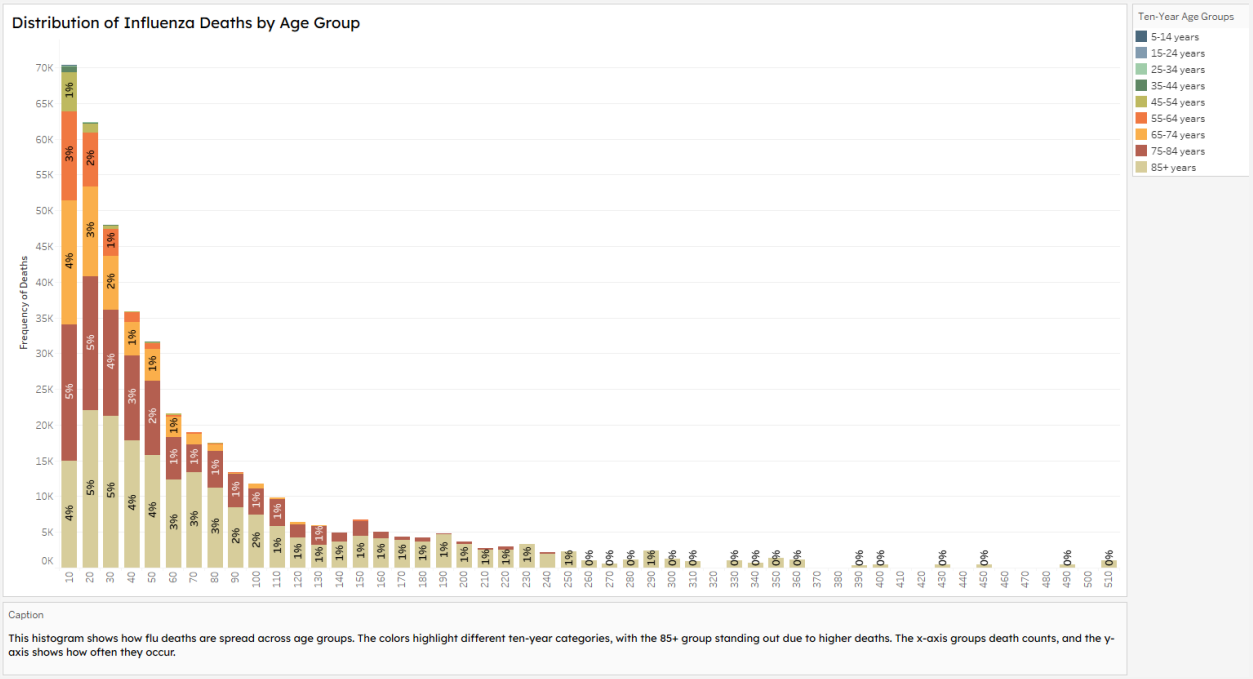
Answer 2.5
By Yarisel Velacanto
Date: 11/26/2024
[Influenza Deaths Analysis]

This task explores the distribution of influenza deaths by age group using statistical visualizations, specifically histograms and box plots. The aim is to analyze patterns and gain insights into age-related vulnerabilities.

Distribution of Influenza Deaths by Age Group

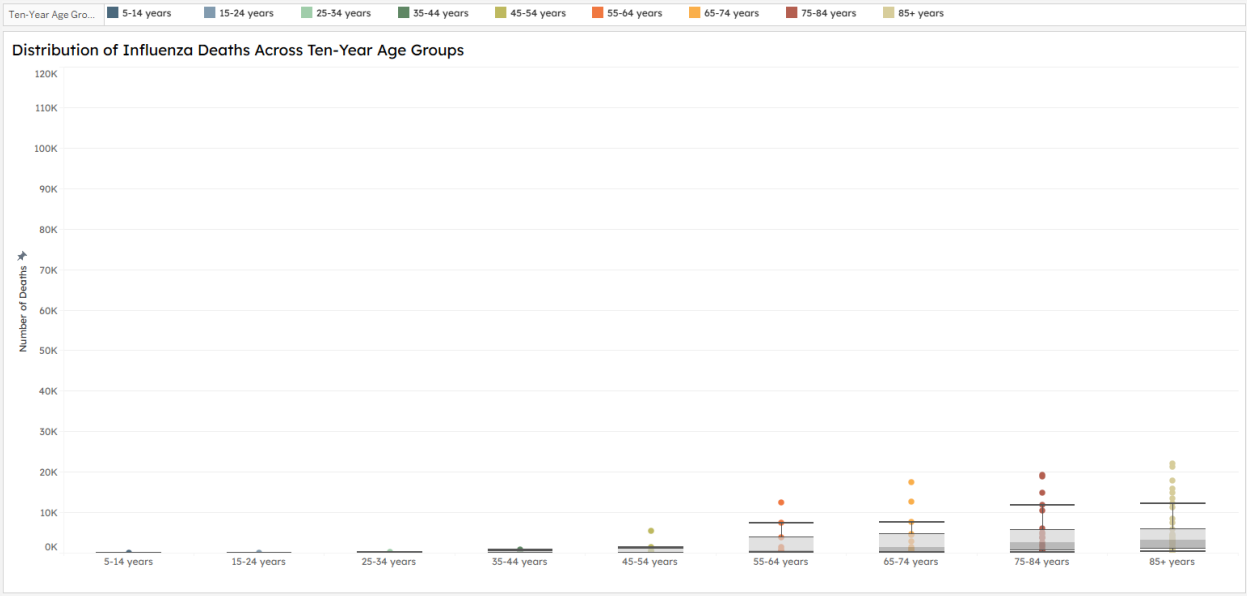


This histogram shows how influenza deaths are distributed across age groups and different death ranges. Here's what stands out:

1. **Concentration of Deaths:**
    - Most deaths are grouped in the first few bins (10–50 deaths), meaning that smaller clusters of deaths are far more common. Larger clusters (over 100 deaths) occur much less frequently.
2. **Older Age Groups at Higher Risk:**
    - Older populations, especially those in the 65–74, 75–84, and 85+ age groups, appear to be much more vulnerable to influenza. These age groups show higher frequencies of deaths across multiple bins.
    - Younger age groups, like 5–14 years and 15–24 years, have much lower frequencies, suggesting they are less affected.
3. **Near-Zero Representation:**
    - In the higher death bins (100+), younger age groups have little to no representation, as shown by the absence of their colors in these bars. This suggests that influenza deaths are rare for these groups, especially in larger clusters.
4. **Important Considerations:**

- Even though these patterns are clear, it's worth noting that some data in the "Deaths" column is missing from the raw dataset since it was suppressed. This means that the histogram might underrepresent some age groups or trends, making it important to interpret the results cautiously.

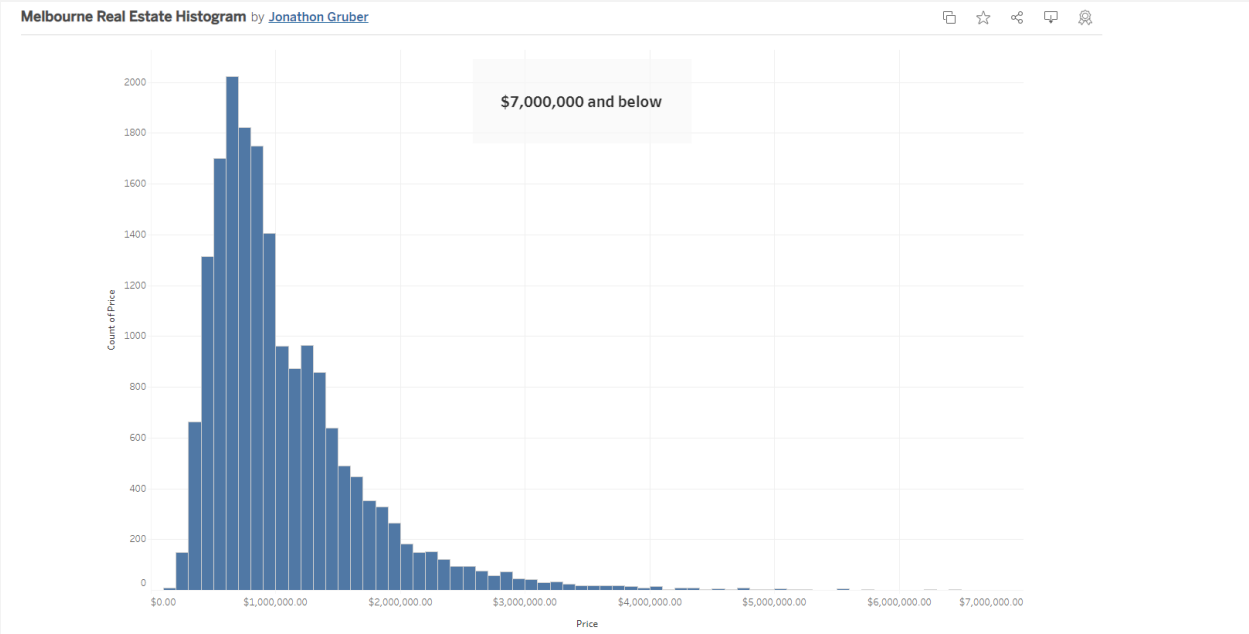
What the Box Plot Tells Us



The box plot gives us a better look at how flu deaths are spread out within each age group, compared to the histogram that shows the overall frequency of deaths. With the box plot, we can focus on key stats like the median, quartiles, and outliers, which helps us see how much the deaths can vary within each group.

For example, the 85+ age group has a bigger interquartile range, showing that deaths in this group are more spread out compared to other groups. The box plot also points out outliers in the 75-84 and 85+ age groups, which weren't that clear in the histogram. This level of detail helps us better understand the differences between age groups, such as age-related vulnerabilities or having different access to healthcare.

Melbourne Real Estate Histogram" by Jonathon Gruber



I reviewed the histogram on Tableau Public titled "Melbourne Real Estate Histogram" by Jonathon Gruber. Here's what I think:

What Works Well:

- **Clarity:** The histogram does a good job showing how real estate prices in Melbourne are spread out. You can easily see how many properties fall into different price ranges.
- **Color Use:** The gradient colors are simple and make it easy to follow without being too much.
- **Axis Labels:** The x-axis (price ranges) and y-axis (number of properties) are labeled clearly, so it's easy to understand what the chart is showing.

What Doesn't Work Well:

- **Title:** The title, "Melbourne Real Estate Histogram," doesn't tell me enough. Adding details like the time period or what kind of properties these are would help.
- **Purpose of the Chart:** It's not clear what the chart is trying to tell me. Are these property prices for individual houses, or do they represent groups of properties? What does the count of prices mean—are they total sales, listings, or something else? The chart doesn't explain this.
- **Bin Sizes:** The chart doesn't explain how the price ranges (bins) are divided. Knowing this would make the chart easier to follow.
- **Data Source:** There's no info about where the data comes from, which makes it hard to know how reliable it is.

Suggestions:

- **Add More to the Title:** Something like "Real Estate Prices in Melbourne (2020-2021)" would give a lot more context.

- **Explain the Purpose:** Add a note or subtitle that explains what the chart is showing. For example, “This chart shows the number of properties sold in different price ranges in Melbourne during 2020-2021.”
- **Explain the Bins:** Showing the bin sizes or adding that info in the tooltip would make it clearer how the data is grouped.
- **Include the Data Source:** Adding a note about where the data came from would make it easier to trust the chart.

This histogram is good at showing price ranges, but it leaves me with a lot of questions about what the data actually means. Explaining the purpose, bins, and data source would make it much more useful.