Public Health

Influenza Season Staffing

Project Overview

Project Title

Influenza Season Staffing Analysis

Objective

Optimise medical staffing allocation by analysing influenza mortality trends and vulnerable populations across U.S. states.

Business Context

📌 Flu season increases hospital demand, requiring strategic staffing.

📌 This project helps predict staffing needs across different states.

Data & Methodology

Data Sources

CDC – Influenza Mortality Data

U.S. Census Bureau – Population Demographics

Key Questions

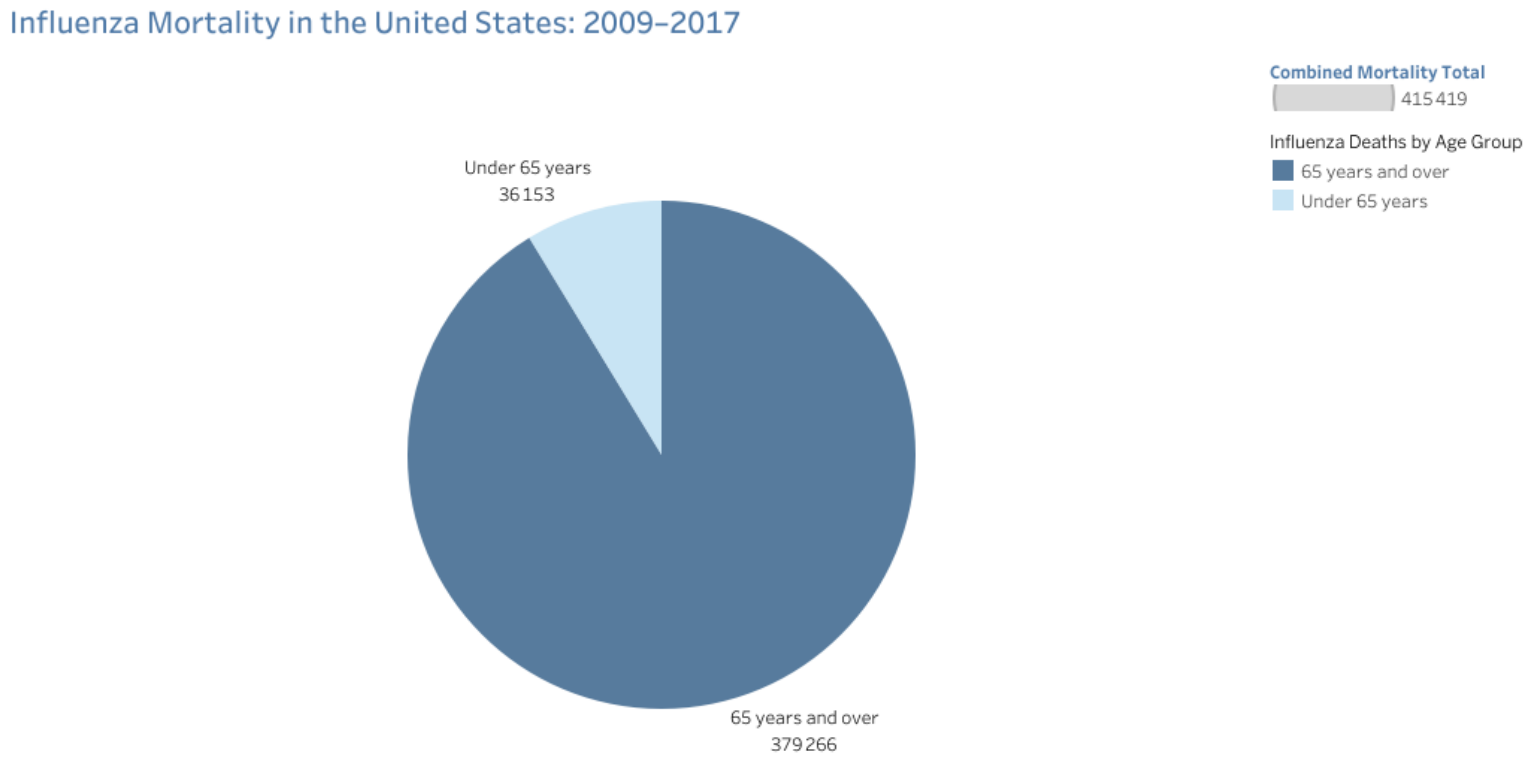
- ✓ Which states have the highest vulnerable populations?
- ✓ Where is additional medical staff most needed?
- ✓ How does the 65+ population correlate with flu-related deaths?

Tools & Techniques

Data Cleaning & Transformation (Excel)

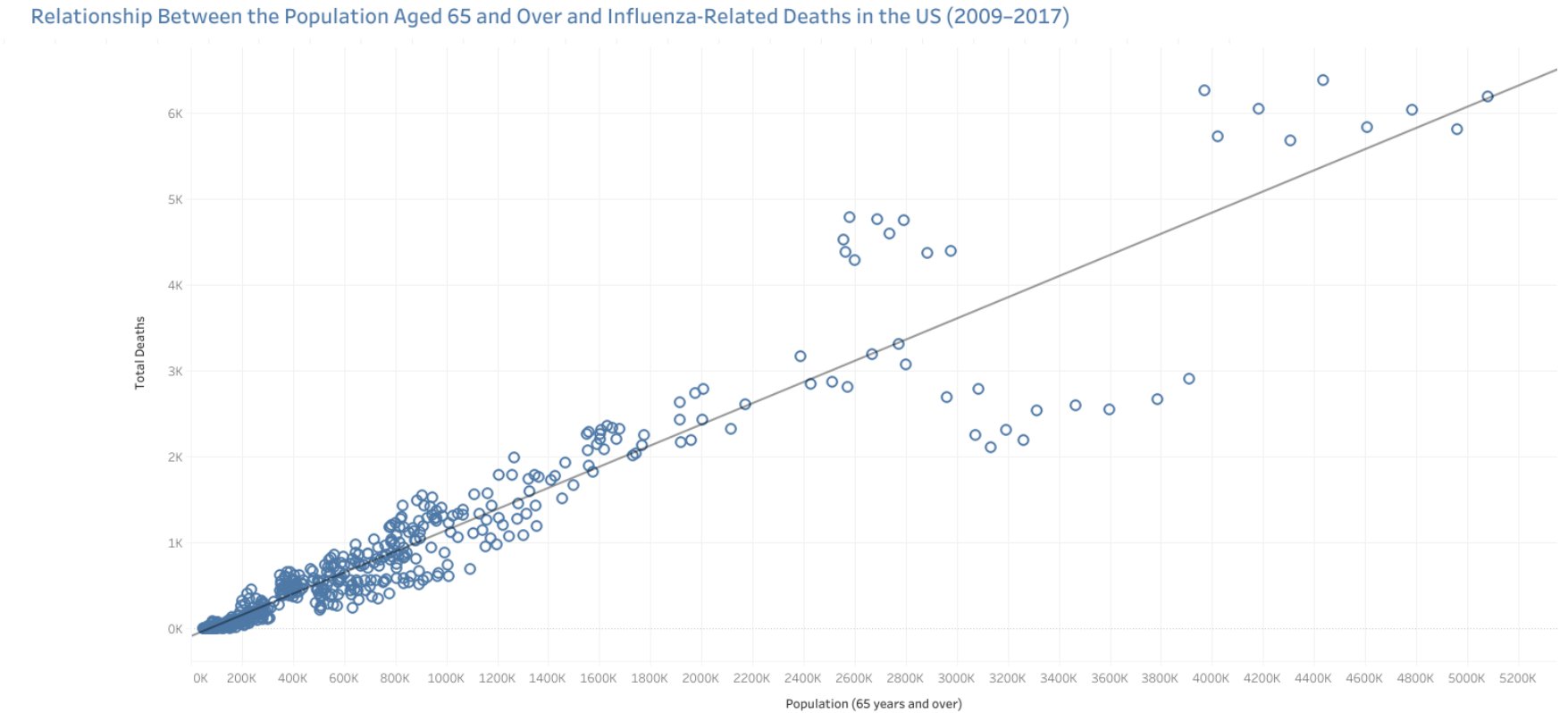
Trend Analysis & Visualisation (Tableau)

Influenza Mortality Breakdown (2009–2017)



➡ **Insight: Shows overall influenza-related mortality distribution across different age groups.**

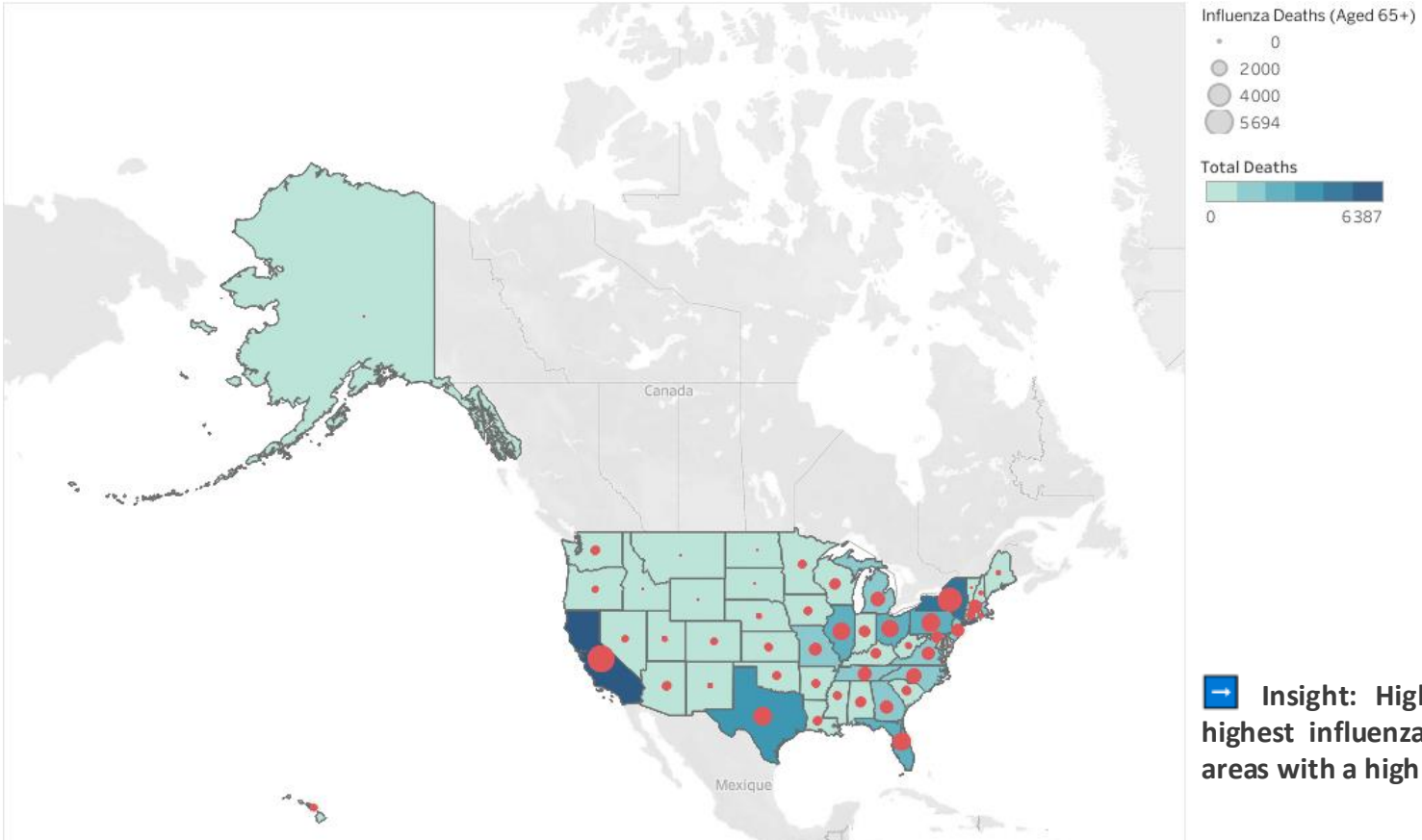
Senior Population vs. Influenza-Related Deaths



➡ **Insight: Examines the correlation between the population aged 65+ and flu-related deaths to determine high-risk areas.**

Where is Additional Medical Staff Needed?

Influenza Mortality Across the U.S. (2009–2017): Focus on Seniors Aged 65+



Insight: Highlights states with the highest influenza mortality, focusing on areas with a high senior population.

Summary of Findings and Actionable Recommendations

Key Findings:

High Mortality in Age 65+
Significant increase in influenza-related deaths among older adults.

High Mortality in Specific States
New York and similar states have the highest rates.

Annual Trends
Peak periods highlight need for focused resource allocation.

Recommendations :

Prioritize Staffing in High-Risk States
Focus additional staffing during peak flu periods.

Increase Vaccination Drives
Target vulnerable populations in high-risk states.

Update Staffing Plans Regularly
Use real-time flu data for better preparedness.