

Preparing for the Influenza Season



Objectives

- ▶ To help a medical staffing agency that provides temporary workers to clinics and hospitals
- ▶ Determine when to send staff and how many to each state.
- ▶ Analyze and examine the trends in Influenza and plan for upcoming flu season

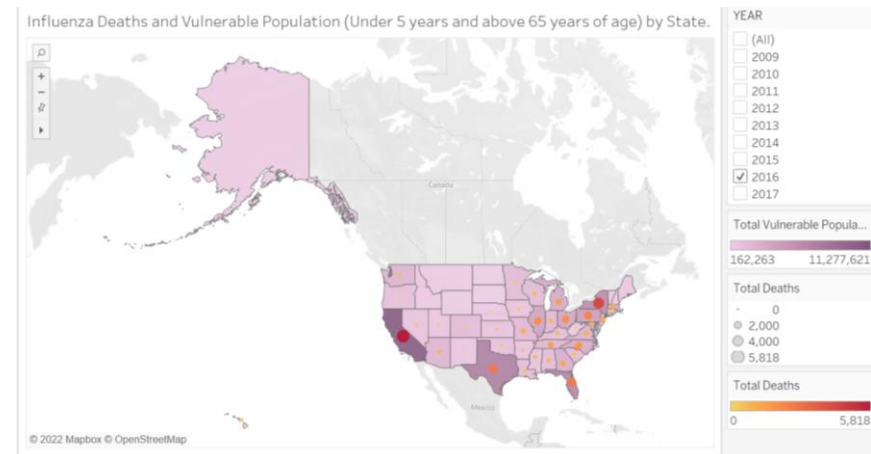
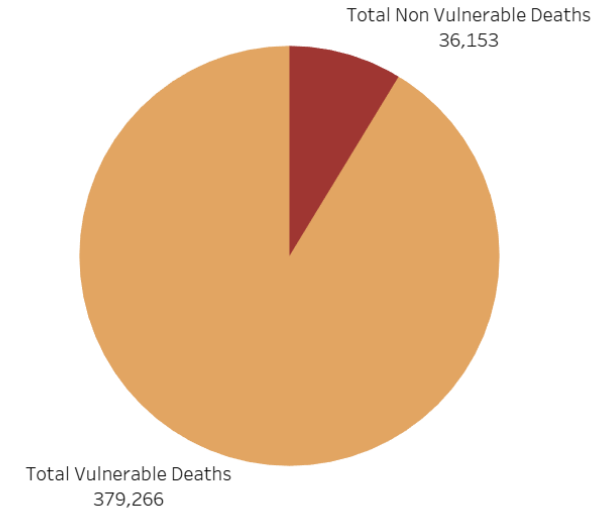


Tools Used:

The **Research Hypothesis** used for this analysis is that, in each state, if the vulnerable populations are increased, then the flu related complications also increase and there by additional staffing will be needed.

Vulnerable population is defined as those who are under 5 years of age and above 65 years of age.

Influenza Death Counts by Population Vulnerability



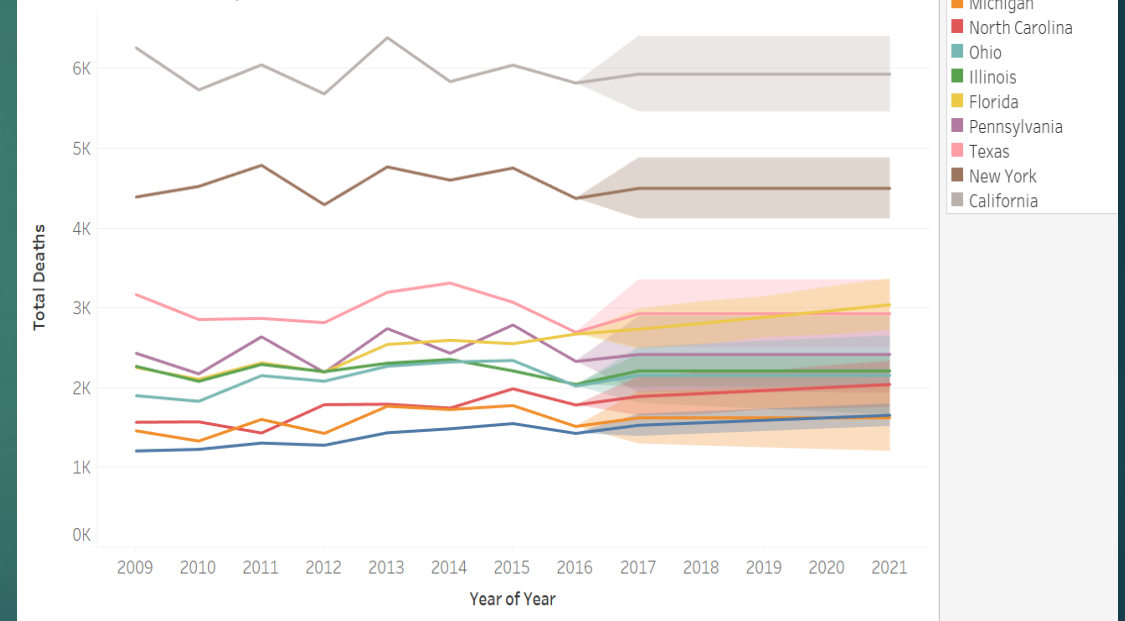
Key Insight

States with high vulnerable population in the year 2017, are identified and a forecast was drawn for the upcoming influenza season.

Top 10 States with highest Vulnerable population

1	California	11,404,870
2	New York	6,233,645
3	Florida	7,123,491
4	Texas	7,578,781
5	Pennsylvania	4,334,651
6	Illinois	3,881,178
7	Ohio	3,717,238
8	North Carolina	3,143,594
9	Michigan	3,172,114
10	Tennessee	2,036,095

Flu deaths Forecast for the period of 2018 to 2021 (using data from 2009 to 2016 to create a forecast through 2021)



Recommendations
for medical staffing:

States with highest vulnerable populations (California, New York, Florida etc) should receive additional staffing for the upcoming Influenza Season.

Vaccinations and preventive measures are to be taken and followed up in the states with higher vulnerable populations.