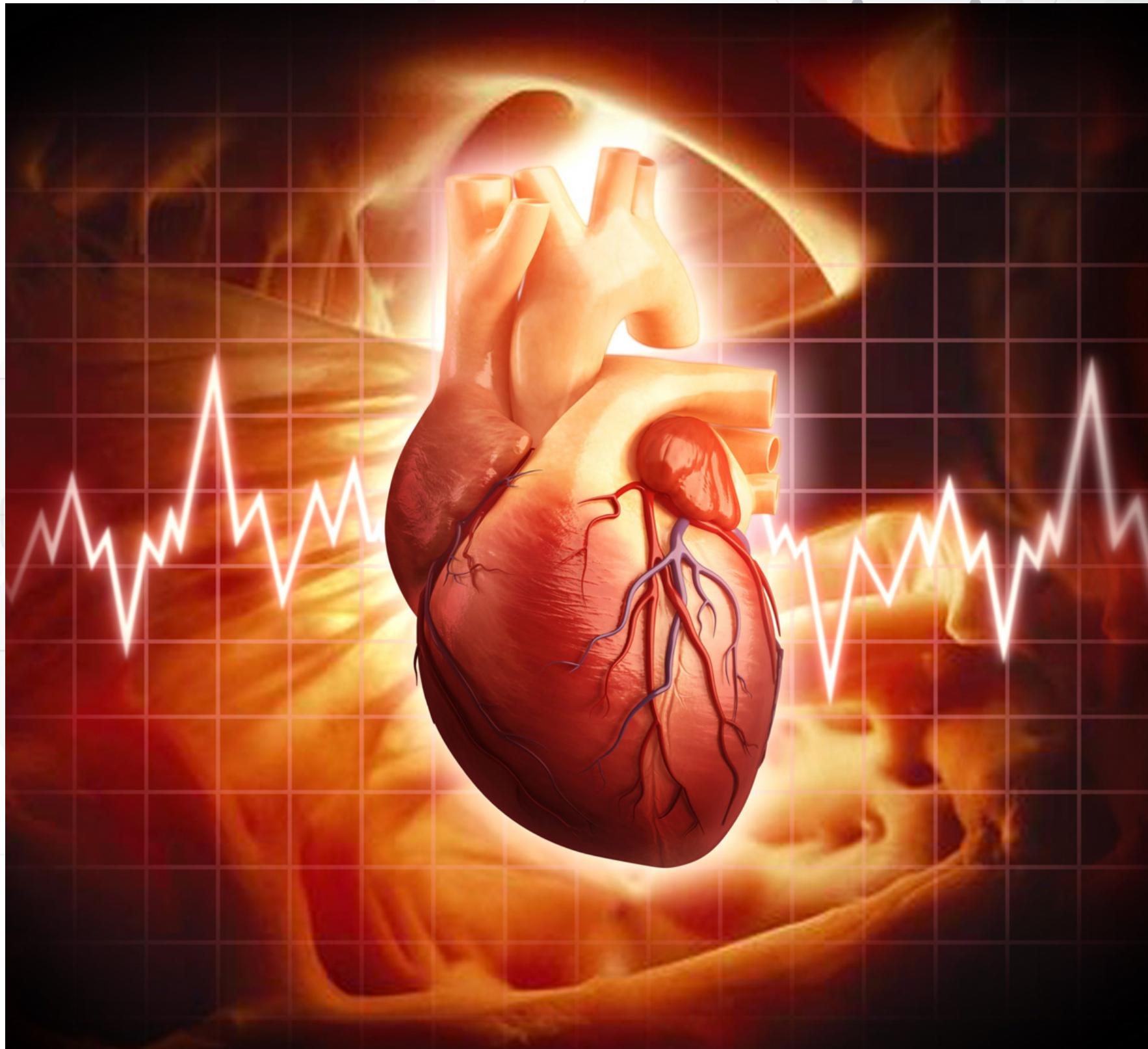


HYPERTENSION- RELATED CARDIOVASCULAR MORTALITY

RATES AND TRENDS
WEB APP



SANDRA TRAN
09/07/22

CARDIOVASCULAR DISEASES

- CDC definition: A group of heart and blood vessel disorders
- #1 cause of death and disability globally.
- Hypertension is the leading risk factor
 - The "silent killer"
 - Untreated, leads to heart disease, stroke, and kidney failure
- Most CVDs can be prevented by addressing behavioral risk factors

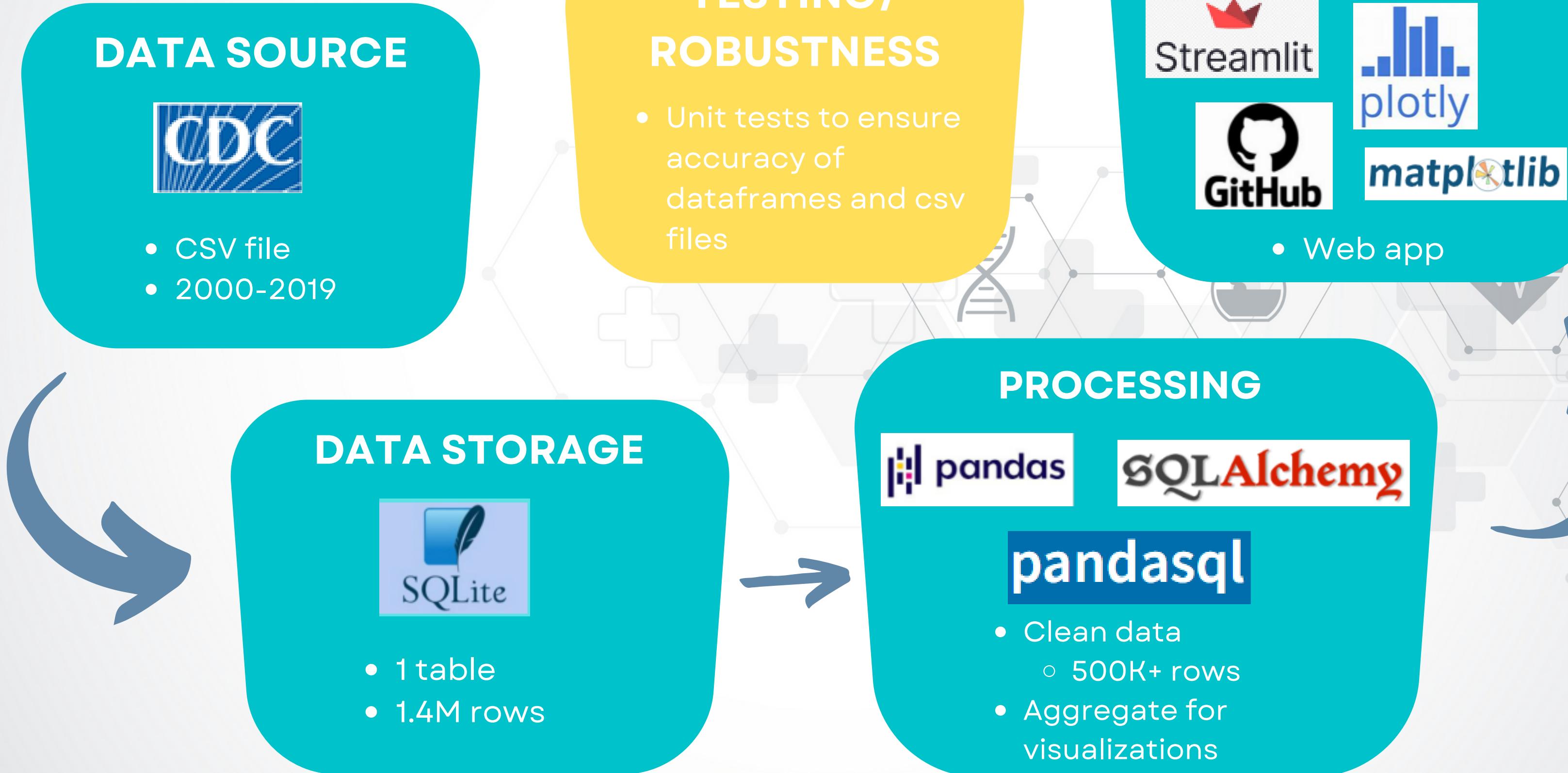
DATA

- Dataset provided by:
 - Centers for Disease Control and Prevention, Division for Heart Disease and Stroke Prevention
- One Table
- 1.4M rows, 24 columns
 - Hypertension-related CVD deaths
 - Any deaths with mention of hypertension or hypertension-related diseases
 - Age groups
 - Race/Ethnicity
 - Gender
 - Counties in the US
 - Year

GOAL

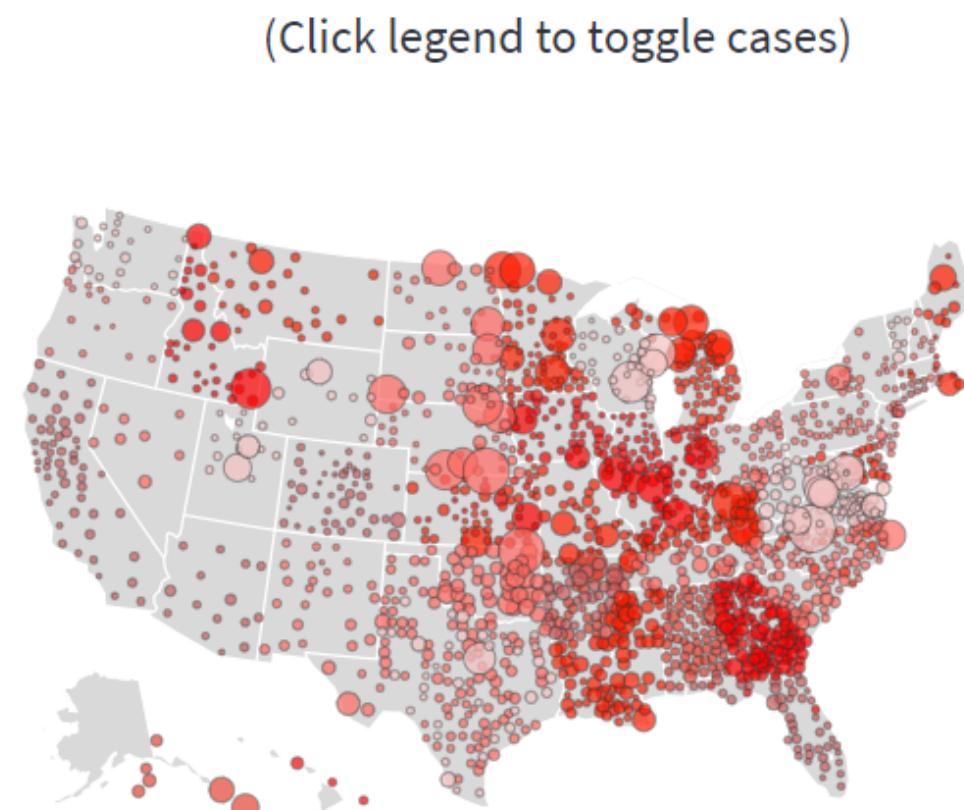
- Hypertension is the leading risk factor for CVD
 - Treatment is simple, effective, and affordable
 - Yet a staggering number of deaths are hypertension-related
- Create a data pipeline to visualize rates and trends of hypertension-related CVD deaths in US on an interactive web app

PIPELINE



STREAMLIT DASHBOARD

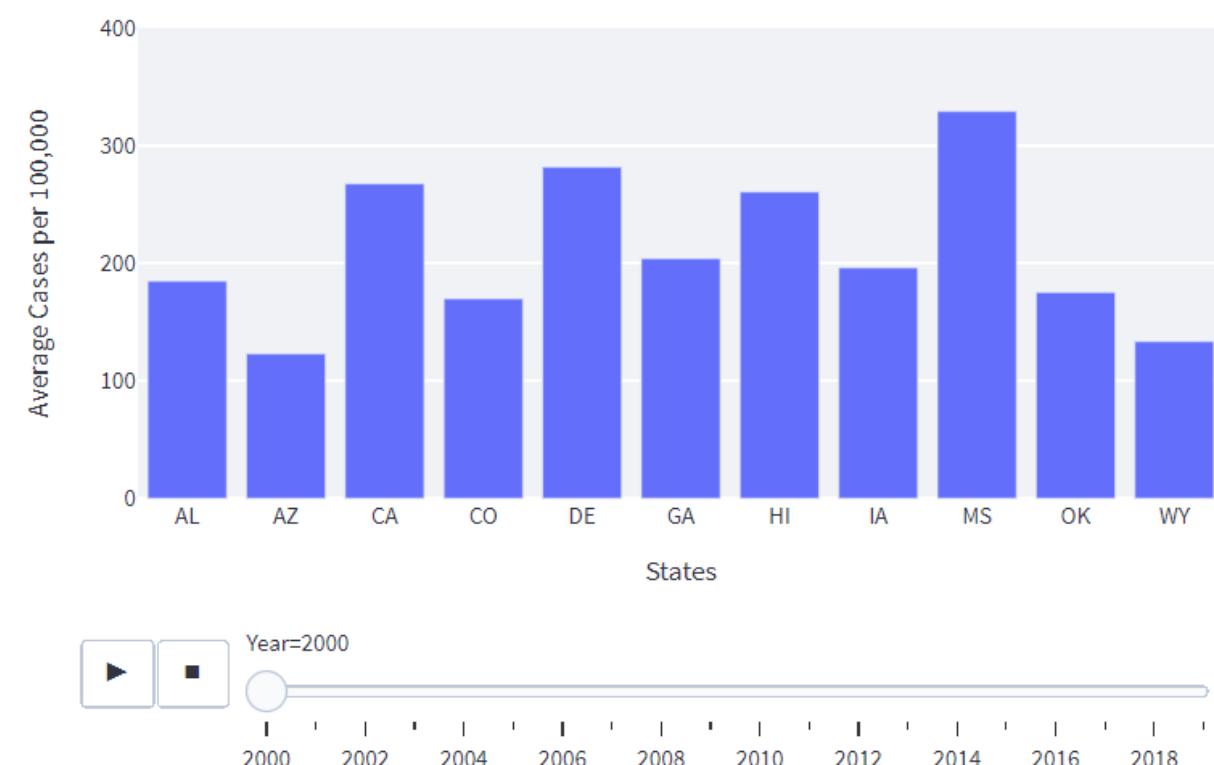
CVD Mortality by County



CVD Mortality by State

Which state(s) would you like to see?

AL ✕ CA ✕ MS ✕ OK ✕ WY ✕ CO ✕ DE ✕ GA ✕ HI ✕ IA ✕
AZ ✕



<https://snazzys1026-data-pipeline-cv-mortality-app-jrv7g0.streamlitapp.com/>

FUTURE WORK

- Update rates and trends to reflect more current data when available
- Utilize cloud warehousing such as AWS
- Utilize other cloud platforms for big data, such as Apache Spark



[future of cardiovascular disease - Search \(bing.com\)](#)

REFERENCES

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4. Doctor and healthcare image: <https://thumbs.dreamstime.com/z/heart-hologram-doctor-disease-health-care-future-modern-medical-science-hi-tech-diagnostic-panel-mixed-medium-copy-181469173.jpg>
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