

COVID-19 Deaths by Age, Sex, and State

Final Data Analysis Project
CDC Provisional COVID-19 Death
Data

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Purpose & Audience

Purpose of the Analysis:

- Analyze how COVID-19 deaths differed by age, sex, time, and state
- Identify groups most impacted

Audience:

- Public health agencies, policymakers

Data & Methodology

Source: CDC provisional COVID-19 death data
(2020–2023, CSV) via Kaggle

Unit of analysis: death counts by age, sex, month, and state

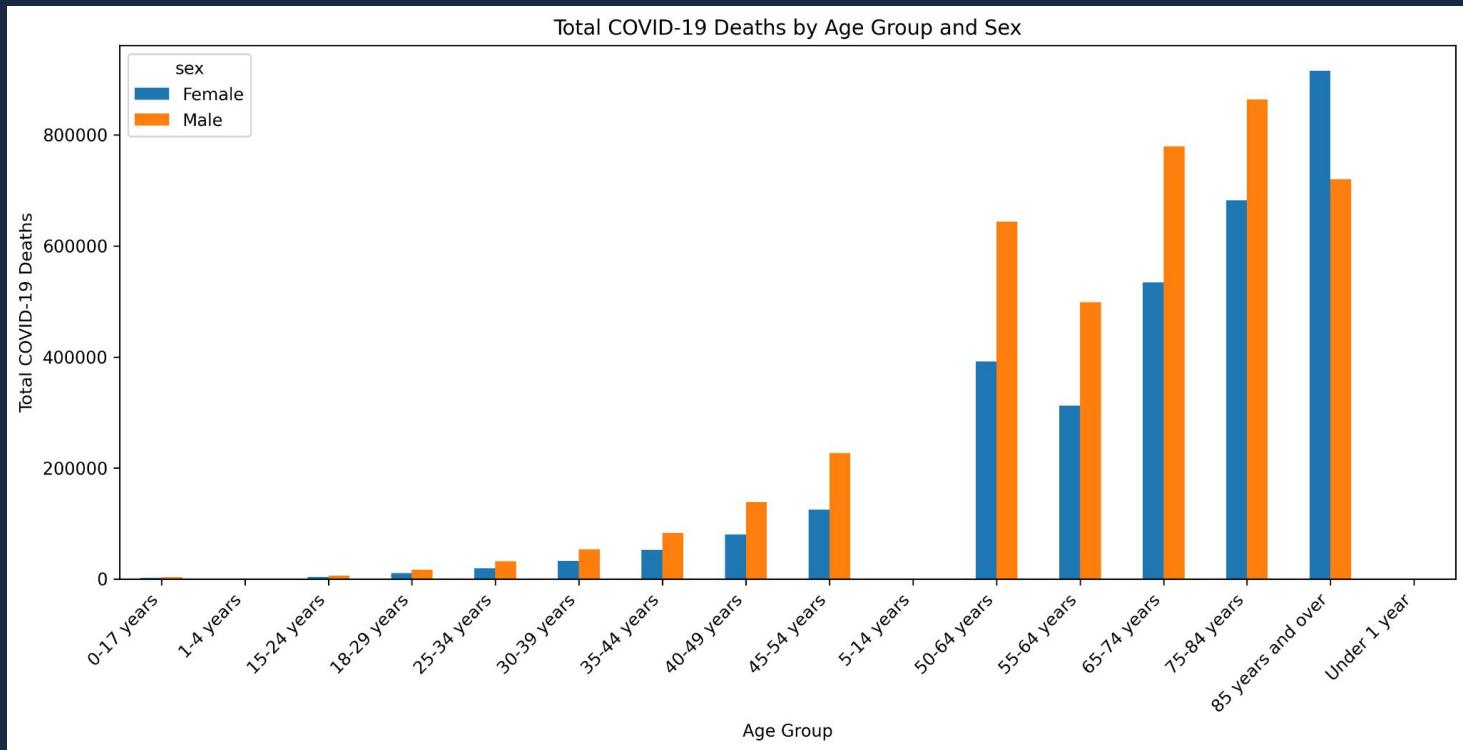
Tools: Python, Pandas, Matplotlib, Jupyter Notebook

Results

Question 1

How did provisional COVID-19 deaths differ between males and females across age groups?

Analysis:
COVID-19 deaths increased with age for both males and females. Across nearly all age groups, males experienced higher death counts, especially in older age categories.



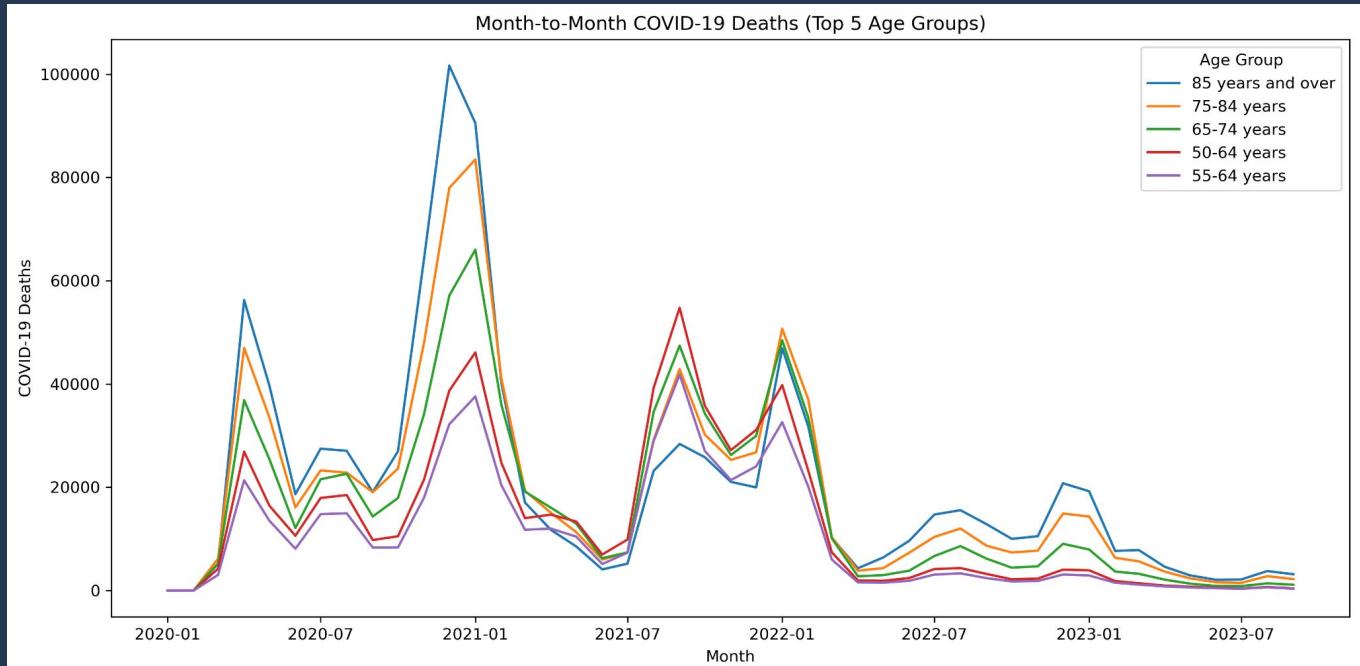
Results

Question 2

How did COVID-19 deaths change month-to-month within age groups?

Analysis:

COVID-19 deaths went up and down over time, with noticeable spikes during major parts of the pandemic. Older age groups consistently had higher death counts than younger groups.



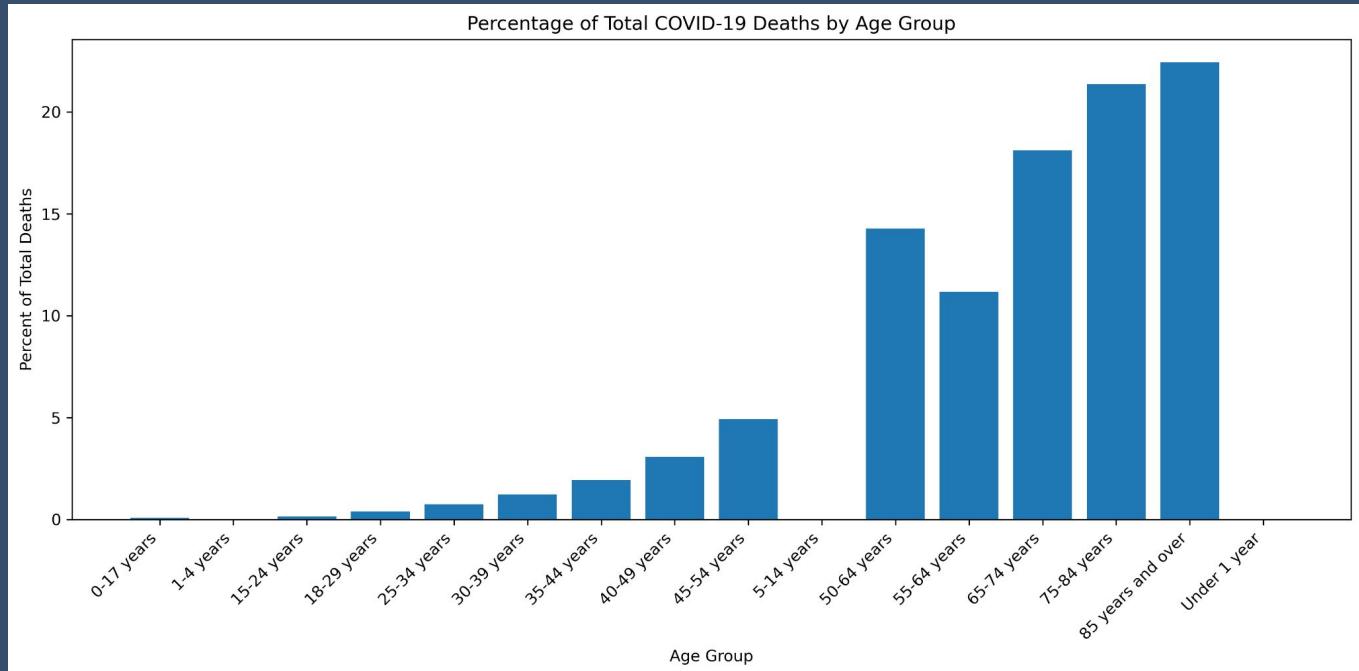
Results

Question 3

Which age groups account for the largest share of total COVID-19 deaths?

Analysis:

Older age groups made up a much larger share of total COVID-19 deaths, while younger age groups accounted for a smaller percentage. This shows that COVID-19 had a greater impact on older people.



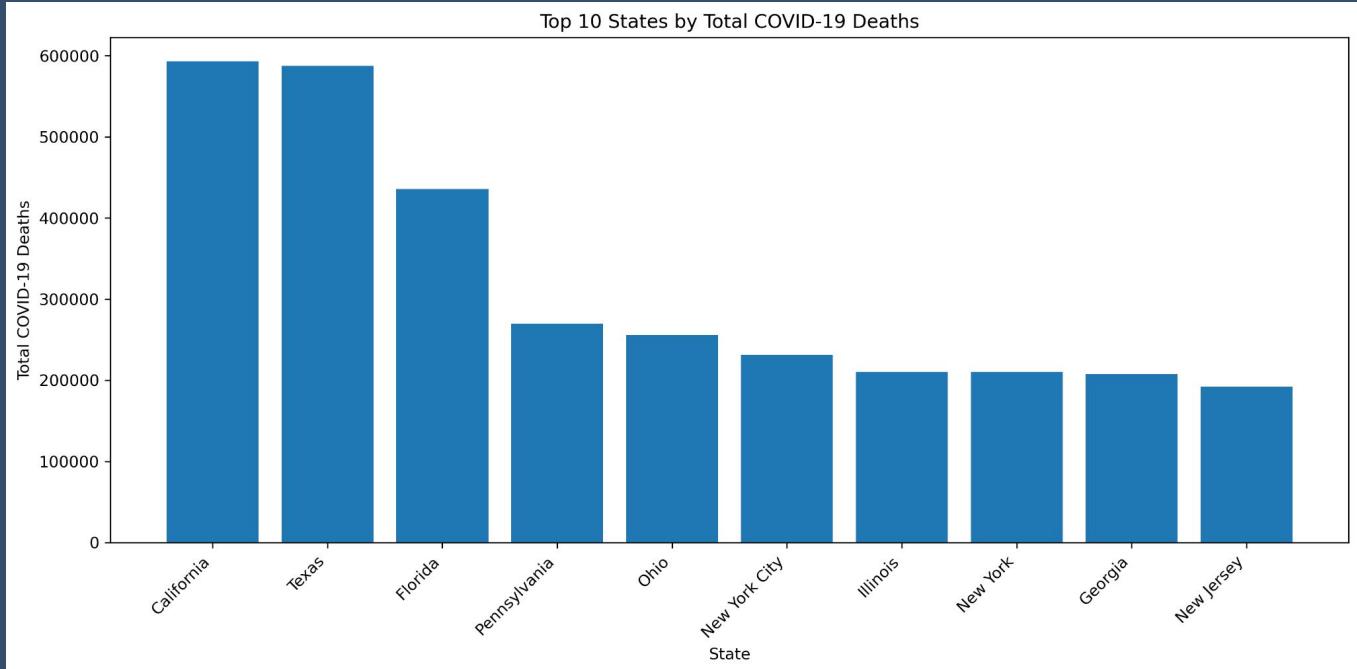
Results

Question 4

Which states experienced the highest total number of COVID-19 deaths?

Analysis:

The data shows that a small number of states had the highest total COVID-19 death counts. This suggests that COVID-19 affected some states more heavily than others.



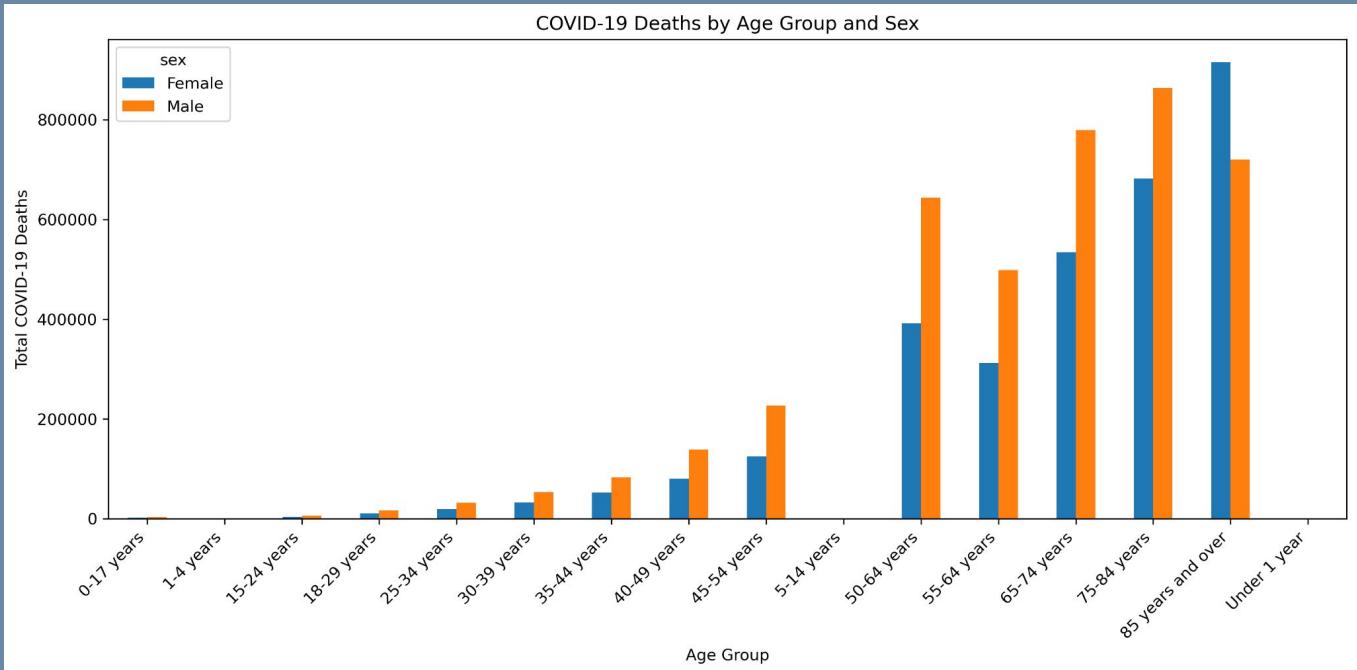
Results

Question 5

Which age and sex groups account for the highest number of COVID-19 deaths?

Analysis:

When age and sex are looked at together, older males had the highest number of COVID-19 deaths. This shows that risk increases when multiple factors are combined.



Future Work

What new questions could be explored?:

- How do COVID-19 death rates compare when adjusted for population size?
- How did vaccination rollout affect death trends over time?

What still needs to be answered?:

- Why were some states impacted more than others?
- How did access to healthcare influence outcomes?

Appendix

Any Questions?



Thank you!