- 4. Simple and Clean Layout: Ensures that the data presentation is straightforward and easy to understand.

Summary:

Through our rigorous analysis of the CDC PLACES data, we have identified key trends and patterns that underline the health challenges and disparities in Indiana and Kentucky. These insights are invaluable for developing targeted interventions aimed at improving health outcomes and promoting health equity across these states. Our project highlights the power of data-driven approaches in public health and sets the stage for ongoing improvements in health policy and practice.

MEET THE Project Team

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Source Code

Our project's complete analysis and visualization code is available on [Github](#).