

Preparing for Influenza Season

Medical Staffing Agency Project

Overview

COMPANY

Medical staffing agency provides temporary staff to 50 United states during influenza season where more people than usual suffer from the flu.

OBJECTIVE

Analyze the data and help medical staffing agency to determine when to send staff and how many to each state

DATASET

CDC data for influenza deaths by geography time, age and gender.

US Census Bureau data for population by geography.

Analysis

Research on Project Data

- Gathering requirements and create list of research questions.
- Creating project plan
- Formulate Hypothesis
- Data sourcing, profiling, check for data quality measures and integration of two data sets.

Statistical Analysis

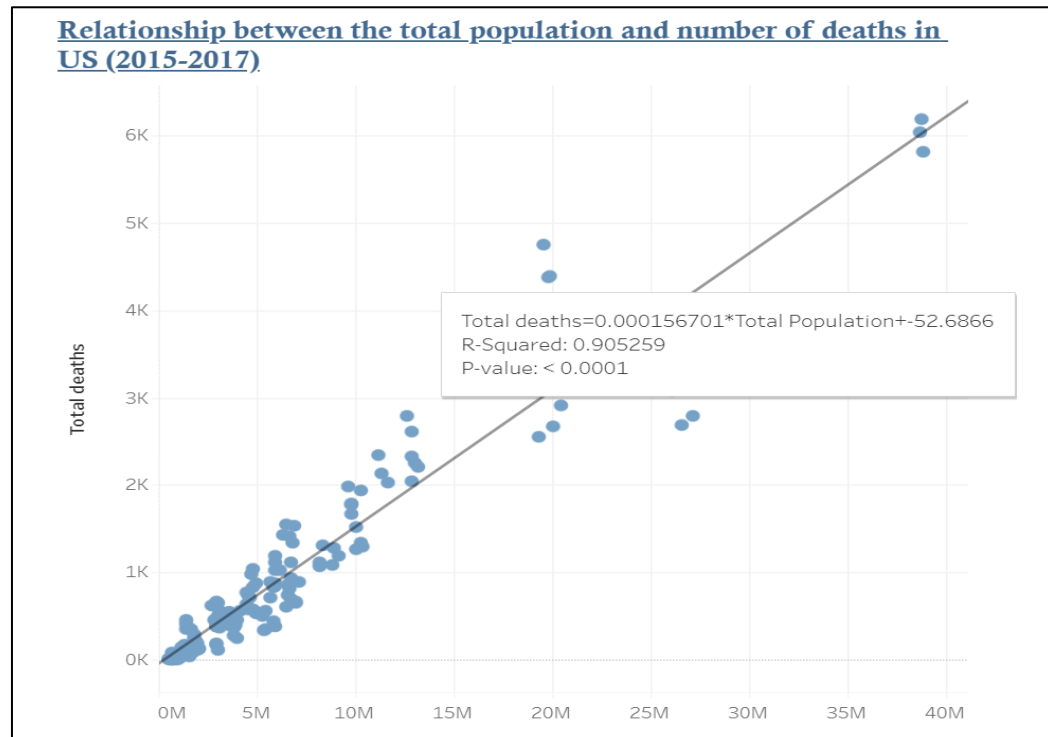
- Performed descriptive statistics to identify variables with strong correlation.
- Formulate and test statistical hypothesis.

Visualizations

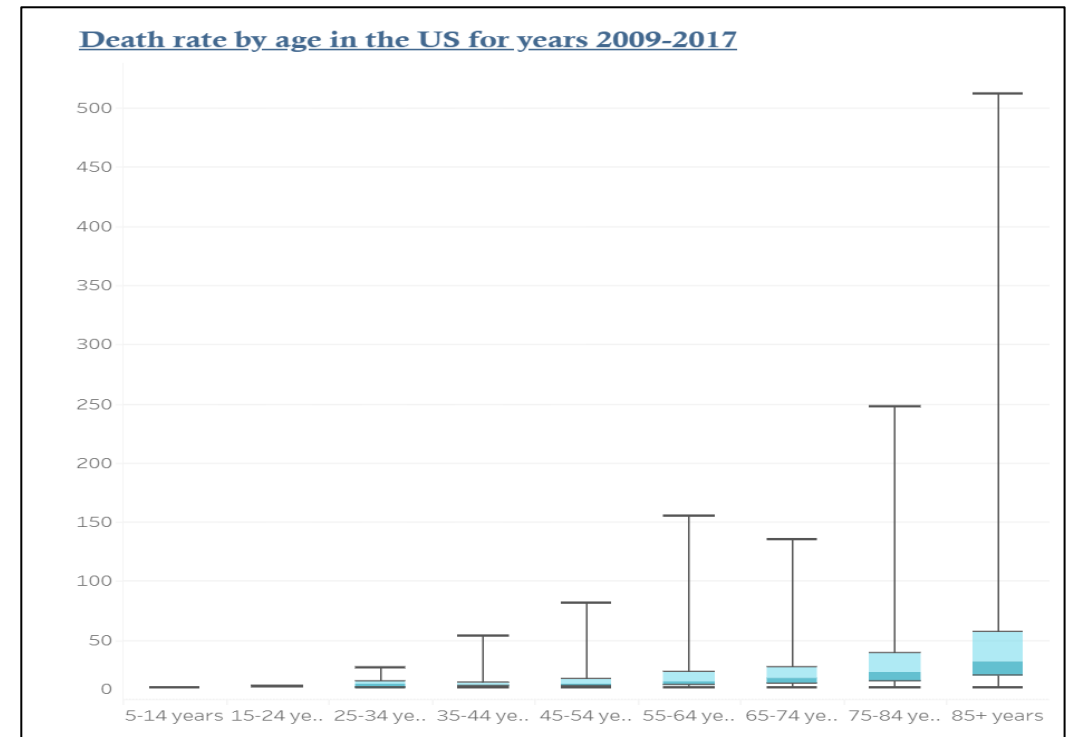
- Below visualizations are created using tableau to communicate trends and insights.
 1. Spatial Analysis
 2. Scatterplot
 3. Boxplot
 4. Treemap
 5. Temporal analysis and forecasting

Findings

Below scatterplot shows that there is a strong correlation between the population and deaths as the number of population increases deaths also increase.



Death rate by age group shows that older age group (55+years) has much higher chance of dying from influenza than younger age group



Findings

- Below visualizations show the US states with total population and deaths for elderly people (55+ years).
- We should focus on these states with largest population and deaths for elderly people who are more vulnerable and plan accordingly while providing medical staff.

[Link to Tableau dashboard](#)

[Link to video](#)

