

Mortality Demographics Presentation

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Mortality Demographics

This slide set accompanies the associated Shiny web application. - The dataset is available from the CDC here: <https://data.cdc.gov/api/views/w9j2-ggv5/rows.csv?accessType=DOWNLOAD> - Understanding trends and demographic differences in populations helps provide a better understanding of groups that may be under-served by current health care education and availability - The dataset provides information from 1900 to 2015 on longevity broken down by race and gender - The program takes a slider as input to control the year range displayed as well as drop down menus for race and sex - All R expressions are displayed in the presentation per the Review Criteria

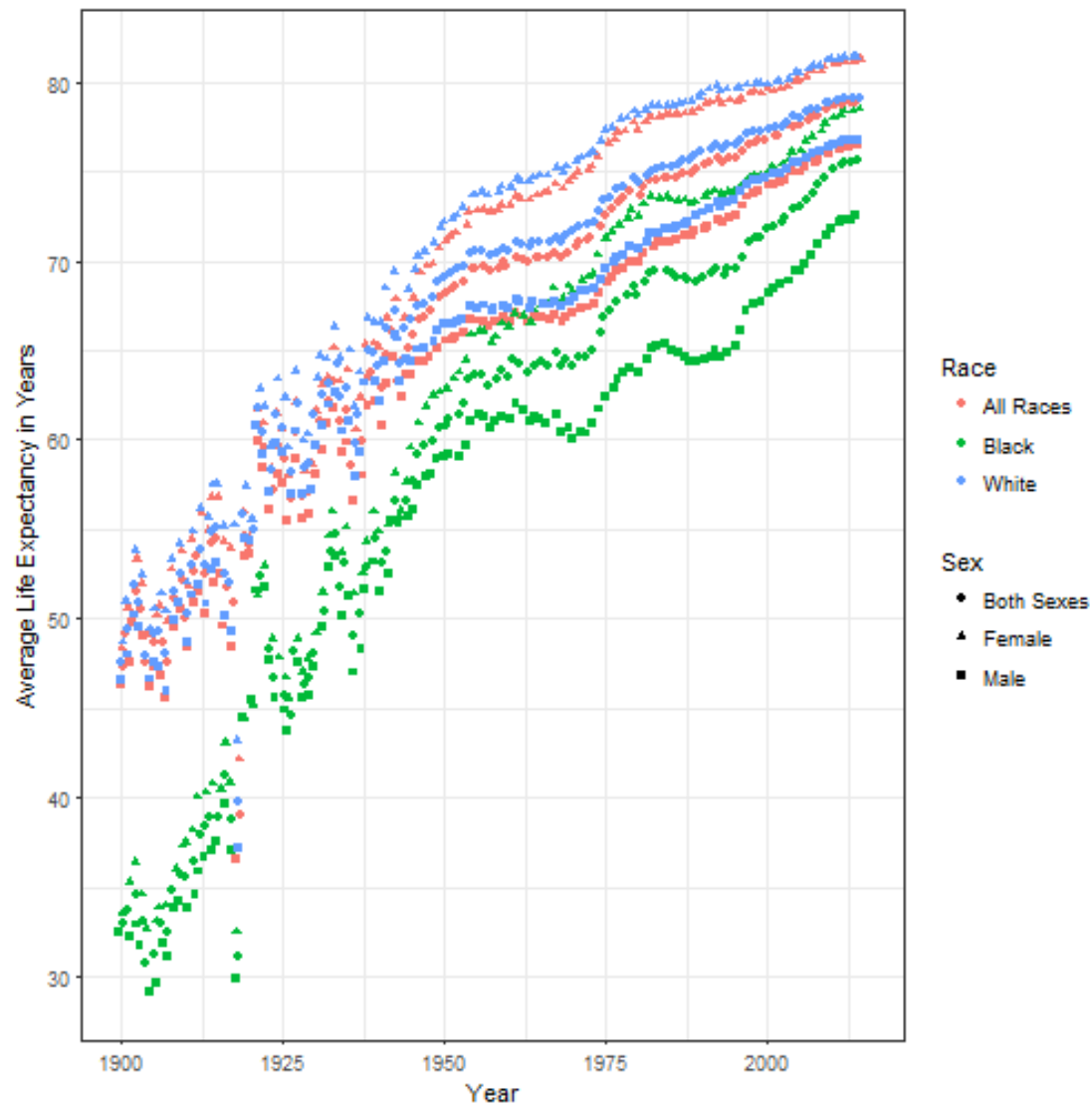
Life Expectancy Demographics by Birth Year

Below is an R expression to evaluate a graph. The actual plot is displayed on the next slide.

```
mortalityDF<-read.csv("https://data.cdc.gov/api/views/w9j2-ggv5/rows.csv?accessType=DOWNLOAD")
mortalityDFYear<-mortalityDF
library(UsingR)
library(ggplot2)
p<-ggplot(mortalityDFYear,aes(x=Year,
y=Average.Life.Expectancy..Years., color=Race, shape=Sex))+
  geom_jitter()+
  ylab("Average Life Expectancy in Years")+
  theme_bw()
```

Data Summary

```
print(p)
```



plot of chunk unnamed-chunk-2

Conclusions

The Shiny Web Application presents a simple way to allow end users to explore the CDC's mortality demographic dataset - The application allows the user to input race, sex, and a time range to limit or expand the data - The dataset shows increasing average life expectancy for all demographics - The dataset is very limited and does not provide granularity to account for other racial groups, causes of death, socioeconomic background necessary to gain a full understanding of mortality rates providing an interesting area for further exploratory data analysis