



Analysis of Burial Records from Forest Hill Cemetery, Utica NY

Samantha M. Henry and Adam T. McLain

Department of Biology and Chemistry, State University of New York Polytechnic Institute, Utica NY 13502

Abstract

Through the organization of data obtained from Forest Hill Cemetery in Utica, NY observations on the causes of death in this region could be made. Here the primary focus is on leading causes of death. A comparison is made between the leading causes of death in 2014 and the same causes of death from the mid-19th to mid-20th century. A particular focus of this examination was Tuberculosis, Influenza and Pneumonia, and Heart Disease death rates in the region throughout the years 1850-1959, as CDC records indicated that these conditions were the leading causes of death in the United States within this time period. Observing this data advances in medicine and changing lifestyles have impacted causes of mortality in the local population.

Introduction

Forest Hill Cemetery is located east on Oneida Street within the city of Utica, NY. It began to be developed in 1849 and officially opened in June 1850. In its entirety Forest Hill Cemetery is 185 acres with 48,246 marked graves, and has seen over 60,000 burials.

Data was gathered from here since it was deduced that this would be a good sample population to work with. There is a large amount of data, 48,235 recorded deaths that predominantly span through 1849-1967, and because Forest Hill Cemetery is an inclusive cemetery.

The first item of comparison was of the data gathered to leading causes of death of 2014, which in order are: Heart Disease, Cancer, Chronic Lower Respiratory Disease, Accidents, Stroke (CVA), Alzheimer, Diabetes, Influenza and Pneumonia, Nephritis, Nephrotic Syndrome, and Nephrosis and Suicide.

Second item of comparison of the data was between Heart Disease, which is today's number one killer, to Tuberculosis, which was a leading cause of death in the late 1800s and early 1900s, and of Pneumonia and Influenza which were leading causes of death in the early 1900s as well.

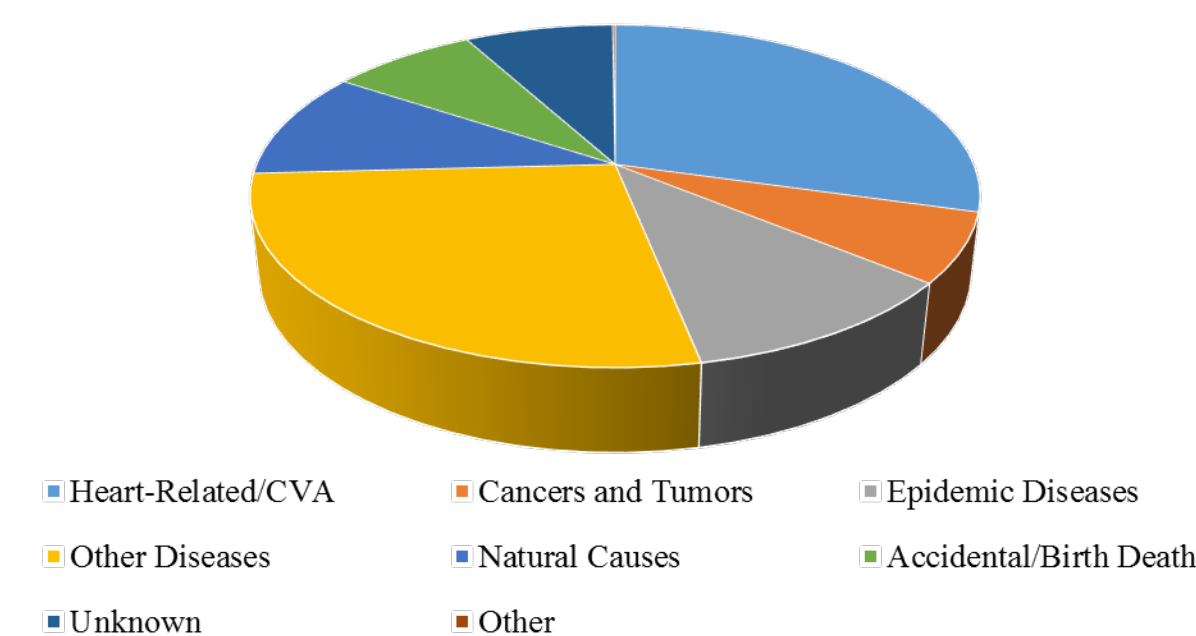
Through these comparisons it will be seen such how changes in lifestyle and advancements in medicine have influenced the trend in the leading caused of death.

Methods and Results

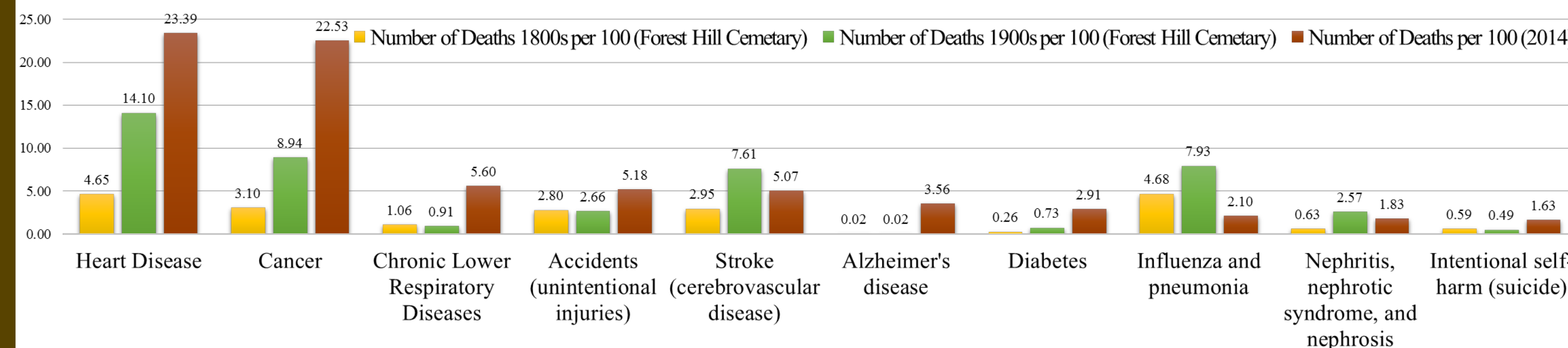
- The data was organized through the use of a VBA formatted program that would search the column "Cause of Death" for a declared condition and were organized into one of eight different categories: Heart-Related/ CVA, Cancers and Tumors, Epidemic Diseases, Other Diseases, Natural Causes, Accidental/ Birth Deaths, Unknown, or Other.

Causes of Death	Number of Deaths
Heart-Related/CVA	14200
Cancers and Tumors	3149
Epidemic Diseases	5260
Other Diseases	13175
Natural Causes	4900
Accidental/Birth Death	3724
Unknown	3789
Other	63

ORGANIZATION OF DEATHS IN FORREST HILL CEMEMTARY

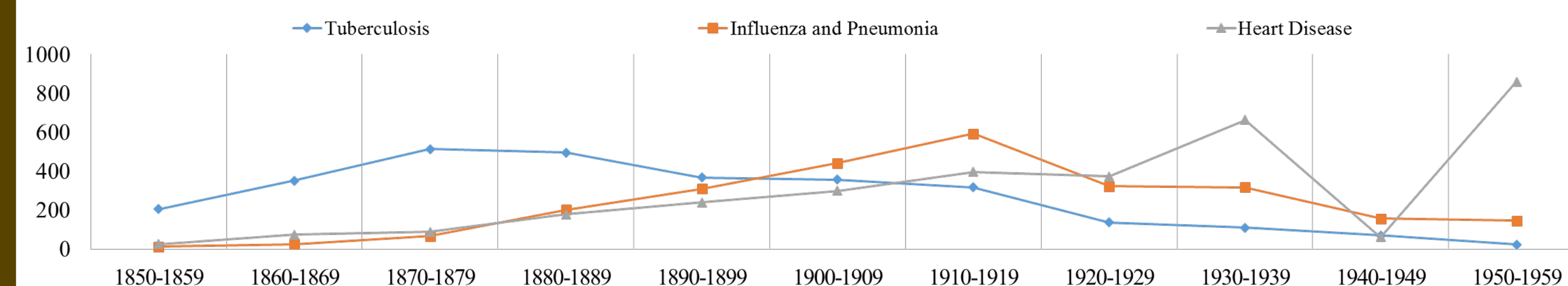


- From here the data was further organized using the same VBA code using the CDC's ten leading causes of death for 2014, following requirements defined in ICD-10.
- Each of the 10 causes were filtered through, using excels filter option, by year of death. This allowed the data to be separated into an 1800s section and a 1900s section.
- Next the number of deaths per 100 people for each cause was calculated, to better compare data.



- For the last comparison the categories of Heart Disease and Influenza and Pneumonia were reused, and another category Tuberculosis was created from data in Epidemic Diseases using the same VBA code.
- Then for each of these causes they were filtered further by decade of death between the time period of the 1850-1959.

TRENDS OF DEATH IN FOREST HILL CEMETERY



Discussion

Analyzing the available data from Forest Hill Cemetery reveals that overall Heart-Related/Cardiovascular diseases were the cause of the most deaths in the Utica region.

Comparing Forest Hill Cemetery data to current statistics of Leading Causes of Death from CDC show that Heart Disease is a dominant cause of death within both the 1800s and 1900s as it is in 2014. Heart Disease is only slightly surpassed by Influenza and Pneumonia in the 1900s.

This graph also depicts that the frequency of Heart Disease has increased dramatically from the 1800s to 2014. An explanation for this upward trend is that there has been a change in the population's diet.

"Trends of Death in Forest Hill Cemetery" depict that in the Utica region Heart Disease killed more than Pneumonia and Influenza and Tuberculosis in the 1920s. This expected increase in the rate of Heart Disease continues until the 1940s, where a drop occurs, but in the 1950s it jumps back up showing that an upwards trend did continue.

The Forest Hill Cemetery data also shows that Tuberculosis was a leading cause of death in the 1850-1899. While Influenza and Pneumonia were the highest cause of death from 1900-1919. Other resources show that this is similar to what was seen in the U.S.

A difference is that Consumption (Tuberculosis) was expected to be a leading cause of death in the early 1900s as well.

Another area of difference is that in Utica the rate of Tuberculosis and Influenza and Pneumonia began to decrease in Utica before they began to decrease in frequency throughout the U.S. A possible reason for this early decline could be that Utica began to improve health and medical care, since it had a growing population. Then medical advances in antibiotics and vaccinations for these diseases would have further decreased the cases of Tuberculosis and Influenza and Pneumonia.

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