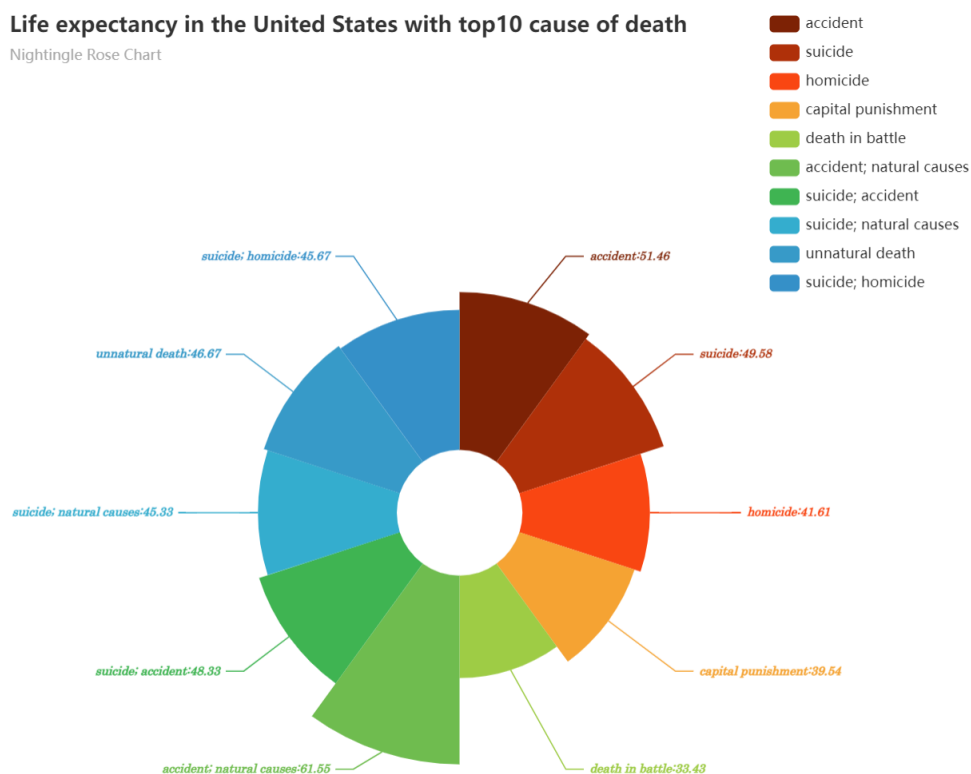


# Life expectancy and occupation composition of American celebrities based on the top 10 causes of death

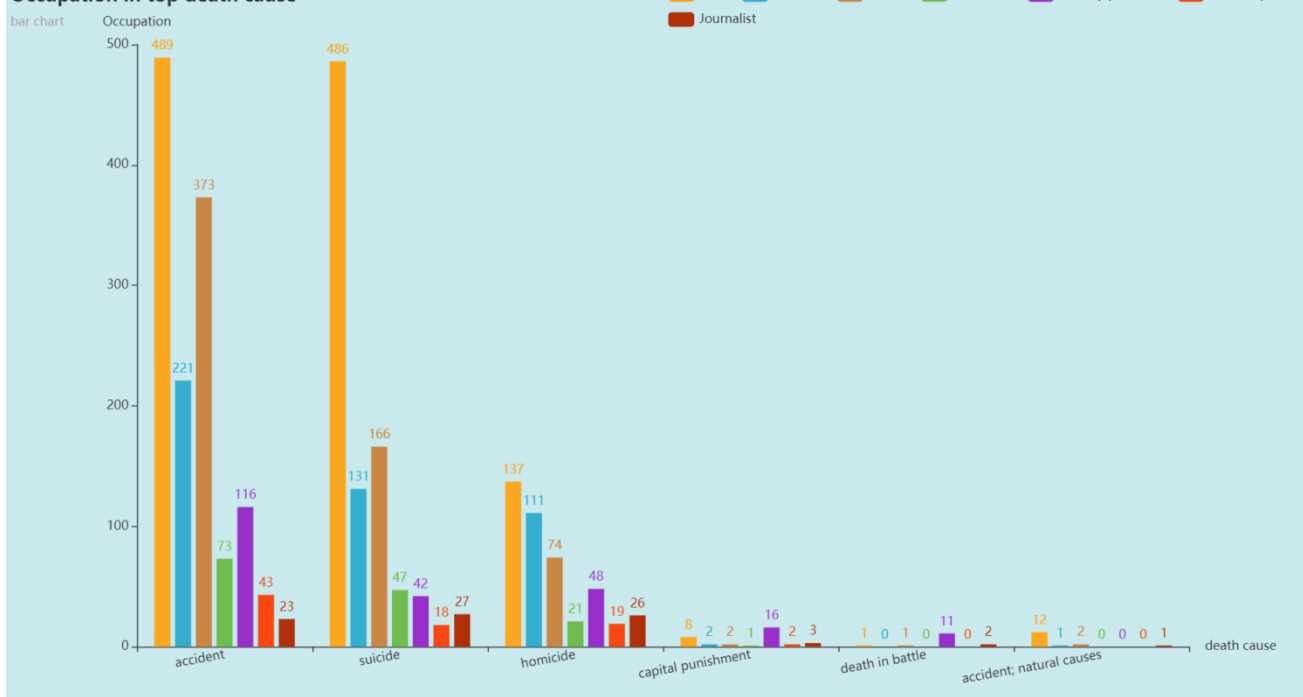
Life expectancy in the United States with top10 cause of death

Nightingale Rose Chart



In this nightingale rose chart, each bar represents average life expectancy of notable with different death causes in America. The legend is on the top corner of the graph and each color represent a kind of death cause respectively. And the length of the bar represents the size of the number. The larger number is, the longer the bar is. Due to the kind of the rose chart, there are no x axis and y axis in this graph.

Occupation in top death cause



In this bar plot, the figure has depicted occupational composition of specific causes of death. What's

more, the length of the bar describe the number of dead. The legend is on the upper right corner, each color represents for an occupation. The x axis is top6 dead cause in descend order and the y axis is the number of occupation.

The original data set is the largest on notable deceased people and includes individuals from a variety of social groups. After data cleaning, the columns which includes null values have been dropped and only American celebrity have been extracted and counted for visualization. Then the extracted data has been ordered by number of death and top10 ranked death cause has been split out except nature cause and corresponding life expectancy have been calculated. The occupation of top ranked cause will be extracted at the same time using Panda package in python. The final results have been visualized by pyecharts package.

#### Findings:

1. According to the figure. We could find that the largest member group died by accident does not have the lowest life expectancy. The relationship between life expectancy and death amount is not obvious.
2. The 6<sup>th</sup> large one died by natural accidents has the highest life expectancy while died by war has the lowest life expectancy, which may match the common sense.
3. The bar chart shows that accident and suicide could be the mainly death cause towards notable people except nature cause. And occupations with the highest number of causes of death are artist, athlete and politician.

#### Importance:

1. This figure firstly give a clear description on the main death cause of American celebrity.
2. The product provides new insights into the demographics of mortality in relation to cause, profession and death number in American history.
3. The product provides more detailed information around dead cause about American celebrity like profession composition of each cause and relative life expectancy.

Data source: <https://www.kaggle.com/datasets/imoore/age-dataset>

Github: <https://github.com/sixuan-Zhao/InformationVisualizationFinal.git>