Task 2.5 Histogram & Box Plot

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Histogram of Influenza Deaths by Age [Task 2.5 Influenza Deaths Histogram | Tableau Public](https://public.tableau.com/app/profile/alex.kaplan3758/viz/Task2_5InfluenzaDeathsHistogram_16849762304550/USInfluenzaDeathsHistogram?publish=yes)

A screen shot of a graph

Description automatically generated with medium confidence

1b. **Are young and old populations more vulnerable (because they have more deaths)?** The population of people 65 and older are more vulnerable to influenza related deaths from what this visualization shows. This group also has the most values of each bin in the visualization. I will note that people aged 55–65-year-old are also vulnerable to influenza related deaths but not as much as people aged 65 and older.

1c. **Are there any age groups that have no deaths?** Based on this raw data, there are no groups with 0 deaths. However, since many of the values are suppressed, we do not have a complete picture.

Box and Whisker Plot of Influenza Deaths by Age [Task 2.5 Influenza Deaths Box Plot | Tableau Public](https://public.tableau.com/app/profile/alex.kaplan3758/viz/Task2_5InfluenzaDeathsBoxPlot/USInfluenzaDeathsBoxPlot?publish=yes)

A screenshot of a computer

Description automatically generated with medium confidence

3. **Text**

* **Are the title and text descriptive enough? (i.e., do you understand what the visualization is trying to convey just by looking at the title and text?) ✓**
* **Are there text labels?**  ✓
* **Does the text portray any redundant information that could be gotten rid of?** Not that I have noticed.
* **Do colors, shapes, and size scales come with legends?** Yes
* **What does the color scheme signify?** Ten Year Age Groups
* **Are there more than five colors?** Yes, more than five colors were used to represent each age group in the visualization.
* **Does the color scheme make sense? Are colors analogous, complementary, monochromatic, or intuitive?** I used analogous colors for this visualization.
* **If color is used to draw attention to important information, is the darkest color representing the most important information?** I used distinctive colors for the age groups 65 and older to emphasize that they had the more deaths than those under the age of 65.

**Other**

* **Are different sizes used? If so, is there meaning behind the sizes?** Different sizes were used to show the frequency in the histogram and the distribution for the box plot with regards to influenza-related deaths.
* **Are there groupings in the data that can be portrayed through color, size, or position?**  Yes
* **Is there (enough) whitespace?**  Yes
* **Is the visualization accessible?** Yes
* **Does the visualization teach you something?** Yes, it shows the age groups and the influenza deaths for each of them. It also shows that people 65 and older have more influenza related deaths than people under 65 year of age.

4. **Explain what the box plot tells you that the histogram can’t.** A box plot gives more of a statistical measurement than a histogram. The box plot displays descriptive statistics such as the minimum, maximum, average, median, and quartiles of each age group in the data. Unlike other data visualizations, the box plot displays all these measures in one chart. This makes the data of each age group much easier to compare with one another, which is harder to do with a histogram.