A Demographic Exploration of Frederick County Mortality Statistics

Welcome to the June, 2005 edition of "A Demographic Exploration of Frederick County." This month, the focus will be a reflection on Memorial Day, with a discussion of the mortality statistics of Frederick County. The Maryland Department of Health and Mental Hygiene has just released its "Maryland Vital Statistics Annual Report 2003." The statistics focused on this month will be directly from this and previous years reports. For further information on the demographics and other statistics of Frederick County, please visit http://www.co.frederick.md.us/planning/Demographics/myweb/DemoHome.htm

Vital Statistics can be defined as the enumeration of data that concerns important events in human life. This month's article will focus on the human experience of death. In 2003, 1,438 Frederick County residents died, the 7th highest number of deaths throughout the state of Maryland. This was the highest number of deaths ever experienced in Frederick County. Since 1997, the number of deaths in the County has been steadily rising. In 1960, there were only 741 deaths, in 2000 there were 1,287 deaths, a 74% increase in deaths over the past 40 years. (See Figure 1.)

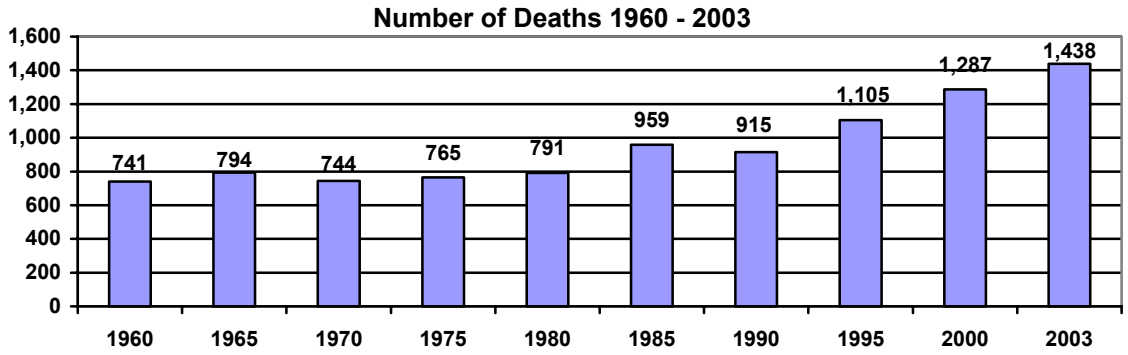

Figure 1.

Even though the County has experienced an increase in the number of deaths, the death rate has been steadily declining since 1960. The death rate is a statistic that measures the number of deaths per 1,000 population. In 1960, the death rate for Frederick County was 10.3; in 2003, the death rate was only 6.7. This means that in 1960, for every 1,000 people there were 10 deaths, in 2003, there were 7 deaths for every 1,000 people. The lowest death rate, since 1960 occurred in 1991, when for every 1,000 people there were only 5.9 people deaths.

From 2000 to 2003, 5,446 Frederick County residents died. 93% of these deaths were amongst the White population. 1 in every 16 deaths were Black and 1 in every 176 deaths were of some other race category. Usually the death rate is higher for the White population in Frederick County. However, in 2001 the death rate was highest in the Black Population (See Figure 2).

Number and Rates of Deaths by Race 2000 – 2003				
	2000	**2001**	**2002**	**2003**
All Races	1,287 (6.6)	1,347 (6.7)	1,373 (6.6)	1,438 (6.7)
White Total	1,204 (6.8)	1,242 (6.7)	1,279 (6.7)	1,355 (7.0)
Black	71 (4.5)	100 (7.3)	84 (6.0)	80 (5.6)
Some Other Race	12	5	9	3

Figure 2.

Within the past three years most of the deaths that have occurred are within the population between the ages of 75 to 84 years old. 1 in every 3 deaths that occur is within this age cohort. The second highest number of deaths occurs within the age cohort of 85 and over. 27% of the total deaths in Frederick County occur to people over the age of 84. Annually there are about 15 infant deaths in the County. The lowest number of deaths occurs between the ages of 1 – 14 years old, where within the past 3 years there have only been a total of 18 deaths. (Figure 3).

Number and Percentage of Deaths by Age 2001 - 2003			
	2001	**2002**	**2003**
All Ages	1,347 (100%)	1,373 (100%)	1,438 (100%)
Under 1	14 (1%)	21 (2%)	10 (0.7%)
1 to 14	3 (0.2%)	6 (0.4%)	9 (0.7%)
15-24	22 (2%)	21 (2%)	14 (1%)
25-44	65 (5%)	74 (6%)	69 (5%)
45-64	247 (18%)	265 (20%)	253 (19%)
65-74	240 (18%)	233 (17%)	240 (18%)
75-84	392 (29%)	388 (29%)	455 (34%)
Over 84	364 (27%)	365 (27%)	388 (29%)

Figure 3.

The top three causes for death in Frederick County are Cardiovascular Diseases, Malignant Neoplasms, and Chronic Lower Respiratory Diseases, respectively. Between 2000 and 2003, 2,130 people died of a cardiovascular disease, 74% of these deaths were due to heart disease. 1 in every 4 deaths in Frederick County are due to some type of Cancer. From 2000 – 2003, Trachea, Bronchus, and Lung Cancers were the leading cause of death. This type of Malignant Neoplasm caused 26% of deaths due to Cancer. The following list outlines the top ten causes of death for Frederick County residents in 2003.

Top Ten Leading Causes of Death for Frederick County Residents
2003

1. Cardiovascular Disease – 554
2. Malignant Neoplasm – 335
3. Chronic Lower Respiratory Diseases – 82
4. Accidents (Motor Vehicle and Other) – 56
5. Alzheimer's Disease – 51
6. Diabetes Mellitus – 41
7. Influenza And Pneumonia – 35
8. Intentional Self-Harm (Suicide) – 26
9. Septicemia - 20
10. Chronic Liver Disease and Cirrhosis – 16

In essence, Frederick County has a considerable low death rate of around 6.7. As the population continues to grow in the County, the number of deaths is averaging about 1, 362 a year. Most of the deaths occur within the elderly white population of the County. The 2 leading causes of death are Diseases of the Heart and Cancer.