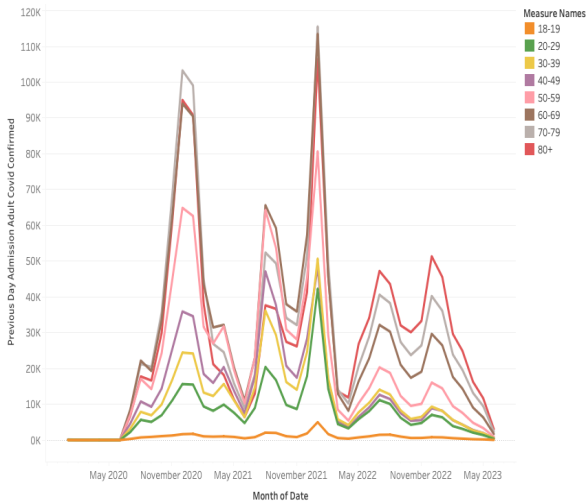


# Executive Summary

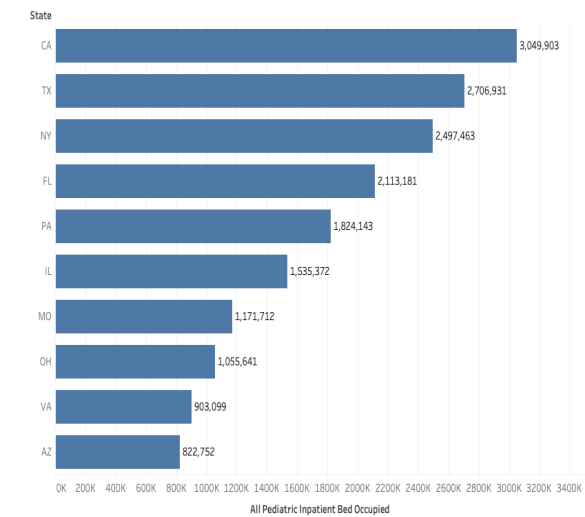
## Current State of the Pandemic and Recommendations

Sheet 1



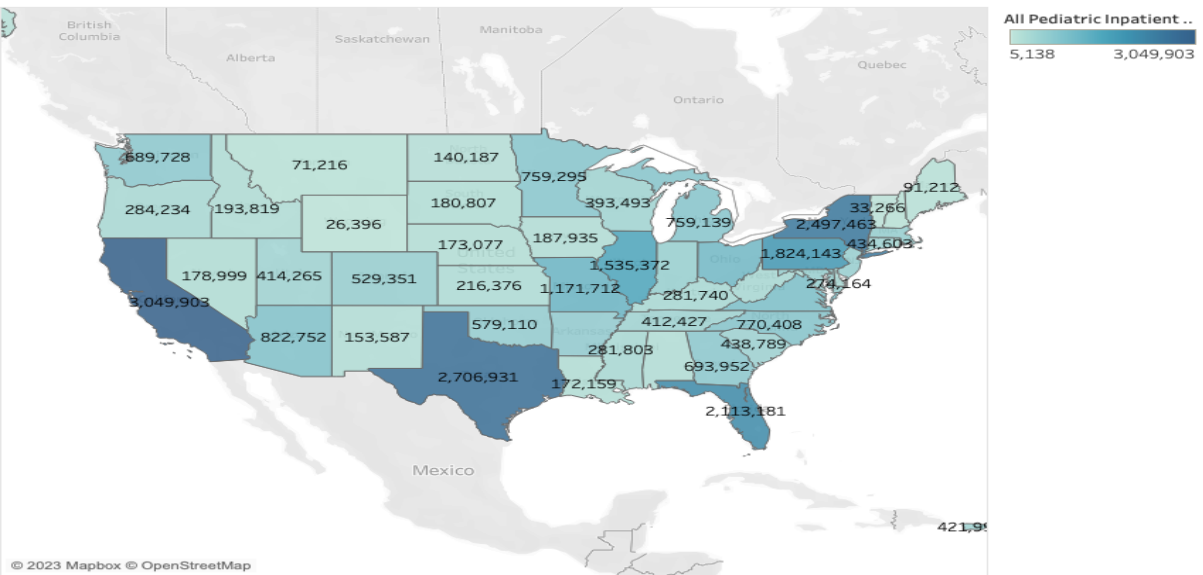
The trends of 18-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79 and 80+ for Date Month. Color shows details about 18-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79 and 80+. The data is filtered on sum of Previous Day Admission Adult Covid Confirmed, which keeps non-Null values only.

Sheet 2



Sum of All Pediatric Inpatient Bed Occupied for each State. The marks are labeled by sum of All Pediatric Inpatient Bed Occupied. The view is filtered on State, which keeps 10 of 54 members.

Sheet 3



Map based on Longitude (generated) and Latitude (generated). Color shows sum of All Pediatric Inpatient Bed Occupied. The marks are labeled by sum of All Pediatric Inpatient Bed Occupied. Details are shown for State.

### Current State of the Pandemic:

The line graph illustrates the daily admissions of adult patients with suspected COVID-19, segmented by different age groups. The data reveals the following key insights:

Based on the line graph, it is evident that there is a pronounced increase in the number of COVID-19 patients during the winter season. The data consistently shows a surge in cases between the months of November and April, indicating a recurring pattern. It can be inferred that the winter months coincide with the flu season, which likely contributes to the higher number of COVID-19 cases observed during this period. This similarity in trends suggests a possible correlation between the prevalence of influenza and COVID-19 infections.

Furthermore, the analysis reveals that elderly individuals aged 70 and above are consistently the most affected demographic group each year. They experience the highest number of COVID-19 cases compared to other age groups. This finding emphasizes the heightened vulnerability of older adults to the virus and highlights the need for targeted protective measures and healthcare resources for this age cohort.

The bar graphs highlight the variation in pediatric healthcare demand across different states. California, Texas, and New York have particularly high pediatric inpatient bed occupancies, indicating a need for adequate resources and healthcare facilities to cater to the pediatric population in these states. Understanding the distribution and demand for pediatric healthcare services can assist policymakers and healthcare authorities in allocating resources and planning for the provision of quality pediatric care.

From the map, we can see that eastern part of the states were the ones most affected and north-west part were least affected. California and Texas were most affected from western and southern region respectively.

### **Recommendations:**

1. **Hospital Capacity Management:** Hospitals should focus on optimizing bed utilization and ensuring sufficient resources for COVID-19 patients. This may involve implementing surge capacity plans, coordinating with neighboring facilities, and leveraging telemedicine technologies to reduce the burden on inpatient beds.
2. **Vaccination Campaign:** While the dataset does not include vaccination data, it is crucial for states to continue their vaccination efforts. Strategies such as expanding eligibility, increasing vaccine supply, and launching targeted outreach campaigns can help accelerate the vaccination rate and achieve herd immunity.
3. **Data Collection and Reporting:** Timely and comprehensive data collection is critical for effective pandemic response. Governments should invest in robust data infrastructure and reporting systems to enable accurate tracking of key indicators, such as hospitalizations, ICU occupancy, and vaccination rates.