Causes of Death, Then and Now

name:

Use the data below to determine how the leading causes of death today compare with those in 1900. Notice the top 10 are caused by infectious diseases (I), noninfectious diseases (NI), or accidents.

TEN LEADING CAUSES OF DEATH IN THE UNITED STATES, 1900 AND TODAY

1900		Today	
Cause of Death	Deaths per 100,000	Cause of Death	Deaths per 100,000
Pneumonia, Influenza (I)*	215	Heart disease (NI)	246
Tuberculosis (I)	185	Cancer (NI)	194
Diarrhea (I)	140	Stroke (NI)	57
Heart disease (NI)	130	Lung disease (NI)	43
Stroke (NI)	110	Accidents	34
Kidney disease (NI)	85	Diabetes (NI)	25
Accidents	75	Pneumonia, Influenza (I)	22
Cancer (NI)	65	Alzheimer's disease (NI)	19
Senility (NI)	55	Kidney disease (NI)	14
Diphtheria (I)	40	Septicemia (I)	11
TOTAL	**1,100**	**TOTAL**	**665**

*(I) indicates an infectious disease. (NI) indicates a noninfectious disease.

Part 1: Comparing Specific Causes of Death

1) First, look at the following causes of death in the data table: (a) pneumonia and influenza, (b) heart disease, (c) accidents, and (d) cancer. Construct a *bar graph* that compares the numbers of deaths from each of those causes in **1900** and **today**. Label the horizontal axis "Causes of Death." Label the vertical axis "Deaths per 100,000 People." Draw two bars side by side for each cause of death. Use a key to show which bars refer to 1900 and to today. Be sure to label the bars for each cause of death. Give an appropriate title to the graph.

Part 2: Comparing Infectious and Noninfectious Causes of Death

2) In this part of the lab, you will examine three categories for cause of death: infectious diseases, noninfectious diseases, and "other." You will start by grouping the data from **1900** into the three categories- infectious diseases, noninfectious diseases, and other causes. Calculate the *total number* of deaths for each category. Want to be ADVANCED… convert to *percent of deaths* for each category.

3) Next, group the data from **today** into the same three categories and calculate the *total* deaths for each category. Want to be ADVANCED… convert to *percent of deaths* for each category. In addition, calculate the *percent change of deaths* and include above the bars.

4) Finally create a *bar graph* that compares the data. Label the horizontal axis "Causes of Death." Label the vertical axis "Deaths per 100,000 People." Draw two bars side by side for each category for cause of death. Use a key to show which bars refer to 1900 and which refer to today. Be sure to label the bars for each category for cause of death. Give an appropriate title to the graph.

Analyze and Conclude

1) According to your bar graph from step 1, which cause of death showed the greatest **increase** between 1900 and today? **Explain why** you would likely see the change.

2) According to your bar graph from step 1, which cause of death showed the greatest **decrease** between 1900 and today? **Explain why** you would likely see the change.

3) Suggest an **explanation** for the change in the number of deaths due to infectious diseases from 1900 to today.