

# **DEATH STATISTICS**



## CRUDE DEATH RATE

In 1998, the crude death rate for Lancaster County was 6.7 per 1000 population. The average crude death rate between 1981 and 1998 was 6.9 per 1000 population.

The crude death rate for the State of Nebraska during 1998 was 9.2 per 1000 population. Figure 14 illustrates the death rates for Lancaster County and the State of Nebraska.

## TOTAL NUMBER OF DEATHS

There were 1582 deaths among Lancaster County residents during 1998. Of these, 1468 (92.8%) were residents of Lincoln. The remaining 114

(7.2%) resided outside the City of Lincoln. The most frequent month for death was February (Table 14).

### Race

Of the deaths in 1998, 1546 (97.7%) were among Whites, 20 were among Blacks, 10 were among American Indians, and 6 were among Asians. Non-White deaths accounted for 2.3% of total deaths.

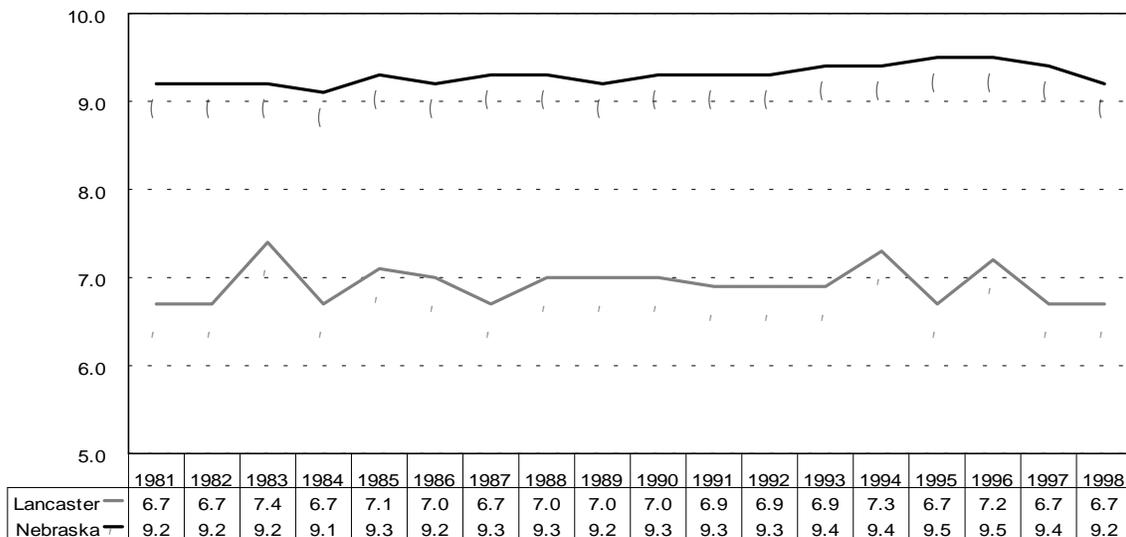
### Sex

During 1998, 47.6% of all deaths in Lancaster County were males and 52.4% were females.

### Age

In 1998, 26 infants (less than 1 year of age) died,

Figure 14: Comparison of Death Rates  
Lancaster County and Nebraska  
1981 to 1998



Lincoln-Lancaster Health Department

accounting for 1.6% of all deaths and an infant mortality rate of 7.7 per 1000 live births (*See page 30 for further discussion of infant mortality*). A total of 38 children 0 to 14 died in 1998, accounting for 2.4% of all deaths. The most frequent age group among deaths was 80 to 89 years (29.3% of all deaths) followed by 70 to 79 years (24.1% of all deaths). (Table 16).

The mean age of death has increased 0.8 years during the past decade. In 1998, the mean age of death for males and females was 68.8 and 76.4 years, respectively (Figure 15). For males, this represents an increase of 0.8 years over the past decade (since 1988). The mean age of death for females increased 0.4 years from 1988 to 1998.

Using a five year rolling average (1994 to 1998), the mean age of death for White individuals (73.6 years) is approximately 19.0 years older than the mean age of death for individuals in other racial/ethnic categories (54.7 years).

**TABLE 14.**  
**Deaths by Month,**  
**Lancaster County 1998**

<u>Month</u>	<u>Number</u>	<u>Percent</u>
January	132	8.3
February	146	9.2
March	132	8.3
April	134	8.5
May	110	7.0
June	142	9.0
July	136	8.6
August	114	7.2
September	117	7.4
October	139	8.8
November	138	8.7
December	142	9.0
<b>TOTAL</b>	<b>1582</b>	<b>100.0</b>

## LEADING CAUSES OF DEATH

In 1998, 27.7% of all deaths were due to heart disease and 23.2% were due to cancer. These two major causes of death accounted for 50.9% of all deaths (Figure 16). Table 17 details statistics on the leading causes of death in Lancaster County.

Table 15 lists the average age of death by sex by selected cause. The six leading causes of death in Lancaster County and Nebraska can be found in Table 18.

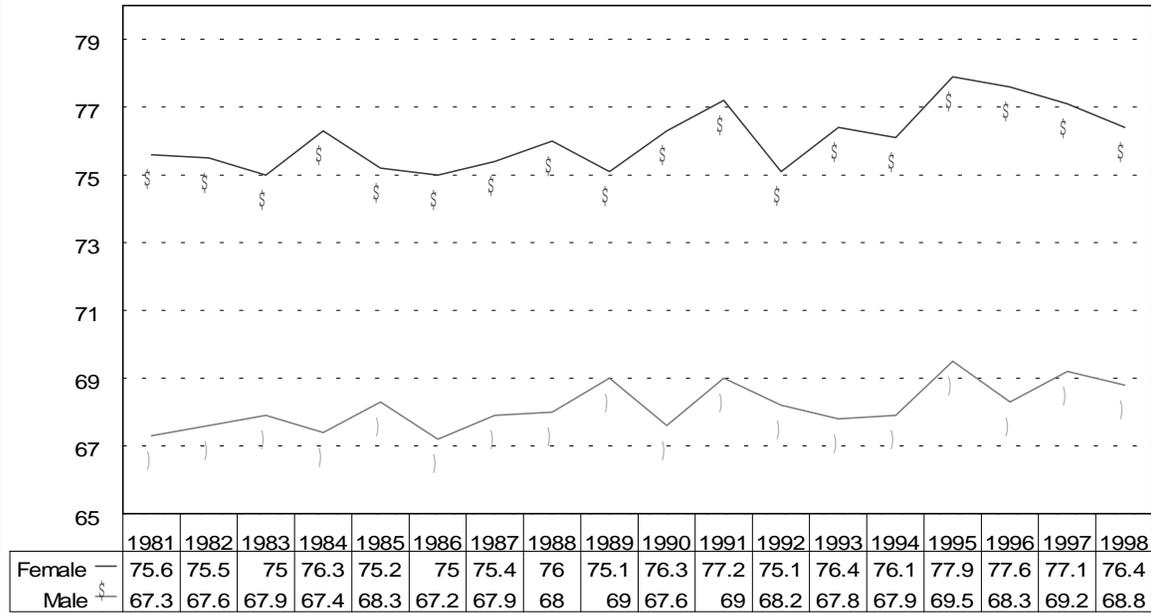
### Age and Sex

Among males 1 to 29 years of age, unintentional injury, suicide, and homicide were the leading causes of death (Table 19). For males and females 30 to 59 years old the leading causes of death were heart disease and cancer respectively. The leading cause of death for males and females 60 and older was heart disease. Causes of infant mortality are listed in Table 23.

**TABLE 15.**  
**Average Age of Death**  
**by Sex by Selected Cause**  
**Lancaster County, 1998**

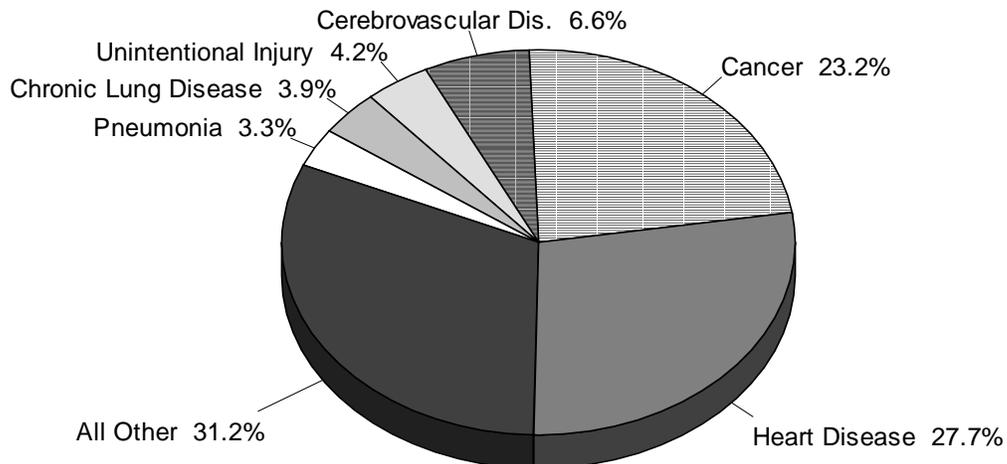
<u>Cause of Death</u>	<u>Male</u>	<u>Female</u>
Heart Disease	74.3	83.6
Cancer	70.2	70.2
Cerebrovascular Disease	78.4	82.9
Accidental Deaths	49.9	61.0
Chronic Lung Disease	72.6	76.5
Pneumonia	76.8	82.2
Suicide	43.5	41.6

**Figure 15: Mean Age of Death for Males and Females**  
Lancaster County, NE  
1981-1998



Lincoln-Lancaster County Health Department

**Figure 16: Leading Causes of Death**  
Lancaster County, NE  
1998



Lincoln-Lancaster County Health Department

**TABLE 16.**  
**Deaths by Age and Sex**  
**Lancaster County, 1998**

<u>Age</u>	<u>Total Deaths</u>	<u>% of Total Deaths</u>	<u>Male Deaths</u>	<u>% of Male Deaths</u>	<u>Female Deaths</u>	<u>% of Female Deaths</u>
<1	26	1.6%	11	1.5%	15	1.8%
1 - 4	2	0.1%	2	0.3%	0	0.0%
5 - 9	5	0.3%	3	0.4%	2	0.2%
10 - 14	5	0.3%	4	0.5%	1	0.1%
15 - 19	2	0.15%	2	0.3%	0	0.0%
20 - 24	7	0.4%	5	0.7%	2	0.2%
25 - 29	15	0.9%	7	0.9%	8	1.0%
30 - 39	37	2.3%	23	3.1%	14	1.7%
40 - 49	77	4.9%	46	6.1%	31	3.7%
50 - 59	119	7.5%	71	9.4%	48	5.8%
60 - 69	203	12.8%	128	17.0%	75	9.0%
70 - 79	382	24.1%	207	27.5%	175	21.1%
80 - 89	464	29.3%	194	25.8%	270	32.6%
90 - 99	218	13.8%	49	6.5%	169	20.4%
>100	20	1.3%	1	0.1%	19	2.3%
<b>TOTAL</b>	<b>1582</b>	<b>100.0%</b>	<b>753</b>	<b>100.0%</b>	<b>829</b>	<b>100.0%</b>

**Mean Age of Death for Males 68.8 Years**  
**Mean Age of Death for Females 76.4 Years**

**TABLE 17.**  
**Leading Causes of Death**  
**and Crude Rate per 100,000 Population**  
**Lancaster County, 1998**

<b>Cause of Death</b>	<b>Number of Total Deaths</b>	<b>% of Total Deaths</b>	<b>Crude Death Rate</b>
Heart Disease	439	27.7%	186.3
Cancer	367	23.2%	155.8
Cerebrovascular Disease	104	6.6%	44.1
Unintentional Injury	66	4.2%	28.0
Chronic Lung Disease	61	3.9%	25.9
Pneumonia	52	3.3%	22.1
Mental Disorders	39	2.5%	16.6
Diabetes Mellitus	36	2.3%	15.3
Suicide	29	1.8%	12.3
Atherosclerosis	27	1.7%	11.5
Emphysema	19	1.2%	8.1
Parkinson's Disease	18	1.1%	7.6
Alzheimer's Disease	15	0.9%	6.4
Cirrhosis of Liver	13	0.8%	5.5
Birth Defects	11	0.7%	4.7
Homicide	9	0.6%	3.8
Nephritis and Nephrosis	9	0.6%	3.8
Aortic Aneurysm	7	0.4%	3.0
Septicemia	7	0.4%	3.0
AIDS	6	0.4%	2.5
All Other Causes	<u>248</u>	<u>15.7%</u>	<u>105.3</u>
<b>TOTAL</b>	<b>1582</b>	<b>100.0</b>	<b>671.5</b>

*Population for Lancaster County = 235,589 (estimated)*

**TABLE 18.**  
**Comparison of the Six Leading Causes of Death**  
**Lancaster County vs. the State of Nebraska, 1998**

<b>LANCASTER COUNTY</b>		<b>STATE of NEBRASKA</b>	
<b>Cause of Death</b>	<b>Percent</b>	<b>Cause of Death</b>	<b>Percent</b>
Heart Disease	27.7%	Heart Disease	31.2%
Cancer	23.2%	Cancer	21.6%
Cerebrovascular Disease	6.6%	Cerebrovascular Disease	7.6%
Chronic Lung Disease	3.9%	Unintentional Injury	4.4%
Unintentional Injury	4.2%	Chronic Lung Disease	3.9%
Pneumonia	3.3%	Pneumonia	3.9%

**Cancer Sites**

Cancers of the lung, trachea and bronchus were the leading cause of cancer-related death among males, while breast cancer was the leading the leading cause of cancer death among females (Table 20). Lymphoid and prostate cancer were the next leading causes of cancer death in men. Lung, trachea, and bronchus cancer were the next leading causes of cancer death among women (Table 20). Cancer death rates are discussed on pages 33-34.

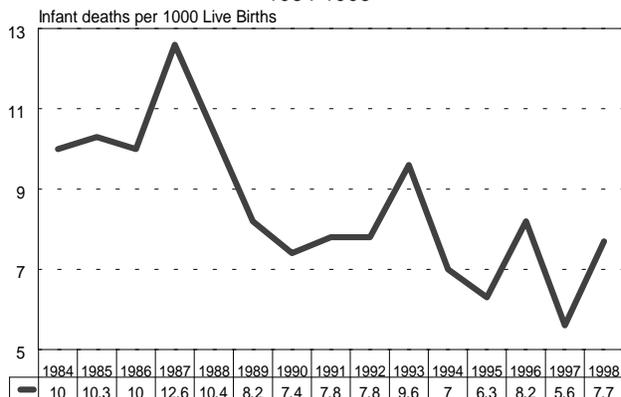
**Suicide**

Suicide by method and age category are shown in Table 21. The average age for male suicides was 43.5 years, compared to 41.6 years for females. Over one-half of suicide deaths (51.7%) were among individuals 39 years of age or younger. In 1998, the crude rate for suicide was 12.3 per 100,000 population. This indicates little change from the 1997 rate of 12.4 per 100,000 population. The Lancaster County Health Objective for the Year 2000 is to reduce suicide mortality to an age-adjusted rate of 7.5 per 100,000 population.

**INFANT MORTALITY RATE**

In 1998, 26 infant deaths occurred in Lancaster County for an infant mortality rate of 7.7 per 1000 live births (Figure 17). This represents an increase from the 1997 infant mortality rate (5.6 per 100,000) in which 18 infant deaths occurred. The Lancaster County Health Objective for the Year 2000 is 7.0 per 1000 live births. In 1998, 42.3% of infant deaths were male while the remaining 57.7% were female.

**Figure 17: Infant Mortality Rate**  
 Lancaster County, NE  
 1984-1998



Lincoln-Lancaster County Health Department

**TABLE 19.**  
**Three Leading Causes of Death by**  
**Age Group and Sex**  
**Lancaster County, 1998**

<u>RANK</u>	<u>SEX</u>	<u>1 - 29</u>	<u>30 - 59</u>	<u>60 &amp; Over</u>	<u>All Ages</u>
1	M	Unintentional Injury	Heart Disease	Heart Disease	Heart Disease
	F	**	Cancer	Heart Disease	Heart Disease
2	M	Suicides	Cancer	Cancer	Cancer
	F	**	Heart Disease* Unintentional Injury*	Cancer	Cancer
3	M	Homicides	Unintentional Injury	Cerebrovascular Disease	Cerebrovascular Disease
	F	**	Suicide	Cerebrovascular Disease	Cerebrovascular Disease

\* Tie      \*\* Too few for subgroup analysis

**TABLE 20.**  
**Cancer by Type by Sex**  
**Lancaster County, 1998**

<u>Site of Cancer</u>	<u>Cases in Males</u>	<u>Cases in Females</u>	<u>Total</u>
Lung, Trachea, Bronchus	61	34	95
Lymphoid and Histiocytic	25	21	46
Female Breast	0	42	42
Colon/Rectum	17	15	32
Prostate	22	0	22
Pancreas	6	9	15
Brain	6	7	13
Ovary/other uterine adnexa	0	11	11
Stomach	5	3	8
Bladder	5	0	5
Cervix Uteri	0	5	5
Esophagus	5	0	5
Liver	4	1	5
Skin	3	2	5
All Other Sites	21	37	58
<b>TOTAL</b>	<b>180</b>	<b>187</b>	<b>367</b>

**TABLE 21.**  
**Suicides by Type by Age Group**  
**Lancaster County, 1998**

<b>Type of Suicide</b>	<b>1-14</b>	<b>15-29</b>	<b>30-44</b>	<b>45-59</b>	<b>60 &amp; Over</b>	<b>Total</b>
Firearms and Explosives	1	2	4	3	5	15
Poisoning by Solids or Liquids	0	0	4	2	0	6
Hanging and Suffocation	0	3	1	1	0	5
Poisoning by Other Gases and Vapors	0	0	2	0	0	2
Other And Unspecified Means	0	0	1	0	0	1
<b>TOTAL</b>	<b>1</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>5</b>	<b>29</b>

A majority (80.8%) of all infant deaths in 1998 were white (Table 22), a rate of 6.8 per 1000 white births. Five infant deaths among other races in 1998 translated into an infant mortality rate of 24.4 per 1000 non-white births.

The leading cause of infant mortality was congenital anomalies (Table 23).

## FETAL DEATHS

Fifteen fetal deaths were reported in 1998, representing a fetal death rate of 4.4 per 1000 live births (Figure 16). This is a

decrease from the 18 fetal deaths reported during 1997, in which a fetal death rate of 5.6 per 1,000 live births occurred.

## CRUDE AND AGE-ADJUSTED RATES FOR THE THREE LEADING CAUSES OF DEATH

### Heart Disease

In 1998, 439 (27.7% of deaths) Lancaster County residents died of heart disease. These 439 deaths translate into a crude death rate due to heart disease of 186.3 per 100,000 estimated population.

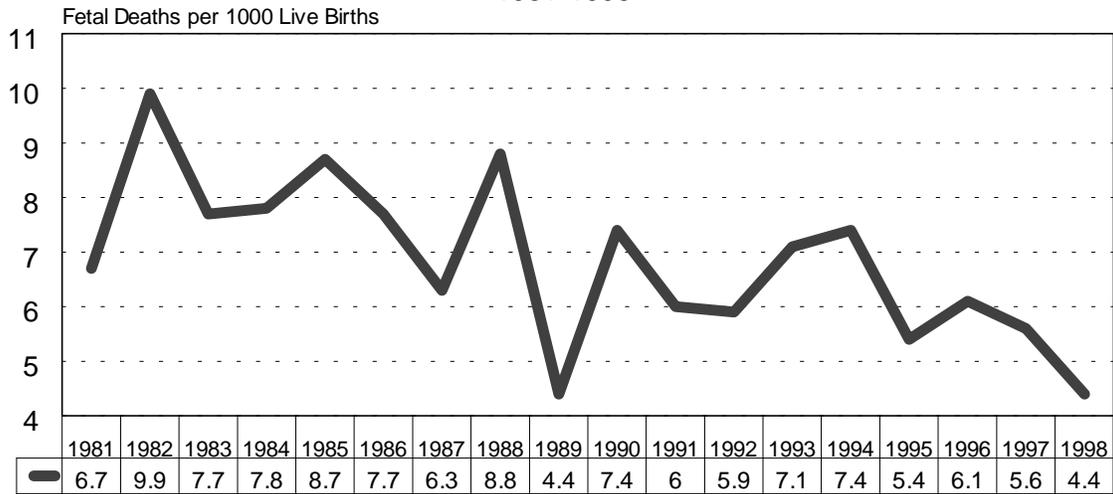
**TABLE 22.**  
**Infant Deaths by Race and Sex**  
**Lancaster County, 1998**

<b>Race</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
White	8	13	21
Black	3	1	4
All Other	0	1	1
<b>TOTAL</b>	<b>11</b>	<b>15</b>	<b>26</b>

**TABLE 23.**  
**Infant Deaths by Cause and Sex**  
**Lancaster County, 1998**

<b>Cause of Death</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Congenital Anomalies	4	3	7
Respiratory Distress Syndrome	1	2	3
Disorders of Digestive System	1	1	2
Sudden Infant Death Syndrome	2	0	2
Other	4	10	14
<b>TOTAL</b>	<b>11</b>	<b>15</b>	<b>26</b>

Figure 18: Fetal Death Rate  
Lancaster County, NE  
1981-1998



Lincoln-Lancaster County Health Department

The average crude death rate for heart disease from 1994 through 1998 was 200.6 per 100,000. The Nebraska Department of Health and Human Services reported an average crude death rate for heart disease of 305.9 per 100,000 population for the State of Nebraska between 1994 and 1998.

The 1998 Nebraska Vital Statistics Report lists Nebraska's age-adjusted death rate for heart disease as 171.0 per 100,000 population for 1998, and 181.7 per 100,000 for 1994 through 1998. Using the same age-adjusted method, Lancaster County's age-adjusted death rates for heart disease were lower: 146.5 per 100,000 for 1998 and 154.0 per 100,000 for 1994-1998.

### Cancer

In 1998, 367 (23.2% of total deaths) Lancaster County residents died of cancer. These 367 deaths translate into a crude death rate due to cancer of 155.8 per 100,000 estimated population. This compares to an average crude death rate of 166.5 per 100,000 population for 1994 through 1998. The Nebraska Department of Health and Human Services reported an average crude death rate due to cancer of 203.3 per 100,000 estimated population for the State of Nebraska between 1994 and 1998.

The Nebraska Vital Statistics Report lists Nebraska's age-adjusted death rate for cancer as 150.7 per 100,000 population for 1998, and 151.1 per 100,000 for 1994 through 1998. It cites similar rates for Lancaster County: 150.1 per 100,000 for 1998 and 154.6 per 100,000 for 1994 through 1998.



## DISPOSITION AND PLACE OF DEATH

The most frequent disposition of a body was burial (73.0%), followed by cremation (24.3%) (Table 25). The most frequent place of death was in a nursing home (37.2%), followed by a hospital or medical center-inpatient (28.9%) (Table 26).

**TABLE 25.**  
**Disposition of Body**  
**Lancaster County, 1998**

<u>Disposition</u>	<u>Frequency</u>	<u>Percent</u>
Burial	1155	73.0%
Cremation	384	24.3%
Removal	25	1.6%
Donation	15	0.9%
Unknown	3	0.2%
<b>TOTAL</b>	<b>1582</b>	<b>100.0</b>

**TABLE 26.**  
**Place of Death**  
**Lancaster County, 1998**

<u>Place of Death</u>	<u>Frequency</u>	<u>Percent*</u>
Nursing Home	589	37.2%
Hospital or Medical Center - Inpatient	457	28.9%
Residence	371	23.5%
Hospital or Medical Center - Outpatient/ER	111	7.0%
Dead on Arrival at Hospital or Medical Center	5	0.3%
Other Facilities	49	3.1%
<b>TOTAL**</b>	<b>1582</b>	<b>100.0</b>

**TABLE 27. SUMMARY OF RESIDENT DEATH STATISTICS FROM 1984 TO 1998, LANCASTER COUNTY, NE**

<b>1984</b>	<b>1985</b>	<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
<b>NUMBER OF DEATHS</b>														
Lancaster County														
1365	1432	1418	1399	1487	1508	1500	1494	1494	1512	1617	1537	1675	1563	1582
Lincoln														
1243	1331	1302	1274	1387	1394	1371	1370	1339	1410	1483	1409	1558	1438	1468
Balance of County														
122	101	116	125	100	114	129	124	155	102	134	128	117	125	114
<b>RACE</b>														
White														
98.2%	97.4%	97.3%	97.5%	97.9%	97.9%	97.9%	98.2%	97.6%	97.4%	97.8%	97.7%	96.2%	96.2%	97.7%
Black														
1.4%	1.7%	1.6%	1.2%	1.3%	1.5%	1.7%	1.3%	1.6%	1.8%	1.5%	1.4%	2.4%	2.2%	1.3%
Other														
0.4%	0.8%	0.8%	1.3%	0.8%	1.0%	0.4%	0.5%	0.8%	0.9%	0.7%	0.9%	1.4%	1.5%	1.0%
<b>SEX</b>														
Male														
48.8%	50.0%	49.5%	48.9%	50.4%	50.1%	47.8%	45.5%	49.6%	48.3%	47.8%	47.5%	48.4%	46.4%	47.6%
Female														
51.2%	50.0%	50.5%	51.1%	49.6%	49.9%	52.2%	54.5%	50.4%	51.7%	52.2%	52.5%	51.6%	53.6%	52.4%
<b>AGE</b>														
Under 1														
2.3%	2.2%	2.1%	2.7%	2.1%	1.7%	1.5%	1.7%	1.6%	2.1%	1.4%	1.3%	1.6%	1.2%	1.6%
1-14														
0.7%	0.6%	0.8%	1.3%	0.4%	0.5%	1.1%	0.8%	0.9%	0.5%	0.9%	0.3%	0.7%	0.4%	0.8%
15-29														
2.4%	2.8%	3.1%	2.4%	2.2%	3.2%	2.5%	1.2%	2.8%	2.4%	2.0%	2.1%	2.1%	1.8%	1.5%
30-44														
2.8%	2.9%	3.7%	2.9%	3.9%	3.1%	4.6%	4.5%	5.2%	4.8%	6.1%	4.6%	4.4%	5.5%	4.4%
45-59														
9.6%	8.3%	9.3%	8.4%	9.1%	8.4%	8.4%	7.9%	7.9%	9.5%	8.8%	7.3%	9.6%	9.7%	10.3%
60 & Over														
82.1%	83.0%	81.0%	82.3%	82.3%	83.0%	81.9%	83.9%	81.6%	80.8%	80.8%	84.4%	81.6%	81.4%	81.4%
<b>AVERAGE AGE AT DEATH</b>														
Male														
67.4	68.3	67.2	67.9	68.0	69.0	67.6	69.0	68.2	67.8	67.9	69.5	68.3	69.2	68.8
Female														
76.3	75.2	75.0	75.4	76.0	75.1	76.3	77.2	75.1	76.4	76.1	77.9	77.6	77.1	76.4
Total														
71.9	71.7	71.2	71.8	72.0	72.0	72.1	73.5	71.7	72.2	72.1	73.9	73.1	73.4	72.8
<b>DEATH RATE</b>														
Deaths per 1000 Population														
6.7	7.1	7.0	6.7	7.0	7.0	7.0	6.9	6.9	6.9	7.3	6.7	7.2	6.7	6.7
<b>INFANT DEATHS</b>														
32	32	30	38	31	26	23	25	24	31	22	20	27	18	26
<b>INFANT MORTALITY RATE</b>														
10.0	10.3	10.0	12.6	10.4	8.2	7.4	7.8	7.8	9.6	7.0	6.3	8.2	5.6	7.7
Deaths per 1000 Live Births														
<b>NEONATAL DEATHS</b>														
19	23	22	22	16	16	13	13	10	19	16	17	17	13	21
<b>NEONATAL DEATH RATE</b>														
5.9	7.4	7.4	6.0	5.4	5.0	7.4	4.1	3.3	5.9	5.1	5.4	5.2	4.0	6.2
<b>FETAL DEATHS</b>														
25	27	23	19	26	14	23	19	18	23	23	17	20	18	15
<b>FETAL DEATH RATE</b>														
7.8	8.7	7.7	6.3	8.8	4.4	7.4	6.0	5.9	7.1	7.4	5.4	6.1	5.6	4.4