

| 2018 | Leading Causes of Death Data Brief |



Key Findings

- The leading cause of death in the United States is heart disease, but cancer has been the leading cause of death in Guilford County since 2008.
- Cancers and heart disease together comprised about 40% of all deaths in Guilford County in 2016.
- Males had higher mortality rates of cancer, heart disease, unintentional injuries, chronic liver disease, suicide and homicide, while females had higher mortality rates of dementia, stroke, Alzheimer's Disease and primary hypertension.
- African-Americans had higher age-adjusted mortality rates than Whites for heart disease, pancreatic cancer, stroke, diabetes and dementia, while Whites had higher mortality rates due to lung cancer, chronic lower respiratory disease and chronic liver disease and cirrhosis.
- Lung cancer is the leading type of cancer mortality, followed by pancreatic and colon cancers.
- In 2016, the leading causes of death among children and young adults were motor vehicle crashes and other unintentional injuries, followed by homicide and suicide.
- The heart disease mortality rate in Guilford County declined 30% between 1997 and 2016.
- Since 2010, the diabetes mortality rate in Guilford County has been on the rise.

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This report was prepared by Health Surveillance & Analysis Unit of the Division of Public Health:
Mark H. Smith, Ph.D, Epidemiologist Laura Mroska, MPH, MSW, Community Health Educator
For more information about Guilford County health statistics, visit www.myguilford.com/humanservices/health/health-

Leading Causes of Death, All Residents Unadjusted Mortality Rates, Guilford County, NC, 2016

Cause of Death	Deaths	Rate
1. Cancer (all types)	918	176.1
2. Diseases of the Heart	809	155.2
3. Dementia	273	52.4
4. Unintentional Injury Deaths	273	52.0
From Non-Motor Vehicle Injuries	216	41.4
From Motor Vehicle-related Injuries	57	10.9
5. Stroke	261	50.1
6. Alzheimer's Disease	239	45.8
7. Chronic Lower Respiratory Disease	193	37.0
8. Nephritis, Kidney disease	126	24.2
9. Diabetes	123	23.6
10. Pneumonia and Influenza	103	19.8
11. Septicemia	84	16.1
12. Chronic Liver Disease and Cirrhosis	71	13.6
13. Suicide	60	11.5
14. Parkinson's Disease	51	9.8
15. Essential (Primary) Hypertension	47	9.0
16. Pneumonitis	45	8.6
17. Homicide	44	8.4
18. Conditions Originating in the Perinatal Period	35	6.7
19. Nutritional Deficiencies	27	5.2
20. Congenital Malformations and Abnormalities	20	3.8
21. HIV Infection	17	3.3
Other Cause	556	--
Total Deaths—All Causes	4,375	839.2
2016 Guilford County Population Estimate	521,330	

Source: NC Mortality File, NC Center for Health Statistics. Note: Mortality Rates not age-adjusted.

Leading Causes of Death by Sex

Deaths and Unadjusted Rates per 100,000, Guilford County, NC, 2016

Cause of Death	Females		Males	
	Deaths	Rate	Deaths	Rate
1. Cancer (all types)	426	155.4	492	199.0
2. Diseases of the Heart	381	139.0	428	173.1
3. Dementia	184	67.1	89	36.0
4. Unintentional Injury Deaths	108	39.4	165	66.7
From Non-Motor Vehicle Injuries	89	32.5	127	51.4
From Motor Vehicle-related Injuries	19	6.9	38	15.4
5. Stroke	144	52.5	117	47.3
6. Alzheimer's Disease	166	60.6	73	29.5
7. Chronic Lower Respiratory Disease	113	41.2	80	32.4
8. Nephritis, Kidney disease	64	23.4	62	25.1
9. Diabetes	63	23.0	60	24.3
10. Pneumonia and Influenza	58	21.2	50	20.2
11. Septicemia	37	13.5	47	19.0
12. Chronic Liver Disease and Cirrhosis	25	9.1	46	18.6
13. Suicide	18	6.6	42	17.0
14. Parkinson's Disease	16	5.8	35	14.2
15. Essential (Primary) Hypertension	32	11.7	15	6.1
16. Pneumonitis	16	5.8	29	11.7
17. Homicide	6	2.2	38	15.4
18. Conditions Originating in the Perinatal Period	15	5.5	20	8.1
19. Nutritional Deficiencies	12	4.4	15	6.1
20. Congenital Malformations and Abnormalities	12	4.4	8	3.2
21. HIV Infection	4	1.5	13	5.3
Other Causes	281	--	271	--
Total Deaths—All Causes	2,183	796.5	2,192	886.6
2016 Total Population by Sex	274,081		247,249	

Source: NC Mortality File, Center for Health Statistics.

Note: Use caution when interpreting rates based on small numbers, i.e., less than 10.

Leading Causes of Death, by Race and Ethnicity

Deaths and Unadjusted Mortality Rates per 100,000, Guilford County, NC, 2016

Cause of Death	White		Black		Asian		Hispanic	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Cancer (all types)	636	209.2	251	135.1	13	47.9	21	51.2
Diseases of the Heart	548	180.3	247	132.9	6	22.1	9	22.0
Unintentional Injury Deaths	207	68.1	57	30.7	5	18.4	6	14.6
From Non-Motor Vehicle Injuries	174	57.2	38	20.4	1	3.7	4	9.8
From Motor Vehicle-related Injuries	33	10.9	19	10.2	4	14.7	2	4.9
Dementia	207	68.1	65	35.0	0	0.0	1	2.4
Stroke	170	55.9	82	44.1	7	25.8	1	2.4
Alzheimer's Disease	183	60.2	55	29.6	0	0.0	0	0.0
Chronic Lower Respiratory Disease	162	53.3	30	16.1	1	3.7	0	0.0
Nephritis, Kidney disease	61	20.1	61	32.8	4	14.7	0	0.0
Diabetes	67	22.0	52	28.0	4	14.7	2	4.9
Pneumonia and Influenza	70	23.0	32	17.2	1	3.7	0	0.0
Chronic Liver Disease and Cirrhosis	59	19.4	7	3.8	2	7.4	4	9.8
Suicide	53	17.4	4	2.2	3	11.0	1	2.4
Septicemia	58	19.1	24	12.9	1	3.7	2	4.9
Parkinson's Disease	41	13.5	8	4.3	2	7.4	0	0.0
Essential (Primary) Hypertension	29	9.5	16	8.6	2	7.4	0	0.0
Pneumonitis (Inflammation of Lung Tissue)	34	11.2	10	5.4	1	3.7	0	0.0
Homicide	6	2.0	34	18.3	2	7.4	2	4.9
Conditions Originating in the Perinatal Period	7	2.3	23	12.4	1	3.7	5	12.2
Nutritional Deficiencies	17	5.6	10	5.4	0	0.0	1	2.4
Congenital Malformations and Abnormalities	9	3.0	09	4.8	0	0.0	2	4.9
HIV Infection	4	1.3	13	7.0	0	0.0	0	0.0
Other Causes	376	--	161	--	7	--	5	--
Total	3,006	988.9	1,253	674.2	62	228.4	63	153.7
2016 Population by Race and Ethnicity	303,976		185,846		27,151		40,991	

Source: NC State Center for Health Statistics.

Note: Use caution when interpreting rates based on small numbers, i.e., less than 10.

Selected Chronic Disease Causes of Death, by Race Age-Adjusted Mortality Rates per 100,000, Guilford County, NC, 2016

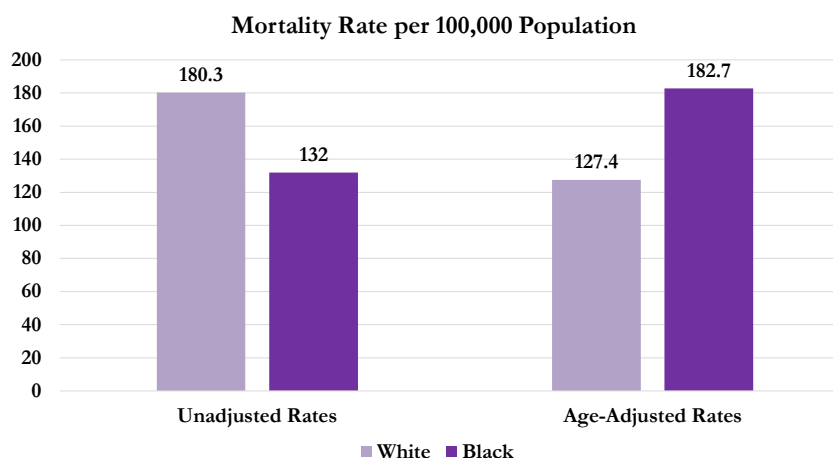
Cause of Death	White		Black/African	
	Deaths	Rate	Deaths	Rate
Cancer (all types)	636	156.1	251	178.7
Lung Cancer	178	44.7	59	42.7
Pancreatic Cancer	44	10.8	28	22.1
Colon Cancer	50	12.2	19	13.5
Diseases of the Heart	548	127.4	247	182.7
Dementia	207	42.7	65	57.0
Stroke	170	55.9	82	65.4
Alzheimer's Disease	183	38.5	55	49.2
Chronic Lower Respiratory Disease	162	38.3	30	21.8
Diabetes	67	16.8	52	28.0
Chronic Liver Disease and Cirrhosis	59	16.0	7	5.2
Total	3,006	988.9	1,253	674.2
2016 Population by Race and Ethnicity	303,976		185,846	

Source: NC State Center for Health Statistics.

Note: Use caution when interpreting rates based on small numbers, i.e., less than 10.

Note on Age-Adjustment. When comparing mortality rates of age-related conditions—i.e., when the mortality risk increases with age, as with chronic diseases—across groups that have different age distributions, it can be misleading to use crude or unadjusted rates. In such situations, it is advisable to use age-adjusted rates that take into account the differences in age distribution. In Guilford County, Whites and African-Americans have substantially different age distribution, with Whites having an older age distribution than African-Americans.

Comparison of Unadjusted and Age-Adjusted Mortality Rates, by Race, 2016



Detailed Causes of Death for Infants, Birth through Age One Guilford County, 2016

ICD-10 Codes	Cause of Death	Number of Deaths
A090	Other and unspecified gastroenteritis and colitis of infectious origin	1
E343	Endocrine disorders, short stature, not elsewhere classified	1
E889	Metabolic disorder, unspecified	1
J989	Respiratory disorder, unspecified	1
	<u>Maternal complications of Pregnancy</u>	
P00.0	Fetus and newborn affected by maternal hypertensive disorders	1
P01.0	Newborn (suspected to be) affected by incompetent cervix	5
P01.1	Newborn (suspected to be) affected by premature rupture of	5
	<u>Disorders Related to Short Gestation and Low Birth Weight</u>	
P07.2	Extreme immaturity of newborn	4
P07.3	Preterm (premature) newborn (other)	3
	<u>Congenital Malformations, Deformations and Chromosomal Abnormalities</u>	
Q04.2	Holoprosencephaly	2
Q24.9	Congenital malformation of heart, unspecified	1
Q33.6	Hypoplasia and dysplasia of lung	2
Q433	Congenital malformations of intestinal fixation	1
Q898	Other specified congenital malformations	1
Q913	Edwards syndrome, unspecified	1
	<u>Disorders Originating in the Perinatal Period</u>	
P22.0	Respiratory distress of the newborn	5
P269	Unspecified pulmonary hemorrhage originating in the perinatal	1
P280	Primary atelectasis of newborn, respiratory failure	3
P364	Sepsis of newborn due to Escherichia coli	1
P369	Bacterial sepsis of newborn, unspecified	4
P548	Other specified neonatal hemorrhages	1
P549	Neonatal hemorrhage, unspecified	1
P964	Termination of pregnancy, affecting fetus and newborn	1
	<u>Ill-defined and Unknown Cause of Mortality</u>	
R068	Other and unspecified abnormalities of breathing	1
R99	Other ill-defined and unspecified causes of mortality	4
	<u>Total Infant Deaths</u>	52

Source: NC State Center for Health Statistics.

Leading Causes of Death, by Age Group Deaths and Rates per 100,000, Guilford County, NC, 2016

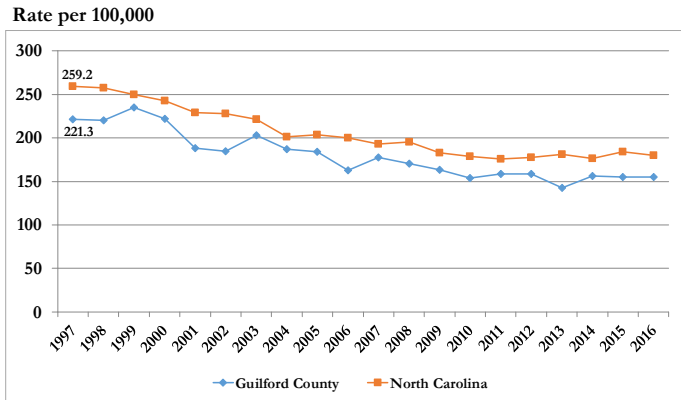
Cause of Death	Ages 1-19		Ages 20-39		Ages 40-59		Ages 60-79		Ages 80 and Over	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1. Cancer (all types)	4	3.1	10	7.0	154	111.4	482	556.4	268	1431.6
2. Diseases of the Heart	0	0.0	8	5.6	117	84.6	298	344.0	386	2062.0
3. Dementia	0	0.0	0	0.0	1	0.7	38	43.9	234	1250.0
4. Unintentional Injury Deaths	12	9.3	69	48.5	68	49.2	54	62.3	70	373.9
From Non-Motor Vehicle Injuries	7	5.4	50	35.1	52	37.6	38	43.9	69	368.6
From Motor Vehicle-related Injuries	5	3.9	19	13.3	16	11.6	16	18.5	1	5.3
5. Stroke	0	0.0	2	1.4	19	13.7	89	102.7	151	806.6
6. Alzheimer's Disease	0	0.0	0	0.0	2	1.4	39	45.0	198	1057.7
7. Chronic Lower Respiratory Disease	1	0.8	1	0.7	14	10.1	96	110.8	81	432.7
8. Nephritis, Kidney disease	0	0.0	1	0.7	10	7.2	53	61.2	62	331.2
9. Diabetes	0	0.0	3	2.1	28	20.3	58	66.9	34	181.6
10. Pneumonia and Influenza	0	0.0	3	2.1	10	7.2	30	34.6	60	320.5
11. Chronic Liver Disease and Cirrhosis	0	0.0	3	2.1	24	17.4	36	41.6	8	42.7
12. Suicide	3	2.3	18	12.6	23	16.6	16	18.5	0	0.0
13. Septicemia	1	0.8	2	1.4	8	5.8	44	50.8	29	154.9
14. Parkinson's Disease	0	0.0	0	0.0	0	0.0	21	24.2	30	160.3
15. Essential (Primary) Hypertension	0	0.0	1	0.7	6	4.3	15	17.3	25	133.5
16. Pneumonitis	0	0.0	0	0.0	3	2.2	12	13.9	30	160.3
17. Homicide	3	2.3	29	20.4	9	5.8	3	3.5	0	0.0
18. Nutritional deficiencies	0	0.0	0	0.0	0	0.0	5	5.8	22	117.5
19. Congenital Malformations and Abnormalities	3	2.3	3	2.1	1	0.7	5	5.8	0	0.0
20. HIV Infection	0	0.0	3	2.1	7	5.1	6	6.9	1	5.3
Other Causes	7	--	18	--	91	--	216	--	211	--
Total Deaths	34	26.3	174	122.2	597	431.9	1,617	1,866.5	1,901	10,154.9
2016 Population by Race and Ethnicity	129,298		142,396		138,238		86,632		18,720	

Source: NC Mortality File, Center for Health Statistics.

Note: Use caution when interpreting rates based on small numbers, i.e., less than 10.

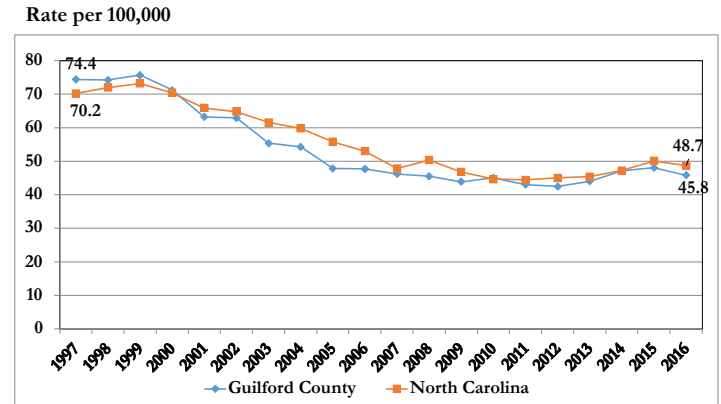
Trends in Chronic Disease Mortality Rates

Heart Disease Mortality Guilford County and NC, 1997-2016



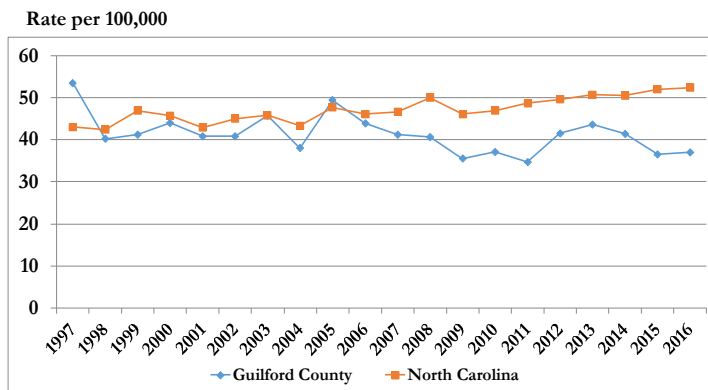
Source: Data provided by the NC Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

Cerebrovascular Disease (Stroke) Mortality, Guilford County and NC, 1997-2016



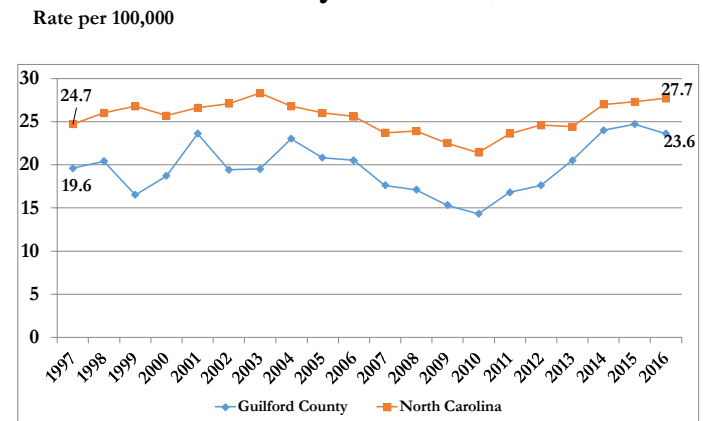
Source: NC State Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

Chronic Lower Respiratory Disease, Guilford County and NC, 1997-2016



Note: Rates are not age-adjusted.
Source: NC State Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

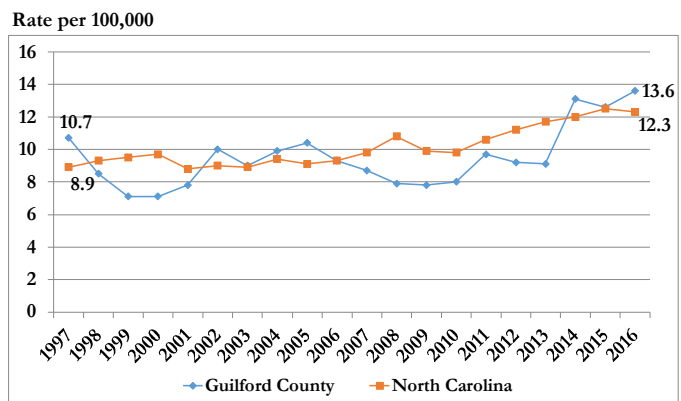
Diabetes Mortality, Guilford County and NC, 1997-2016



Note: Rates are not age-adjusted.
Source: NC State Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

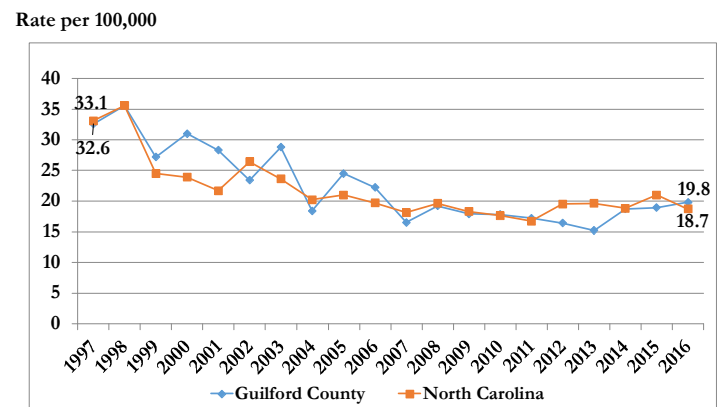
Trends in Chronic Disease Mortality Rates

Chronic Liver Disease/Cirrhosis Mortality Guilford County and NC, 1997-2016



Note: Rates are not age-adjusted.
Source: NC State Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

Trends in Mortality Rates Pneumonia & Influenza, 1997-2016



Source: Data provided by the NC Center for Health Statistics.
Chart prepared by the Guilford County Department of Public Health.

Deaths from Cancer by Type, All Residents Guilford County, NC, 2016

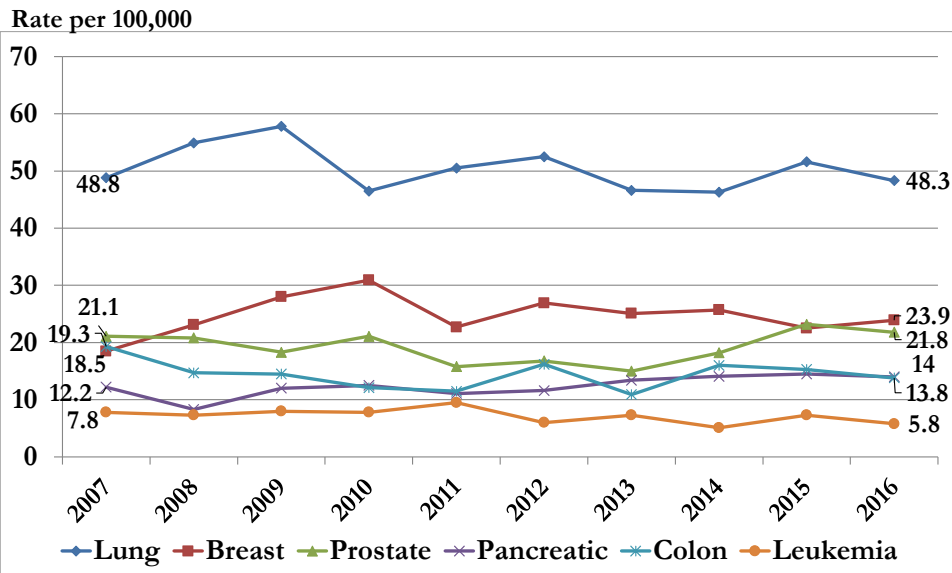
Cancer Cause of Death	Number of Deaths	Rate per 100,000
1. Lung	252	48.3
2. Pancreatic	73	14.0
3. Colon	72	13.8
4. Breast	63	23.9
5. Prostate	54	21.8
6. Liver	52	10.0
7. Leukemia	30	5.8
8. Stomach	30	5.8
9. Non-Hodgkin's Lymphoma	29	5.6
10. Bladder	24	4.6
11. Brain	17	3.3
12. Lip	14	2.7
13. Ovary	11	2.1
14. Skin	7	1.3
15. Larynx	3	0.6
16. Cervical	3	0.6
Other Cancer Deaths	184	--
Total Cancer Deaths	918	176.1
Guilford County Population	521,330	

Source: NC Mortality File, Center for Health Statistics; NC Demographers Office.

Note: Rates for Breast and Prostate cancer are based on the population of females and males in Guilford County, respectively.

Note: Use caution when interpreting rates based on small numbers, i.e., less than 10.

Leading Causes of Death: Cancer Types Guilford County, 2007-2016



Note: Rates are not age-adjusted.

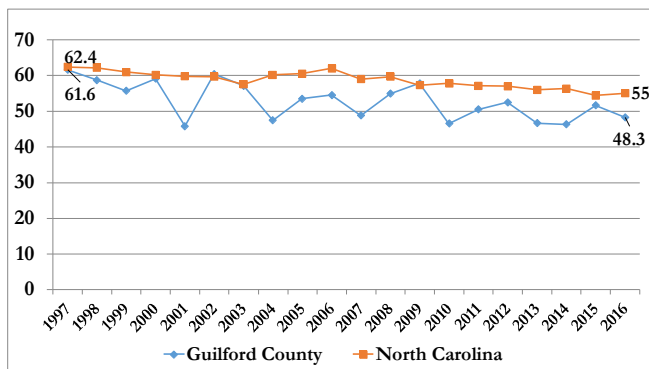
Source: NC State Center for Health Statistics.

Chart prepared by the GCDHHS, Division of Public Health.

Trends in Cancer Mortality Rates

Lung Cancer Mortality Guilford County and NC, 1997-2016

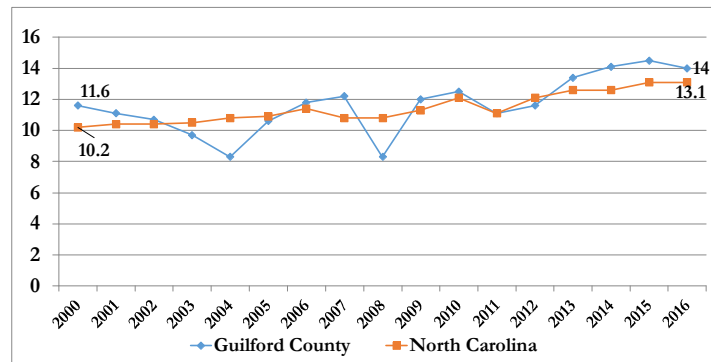
Rate per 100,000



Note: Lung cancer includes cancers of the trachea, bronchus and lungs.
 Note: Rates are not age-adjusted.
 Source: NC State Center for Health Statistics.
 Chart prepared by the GCDHHS, Division of Public Health.

Pancreatic Cancer Mortality, Guilford County and NC, 2000-2016

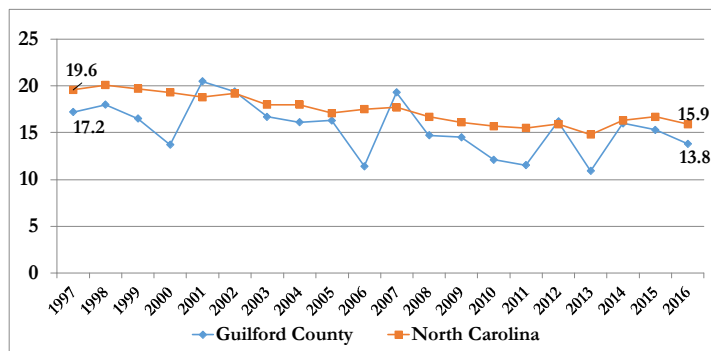
Rate per 100,000



Note: Rates are not age-adjusted.
 Source: NC State Center for Health Statistics.
 Chart prepared by the GCDHHS, Division of Public Health.

Colorectal Cancer Mortality, Guilford County and NC, 1997-2016

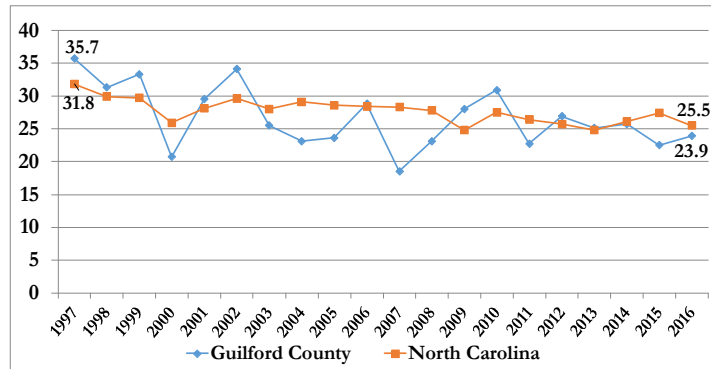
Rate per 100,000



Note: Rates are not age-adjusted.
 Source: NC State Center for Health Statistics.
 Chart prepared by the GCDHHS, Division of Public Health.

Breast Cancer Mortality, Guilford County and NC, 1997-2016

Rate per 100,000

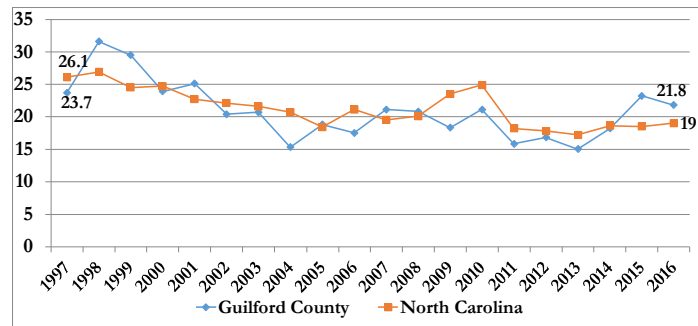


Note: Rates are not age-adjusted.
 Source: NC State Center for Health Statistics.
 Chart prepared by the GCDHHS, Division of Public Health.

Trends in Cancer Mortality Rates

Prostate Cancer Mortality, Guilford County and NC, 1996-2016

Rate per 100,000

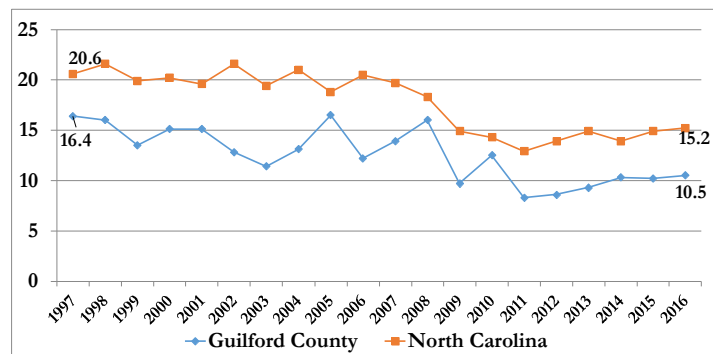


Note: Rates are not age-adjusted.
Source: NC State Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

Trends in Injury Mortality Rates

Motor Vehicle Injury Mortality, Guilford County and NC, 1997-2016

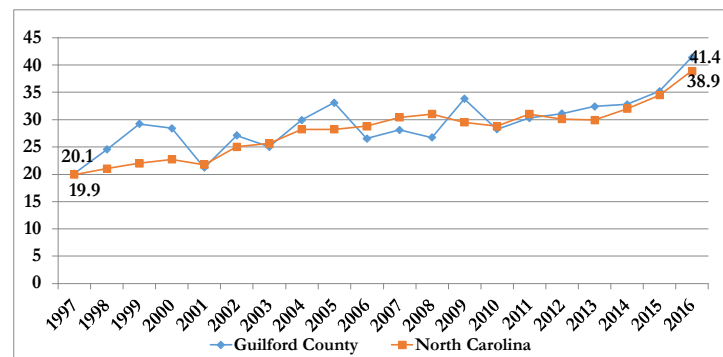
Rate per 100,000



Source: Data provided by the NC Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

Mortality Due to Unintentional Injury Other than Motor Vehicle Injury, 1997-2016

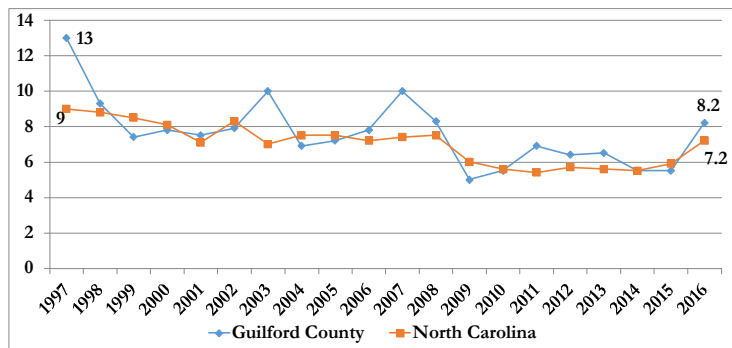
Rate per 100,000



Source: Data provided by the NC Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

Homicide Mortality, Guilford County and NC, 1997-2016

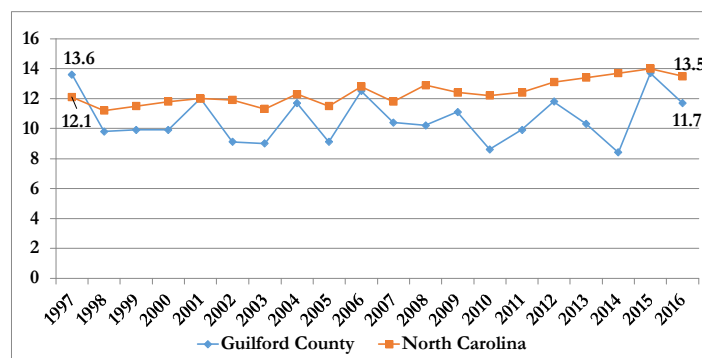
Rate per 100,000



Source: Data provided by the NC Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.

Suicide Mortality, Guilford County and NC, 1997-2016

Rate per 100,000



Source: Data provided by the NC Center for Health Statistics.
Chart prepared by the GCDHHS, Division of Public Health.