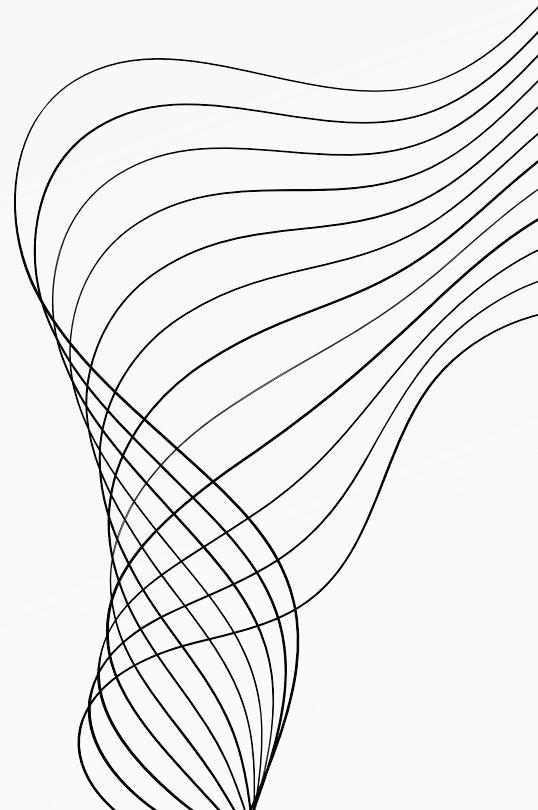




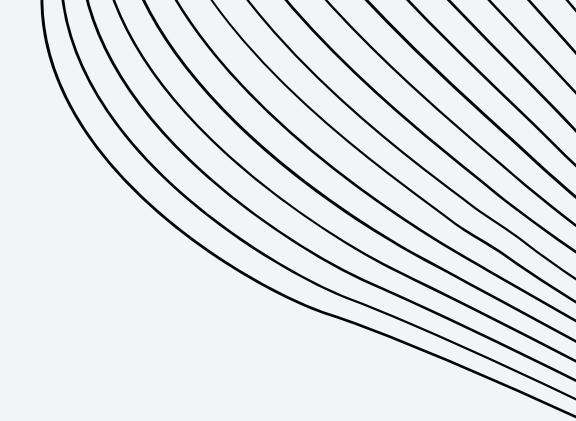
Farhan Alavi March 7th 2024



CAPSTONE PROJECT

Sprint 1

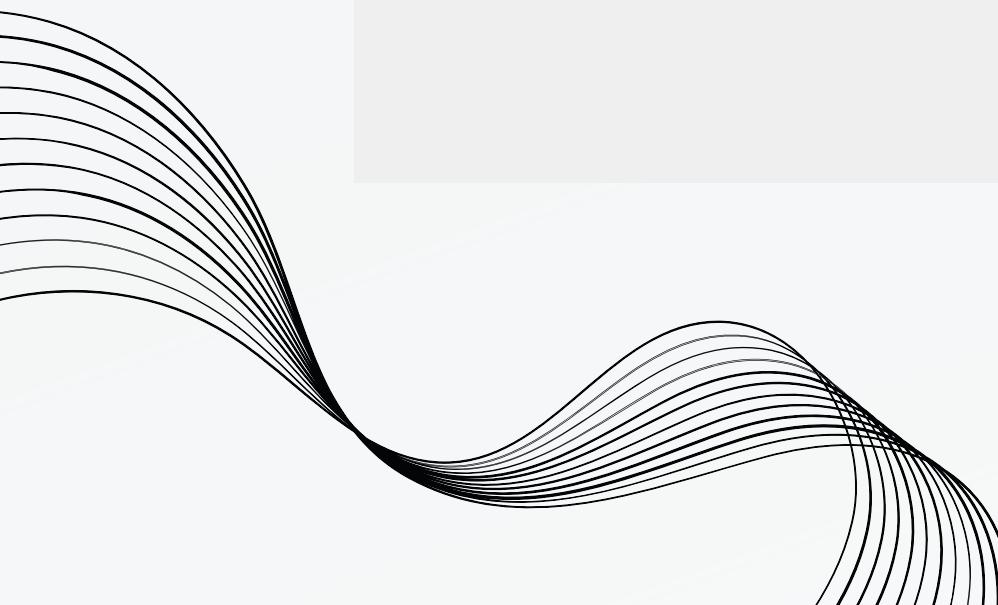
ON THE AGENDA

- 
- 
- 01** INTRODUCTION, BENEFITS, AND FINDINGS
 - 02** TOP 5 DISEASES BY TOTAL CASES
 - 03** TOTAL DISEASE CASES BY YEAR
 - 04** DISEASE CONCENTRATION BY COUNTY
 - 05** VALLEY FEVER CASES BY COUNTY

INTRODUCTION

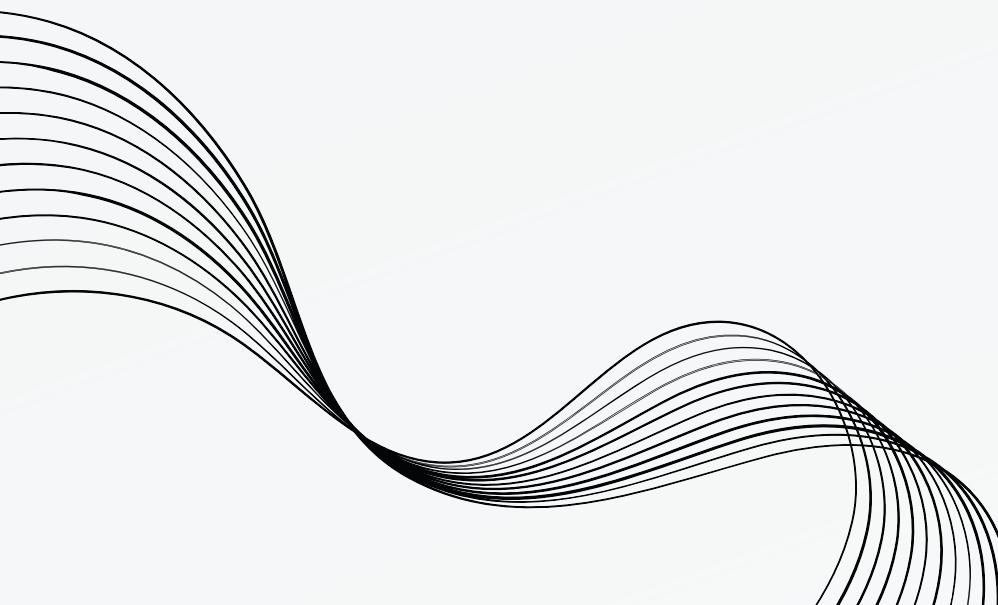
The main objective is to analyze **Infectious Disease Cases by County in California** from 2001 to 2022 and train an MLM to assess the historical trends and try to predict future cases based on County demographics.

Data from <https://data.gov/> and
<https://www.census.gov/>



WHO BENEFITS FROM THIS?

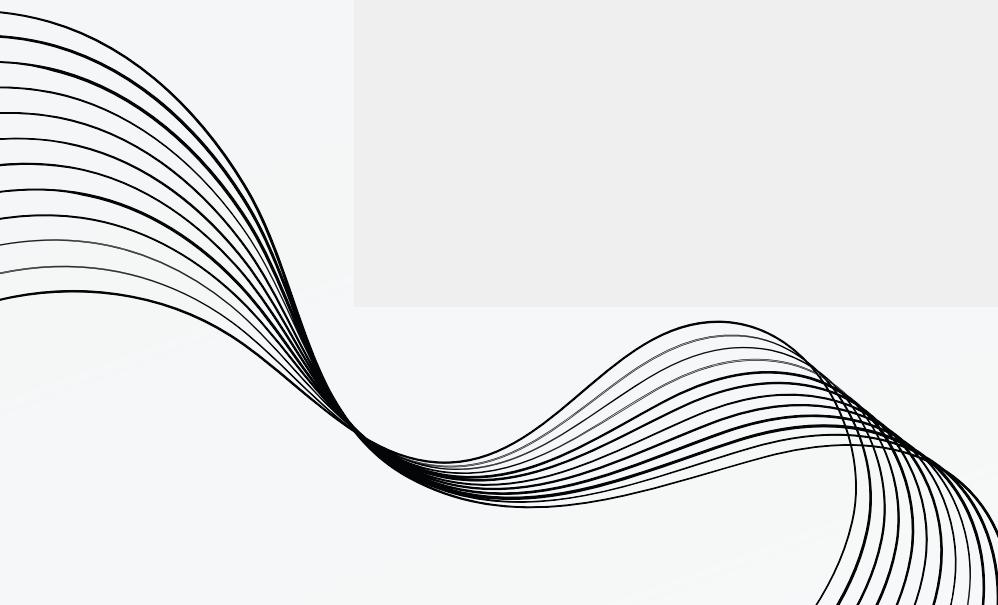
Infectious disease specialists, Doctors, and other medical professionals can utilize a predictive MLM to forecast future cases and use it as a study tool. The visuals can help non-medical professionals to follow along as well.



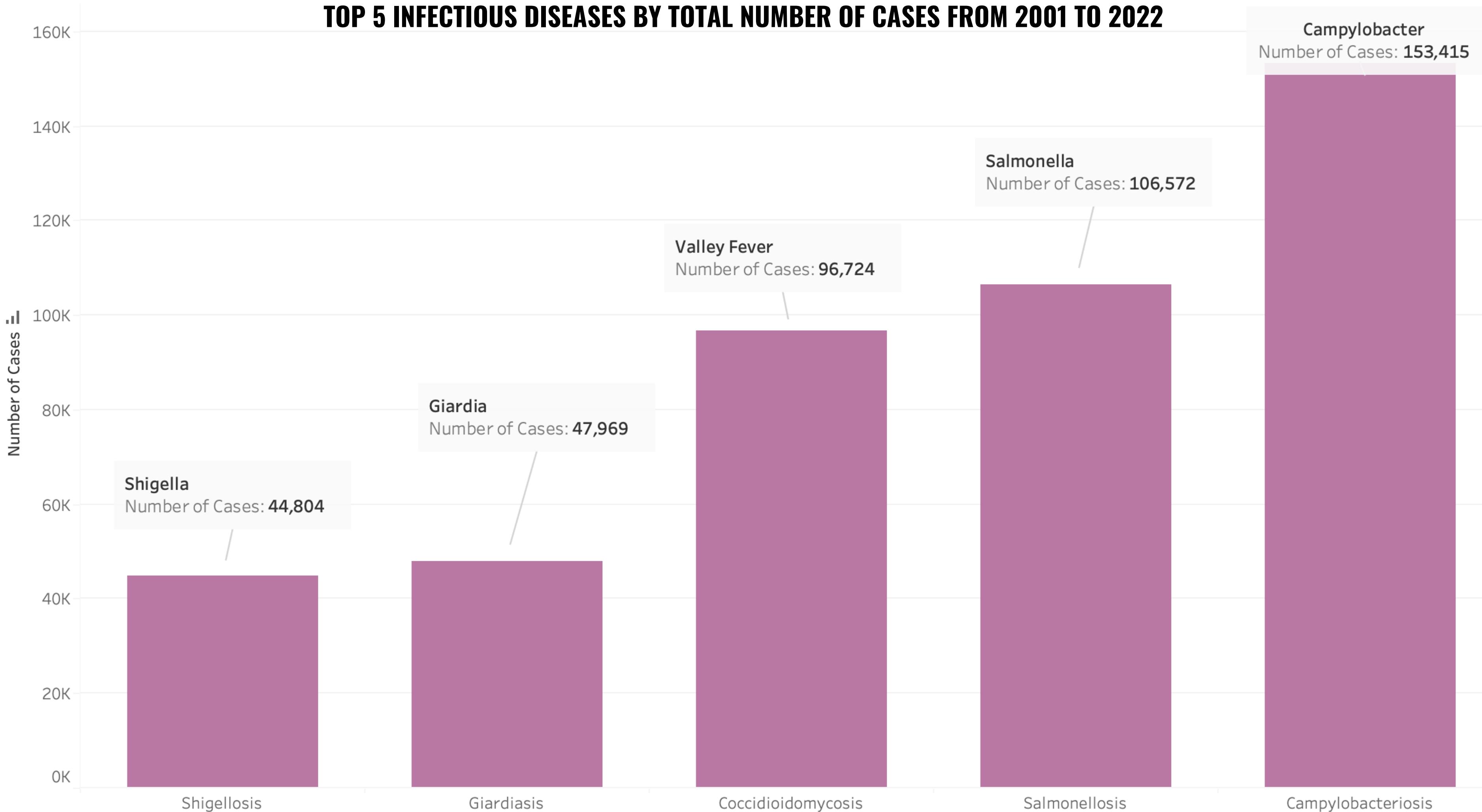
INITIAL DATA FINDINGS

The disease dataset was well over 180,000 rows but after separating columns and merging with the demographic table, the shape is now 62234 rows x 78 columns.

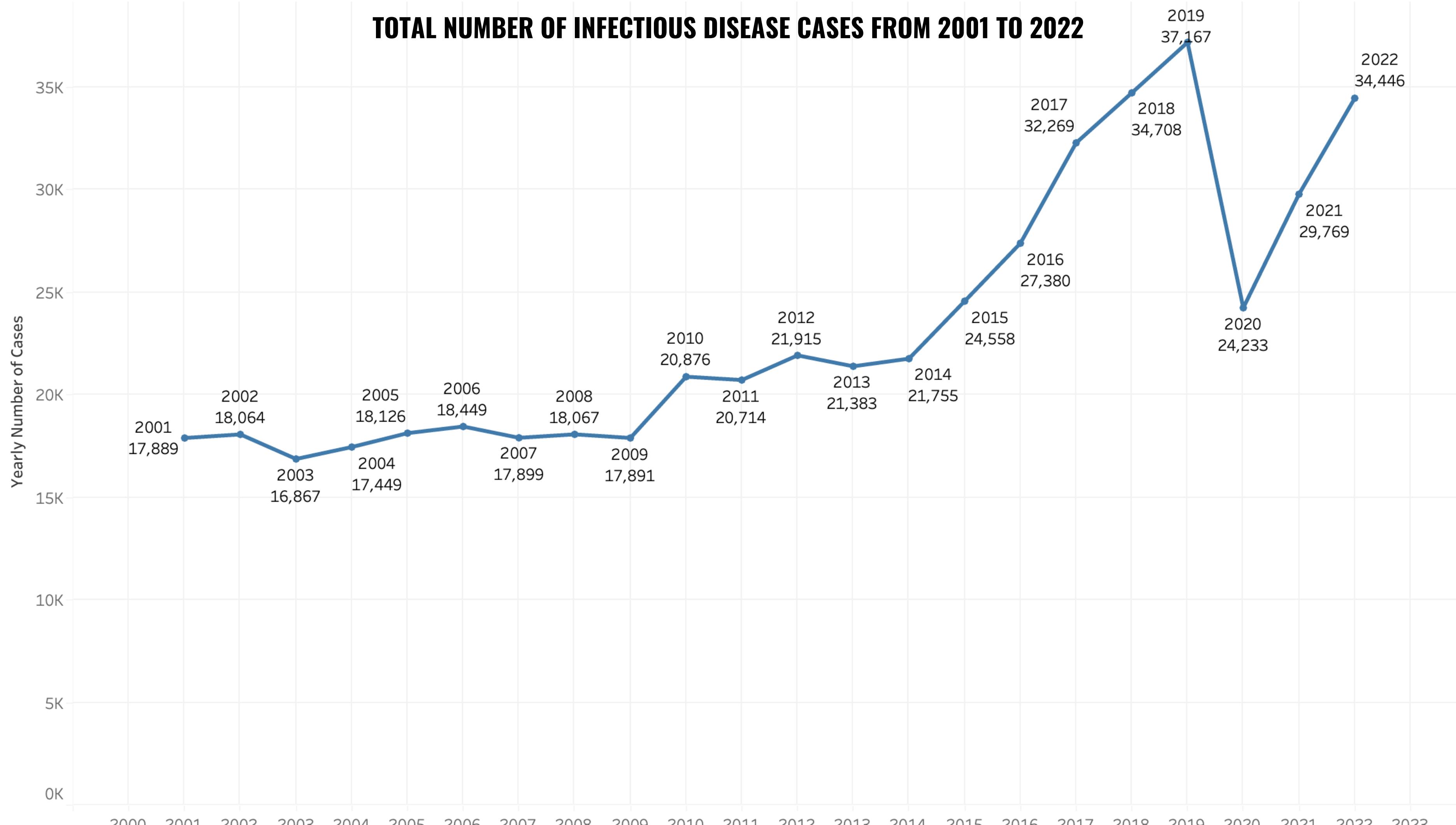
The most challenging part was getting the demographic table to match the size before merging. This was due to the diseases having different testing ranges.



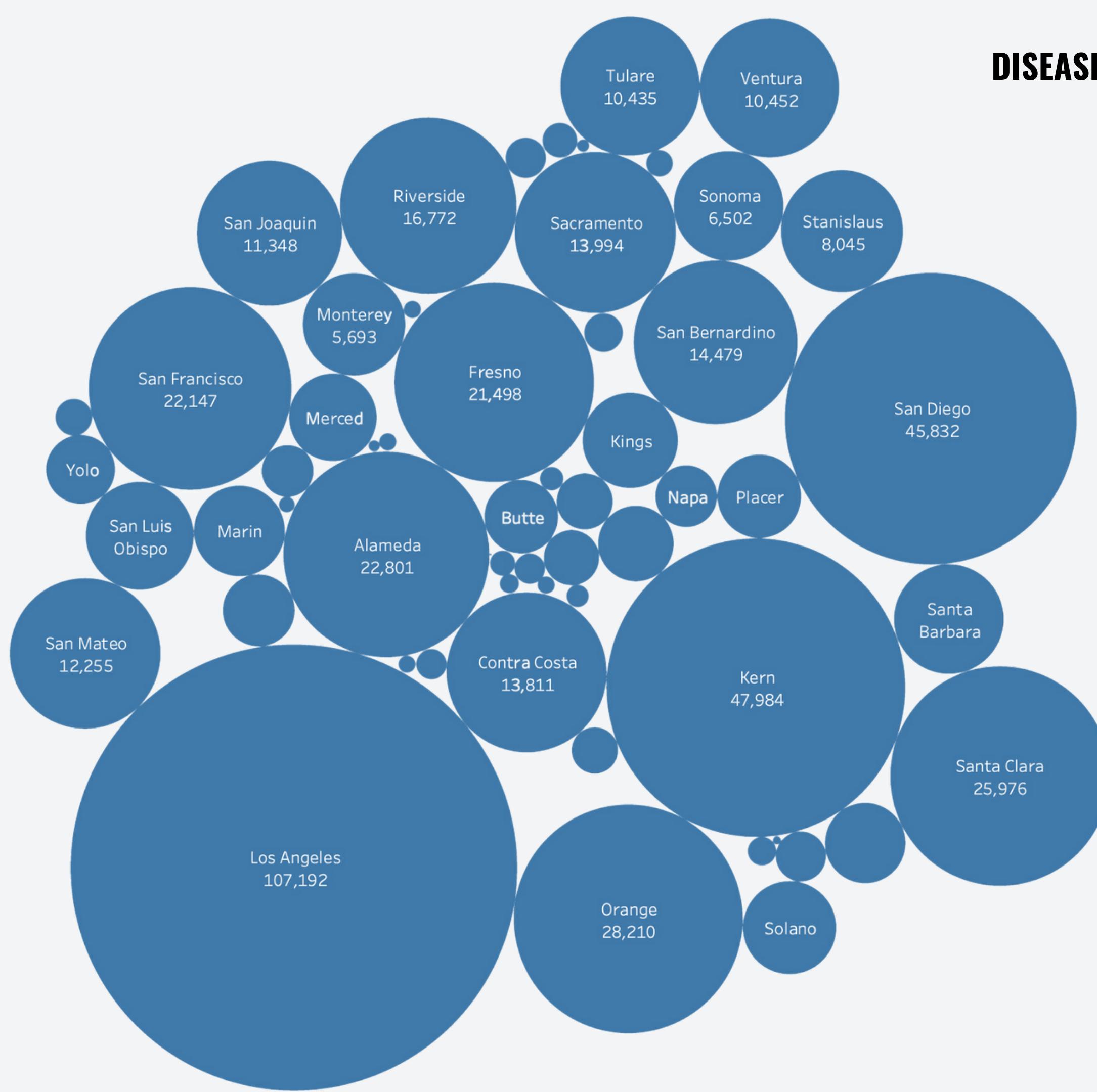
TOP 5 INFECTIOUS DISEASES BY TOTAL NUMBER OF CASES FROM 2001 TO 2022



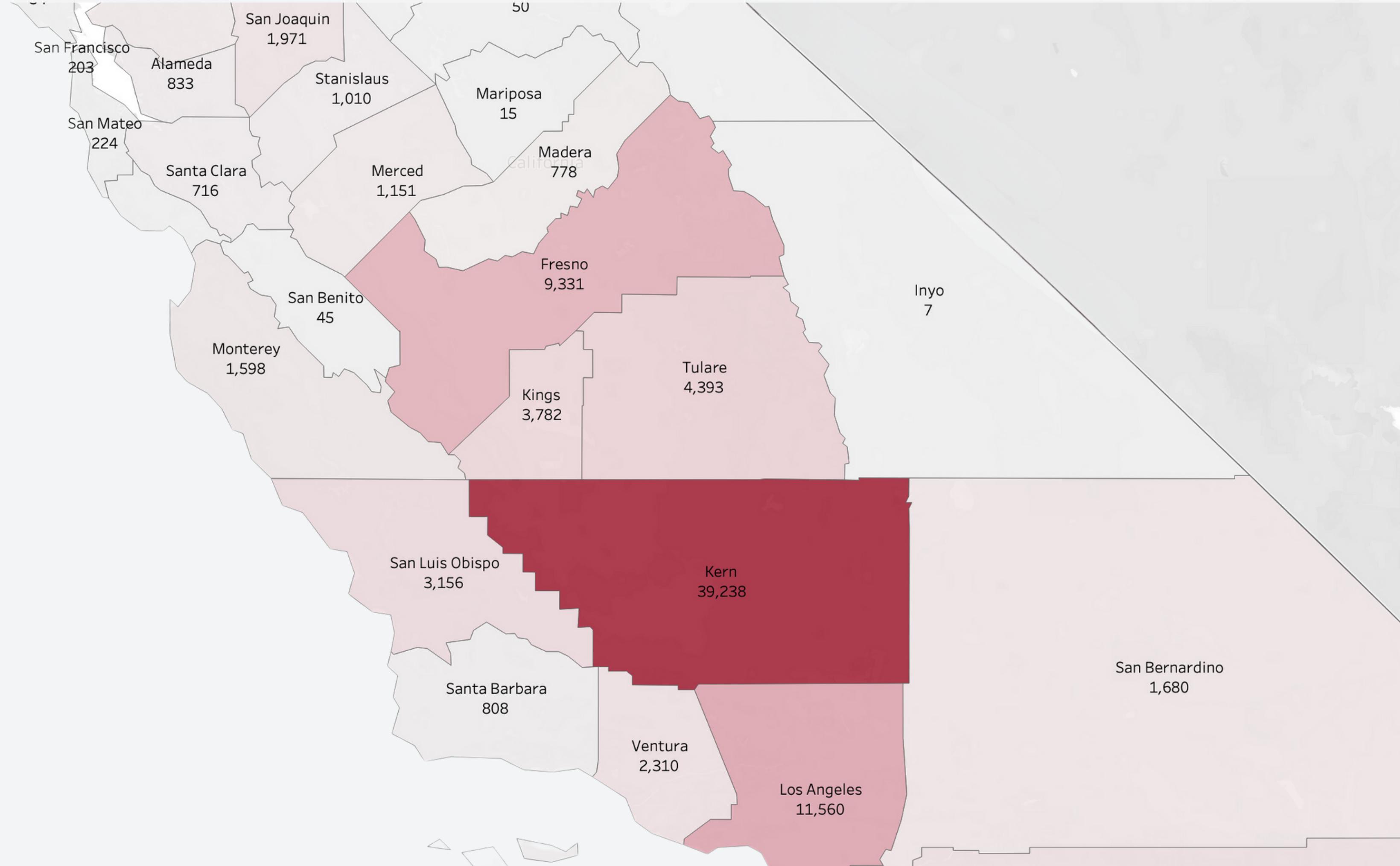
TOTAL NUMBER OF INFECTIOUS DISEASE CASES FROM 2001 TO 2022



DISEASE CONCENTRATION BY COUNTY FROM 2001 TO 2022



VALLEY FEVER CONCENTRATION BY COUNTY FROM 2001 TO 2022



Thanks
for watching!
Questions?

