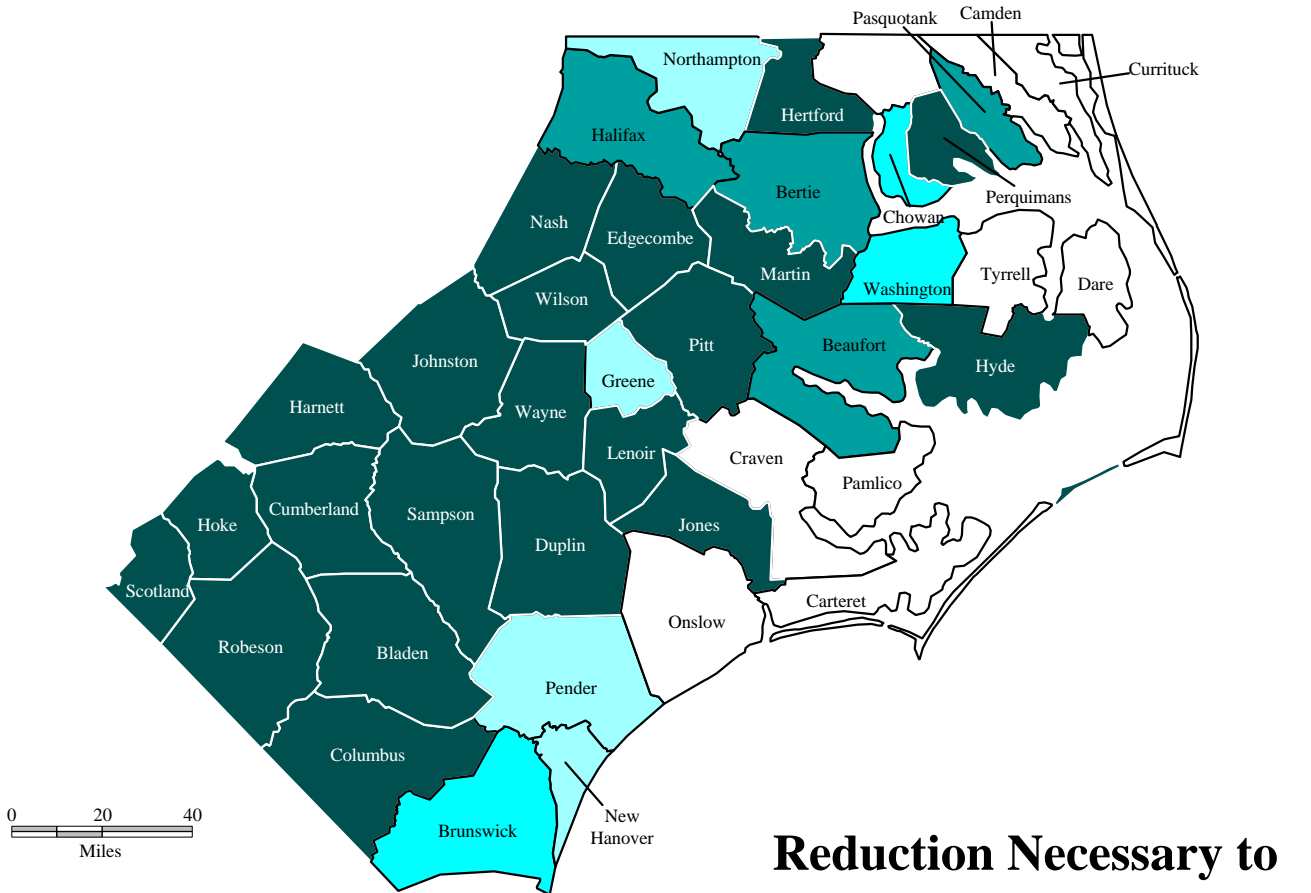


Homicide

Homicide Objectives

Based on 1989-1993 Age-Adjusted Mortality Rates



Reduction Necessary to Reach HP 2000 Objective

□	Met or surpassed objectives	(9)
□	0.1% to 15.0%	(4)
□	15.1% to 30.0%	(3)
□	30.1% to 45.0%	(4)
■	45.1% or more	(21)

Healthy People 2000 Goal
Health Status Objective 7.1:
Reduce Homicide Deaths
to no more than
7.2 per 100,000 Population

HOMICIDE

Homicide is the second leading cause of death among adolescents and young adults (Motor vehicle accidents and injuries rank first). Among black youth, homicide is in fact the most frequent cause of death. This is particularly apparent in North Carolina, where minority men are four times more likely than any other race-sex specific group to die from homicide.¹ Homicide victims are most likely to be men, teenagers, young adults, and members of minority groups. Peer influence appears to have an impact on the probability that one will become a homicide victim. Peers can shape perceptions and opinions regarding drug use, and influence an individual's fears of becoming a victim, tendency to fight, and desire to carry a weapon. Low socioeconomic status and alcohol abuse are also strongly associated with homicide. Moreover, homicide is not uncommon within families. Approximately 17% of homicides occur within a family, with half of these occurring between spouses. Therefore, prevention of spouse abuse may help decrease the incidence of homicide.

Homicide has been a growing problem in North Carolina. Between 1988 and 1989, the state homicide rate increased 20% followed by an increase of 8% in 1990. In 1991, the state homicide rate increased almost 15%. This increase represents the greatest percent change in mortality rate between 1990 and 1991 for all leading causes of death, excluding AIDS.

Crude mortality:

HEALTHY CAROLINIANS 2000 OBJECTIVE

INJURY CONTROL SPECIAL TARGET POPULATION:

Reduce homicides among nonwhite males by 25%. Reduce homicide deaths among nonwhite males to no more than 29.5 per 100,000 population. (Baseline: 40.7 homicide deaths per 100,000 among nonwhite males between 1988-90; 39.3 homicide deaths among nonwhite males projected for the year 2000)

In Eastern North Carolina, the homicide death rate is highest in Hyde County and lowest in Tyrrell County. Lenoir County and the counties west of it exhibit the highest homicide mortality rates.

Age-adjusted mortality by race and gender:

HEALTHY PEOPLE 2000 GOAL

HEALTH STATUS OBJECTIVE 7.1:

Reduce homicides to no more than 7.2 per 100,000 people. (Age-adjusted baseline: 8.5 per 100,000 in 1987)

[In Eastern North Carolina 78% of the counties have homicide mortality rates that fail to meet the national goal.]

HEALTH STATUS OBJECTIVE 7.1A:

Special Population Target: Reduce homicides among children aged 3 and younger to no more than 3.1 per 100,000 people. (Baseline: 3.9 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 7.1B:

Special Population Target: Reduce homicides among spouses aged 15-34 to no more than 1.4 per 100,000 people. (Baseline: 1.7 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 7.1C:

Special Population Target: Reduce homicides among black men aged 15-34 to no more than 72.4 per 100,000 people. (Baseline: 91.1 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 7.1D:

Special Population Target: Reduce homicides among Hispanic men aged 15-34 to no more than 33.0 per 100,000 people. (Baseline: 41.3 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 7.1E:

Special Population Target: Reduce homicides among black women aged 15-34 to no more than 16.0 per 100,000 people. (Baseline: 20.2 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 7.1F:

Special Population Target: Reduce homicides among American Indians/Alaska Natives to no more than 9.0 per 100,000. (Age-adjusted baseline: 11.2 per 100,000 in 1987)

Overall, Hyde County has the highest age-adjusted homicide mortality rate in the region (26.7); whereas, Tyrrell County has the lowest rate (0.0). The distribution of high age-adjusted mortality rates is geographically similar to that of crude rates. Some of the lowest mortality rates appear along the coast in Currituck, Camden, Tyrrell, Dare, Pamlico, Craven, Carteret, and Onslow Counties.

With regard to the nonwhite population, men are 4.3 times more likely than women to die from homicide. Still, some counties report zero homicide deaths for nonwhite males and females. The nonwhite male homicide rate is 0.0 in Currituck, Pamlico, and Tyrrell Counties, and no homicide deaths are reported for nonwhite females in Camden, Carteret, Chowan, Hyde, Jones, and Tyrrell Counties. Of particular note are Dare County's high homicide rate (56.1) for nonwhite females and Hyde County's high homicide rate (84.4) for nonwhite males.

With regard to the white population, men are 2.6 times more likely than women to die from homicide. For white males, no homicide deaths are reported in Camden, Chowan, Gates,

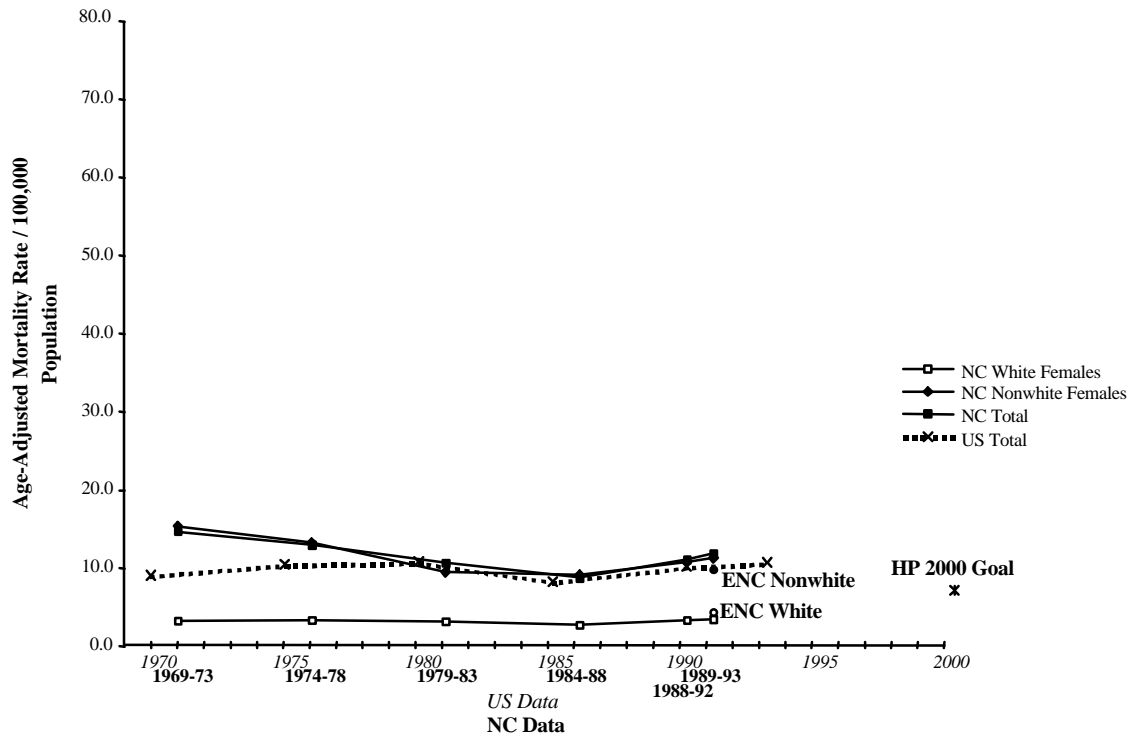
Hertford, and Tyrrell Counties. For white females, the following counties report no homicide deaths: Camden, Chowan, Currituck, Gates, Greene, Halifax, Hertford, Pamlico, Tyrrell, and Washington. The homicide rate is 0.0 for both the white male and white female populations of Camden, Chowan, Gates, Hertford, and Tyrrell Counties. The highest homicide rate for white males (24.4) occurs in Hyde County, and Perquimans County has the highest white female homicide rate (14.5).

The time series charts demonstrate the marked disparity between the white and nonwhite homicide rates. Nonwhite males are 5.3 times more likely than white males to die from homicide. In addition, nonwhite females are 3.2 times more likely than white females to die from homicide.

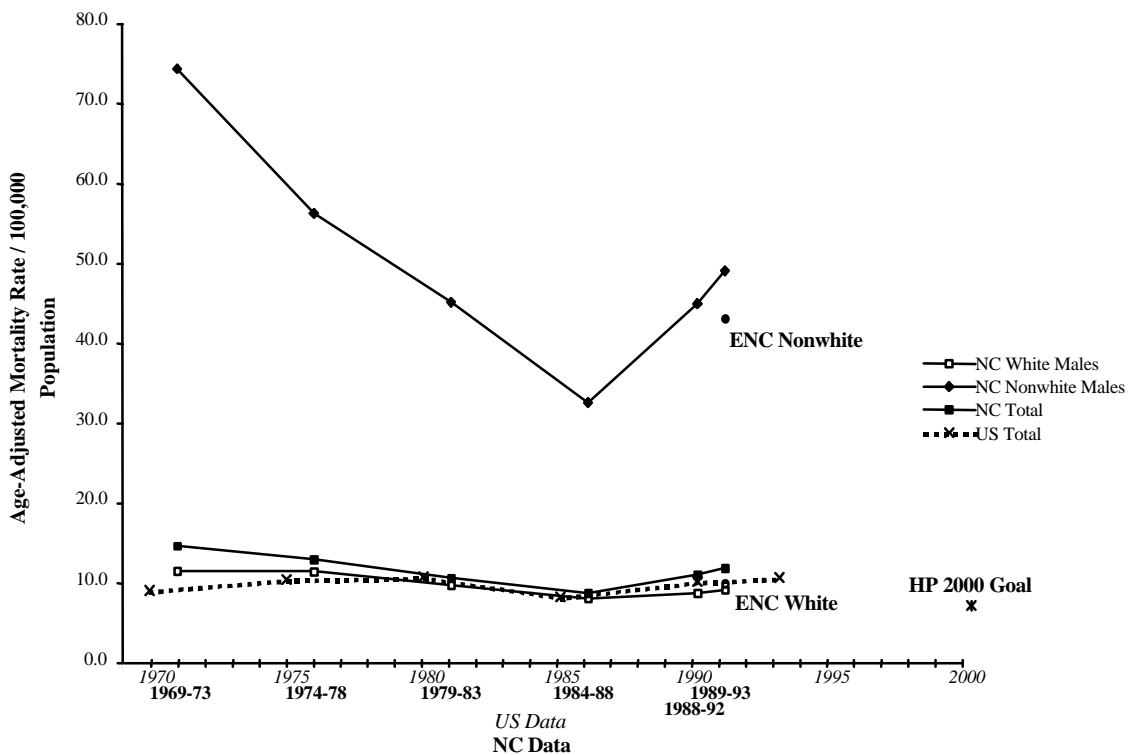
1. Healthy Carolinians 2000: The Report of the Governor's Task Force on Health Objectives for the Year 2000. November 1992. p.4.

Trends in Homicide

Homicide - Female Mortality
US and NC Age-Adjusted Rates, NC Race Specific, 1969-1993



Homicide - Male Mortality
US and NC Age-Adjusted Rates, NC Race Specific, 1969-1993



Sources: NC Five Year Averages - State Center for Health and Environmental Statistics.
 US Individual Years - Monthly Vital Statistics Report.
 HP 2000 Goal - Healthy People 2000: National Health Promotion and Prevention Objectives.
 US Department of Health and Human Services / Public Health Service.

Homicide Eastern North Carolina

County	1990-1994			Race-Gender Specific Age-Adjusted Death Rates 1989-1993				
	Population	Deaths	Crude Death Rate	White Males	White Females	Minority Males	Minority Females	Total
Beaufort	4,272	22	103.0	10.3	3.2	38.4	6.0	11.2
Bertie	20,339	12	11.8	12.8	4.8	18.9	8.9	11.6
Bladen	29,050	26	17.9	12.9	8.2	35.3	20.0	17.7
Brunswick	54,737	26	9.5	11.1	4.6	18.4	9.1	9.0
Camden	6,061	1	3.3	0.0	0.0	27.7	0.0	3.6
Carteret	55,172	16	5.8	3.9	5.2	32.0	0.0	5.3
Chowan	13,793	6	8.7	0.0	0.0	55.3	0.0	9.3
Columbus	50,279	45	17.9	13.3	10.4	75.2	7.0	20.5
Craven	83,077	27	6.5	3.8	0.7	26.6	9.4	6.6
Cumberland	284,444	256	18.0	12.9	5.4	45.9	13.3	16.7
Currituck	14,634	3	4.1	5.8	0.0	0.0	31.3	4.7
Dare	23,529	8	6.8	4.8	4.4	31.8	56.1	6.1
Duplin	41,053	39	19.0	22.7	4.2	59.5	8.9	20.9
Edgecombe	56,731	59	20.8	10.8	9.3	59.9	4.8	21.2
Gates	9,524	1	2.1	0.0	0.0	9.5	8.8	4.4
Greene	15,909	7	8.8	11.3	0.0	15.9	6.0	8.3
Halifax	56,716	38	13.4	11.7	0.0	32.4	5.6	12.8
Harnett	71,111	48	13.5	11.0	3.3	60.9	15.9	14.3
Hertford	22,535	16	14.2	0.0	0.0	52.2	7.1	16.0
Hoke	24,107	27	22.4	23.6	4.1	33.0	14.7	20.5
Hyde	5,405	5	18.5	24.4	11.4	84.4	0.0	26.7
Johnston	86,207	50	11.6	11.5	6.0	60.2	13.2	13.2
Jones	9,467	8	16.9	14.4	8.9	51.9	0.0	16.6
Lenoir	57,955	51	17.6	14.1	3.1	57.3	19.0	20.1
Martin	25,581	22	17.2	17.9	5.5	38.5	13.0	16.7
Nash	79,661	47	11.8	14.6	4.0	40.9	12.9	14.0
New Hanover	127,273	49	7.7	3.7	3.0	42.2	7.7	7.5
Northampton	20,619	10	9.7	7.1	2.7	14.1	5.2	8.0
Onslow	148,571	52	7.0	3.8	5.0	13.2	7.1	5.8
Pamlico	11,538	3	5.2	11.9	0.0	0.0	18.4	7.2
Pasquotank	32,184	14	8.7	8.7	10.2	25.2	6.6	11.5
Pender	31,169	12	7.7	3.7	4.4	20.0	16.8	8.2
Perquimans	10,448	7	13.4	21.6	14.5	53.9	5.6	21.0
Pitt	112,418	86	15.3	9.9	3.4	52.1	8.9	13.4
Robeson	107,143	120	22.4	16.9	7.5	46.3	8.7	20.8
Sampson	48,619	44	18.1	12.2	2.7	50.6	7.3	14.2
Scotland	34,286	24	14.0	6.0	2.3	57.4	12.0	16.0
Tyrrell	3,851	0	0.0	0.0	0.0	0.0	0.0	0.0
Washington	13,913	8	11.5	3.9	0.0	27.4	6.6	9.2
Wayne	107,285	81	15.1	13.3	5.4	49.6	8.7	15.6
Wilson	66,667	65	19.5	13.7	3.3	73.3	9.5	19.8
<hr/>								
29 County Region	1,128,909	714	12.6	9.2 ²	4.0 ²	40.2 ²	8.6 ²	12.5 ²
41 County Region	2,077,334	1,441	13.9	10.0 ²	4.4 ²	43.2 ²	9.9 ²	13.6 ²
North Carolina	6,813,213	4,167	12.2	9.2	3.5	49.1	11.3	11.9
United States	255,039,000	26,009 ⁴	9.6 ¹	8.9 ³	3.0 ³	55.1 ³	10.9 ³	10.7 ³

¹ Number is for 1994 only

³ NC DEHNR, data 1993

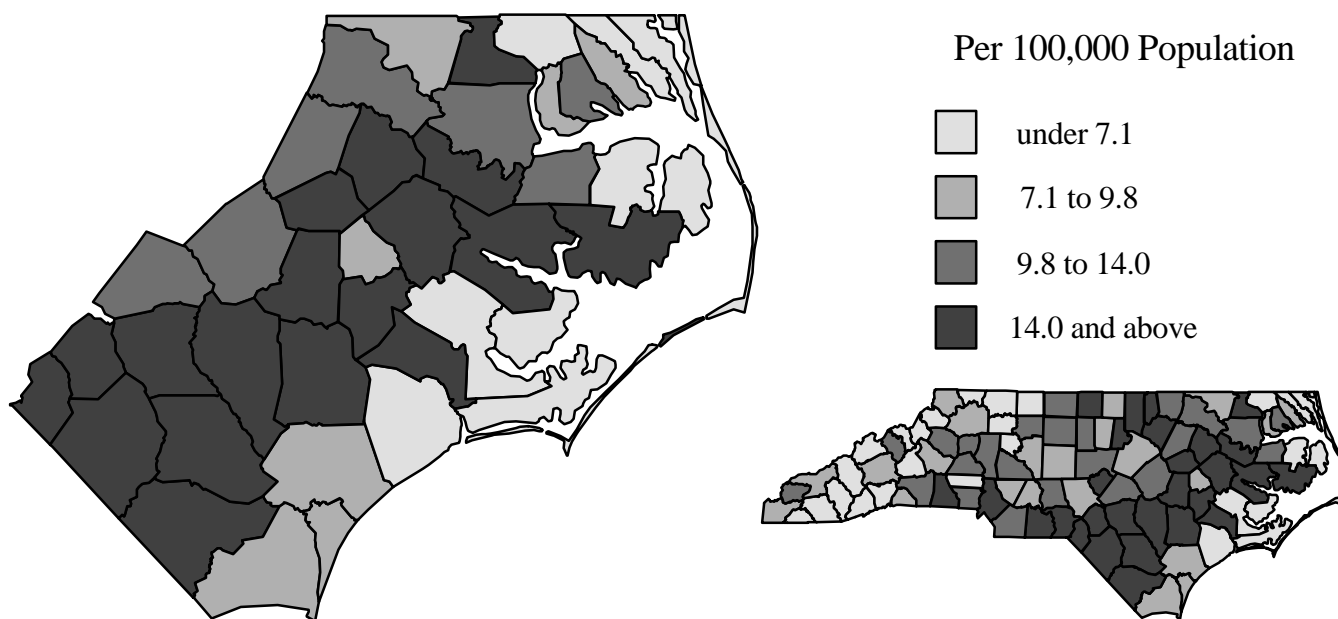
² Estimated

⁴ Health, United States, data 1993

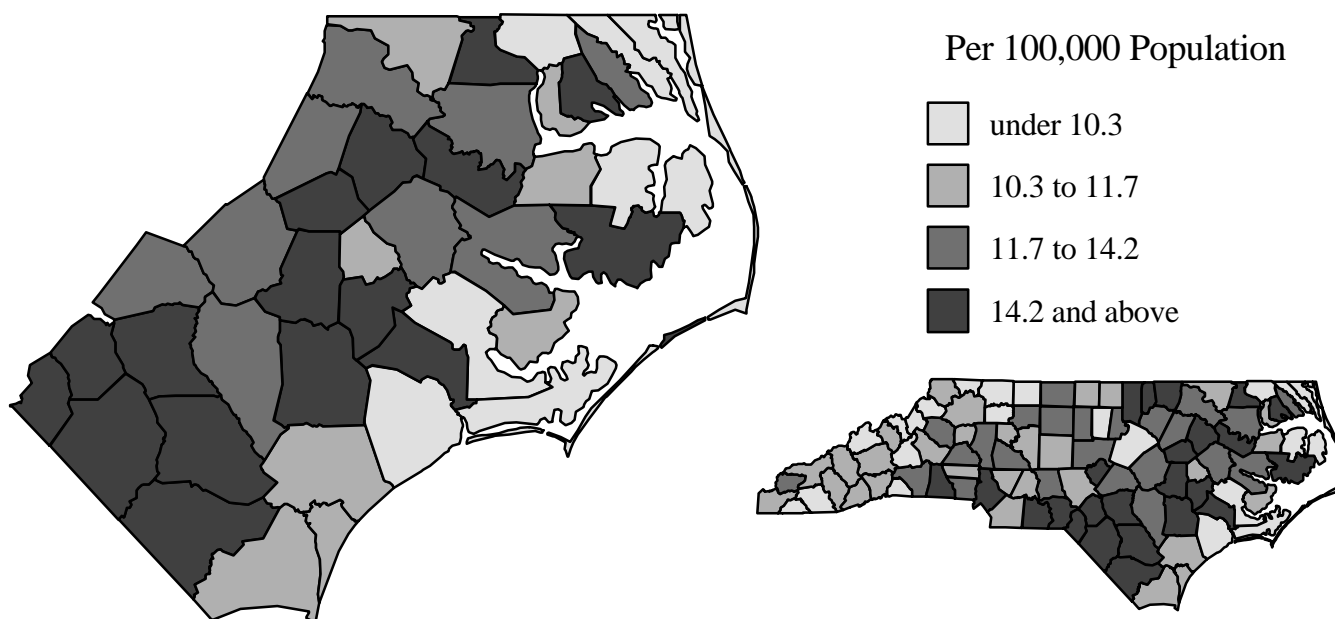
Homicide

Eastern North Carolina

Crude Mortality Rates: 1990 - 1994



Age-Adjusted Mortality Rates: 1989 - 1993

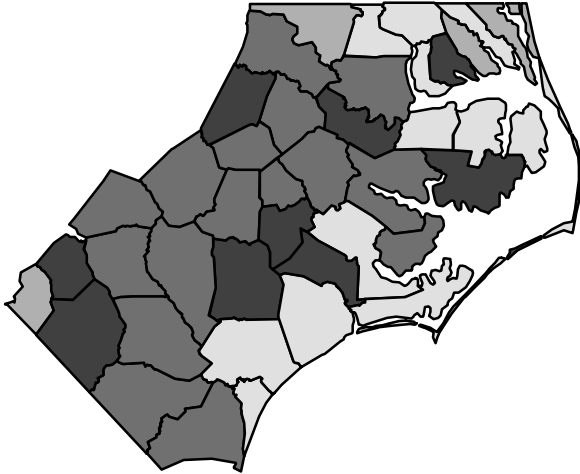


Homicide

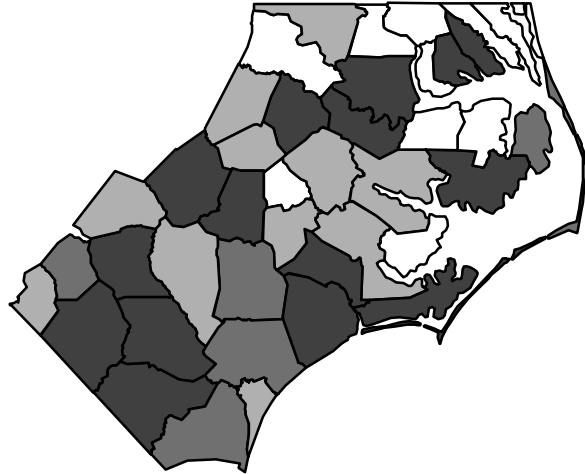
Age-Adjusted Mortality Rates 1989-1993

Per 100,000 Population

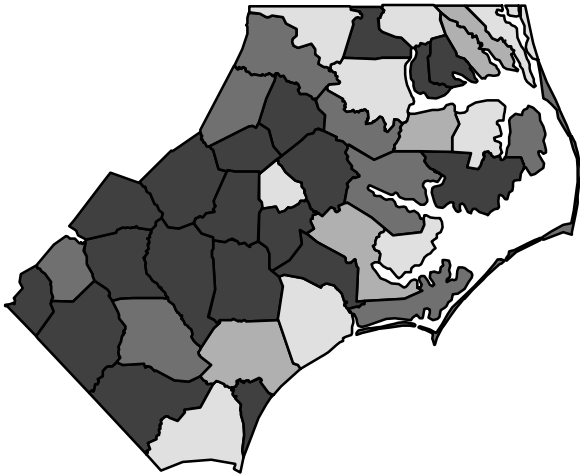
White Males



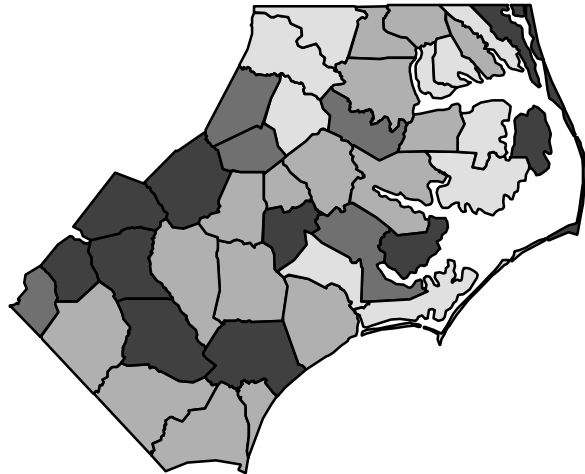
White Females



Nonwhite Males



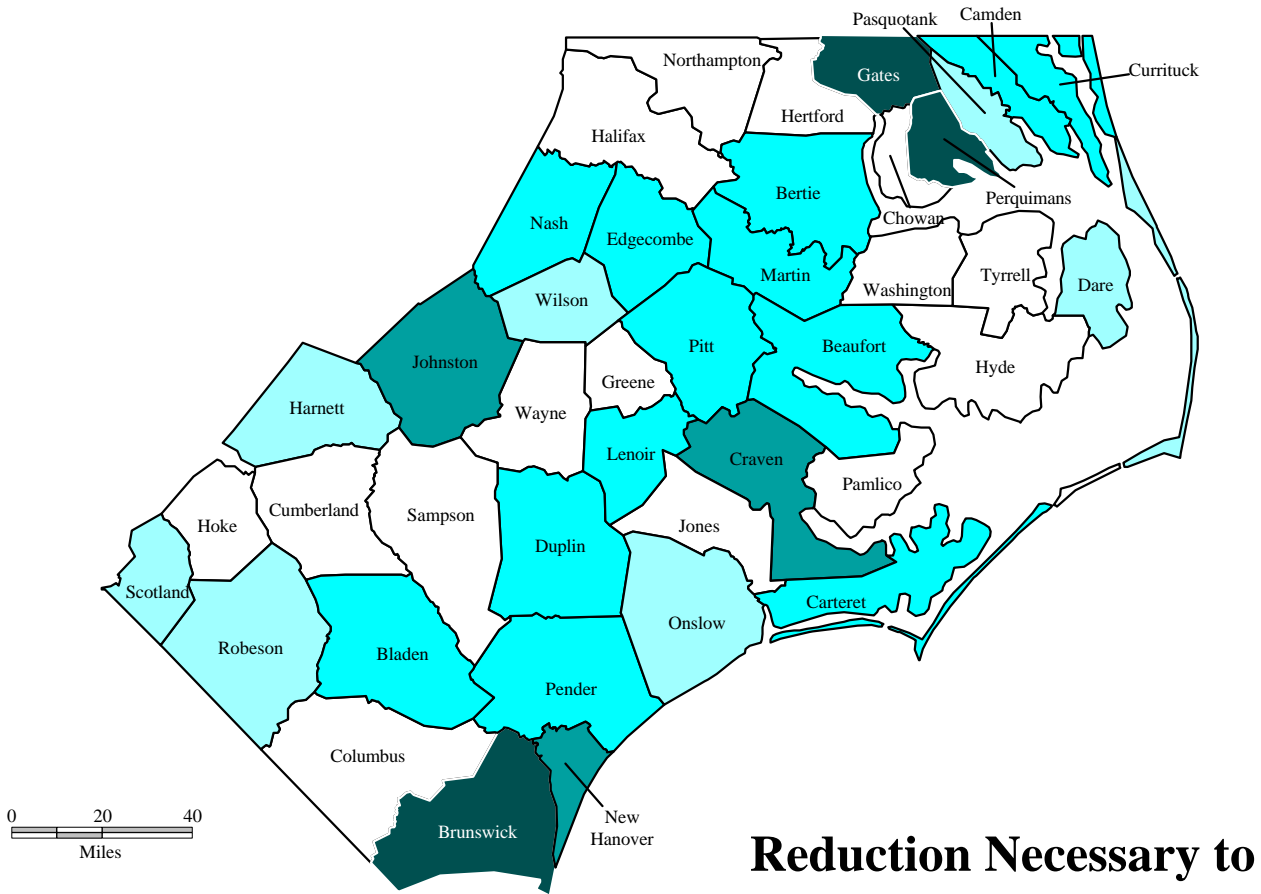
Nonwhite Females



Suicide

Suicide Objectives

Based on 1989-1993 Age-Adjusted Mortality Rates



Reduction Necessary to Reach HP Objective

- Met or surpassed objectives (15)
- 0.1% to 5.0% (7)
- 5.1% to 10.0% (13)
- 10.1% to 15.0% (3)
- 15.1% or more (3)

Healthy People 2000 Goal
Health Status Objective 7.2:
Reduce Suicide Deaths
to no more than
10.5 per 100,000 Population

SUICIDE

Since the 1950s, suicides among youth 15-19 years old have steadily increased in the U.S. By 1986, suicide was the second leading killer of adolescents 15-19. Following increases of 10% and 5% in 1989 and 1990, respectively, the nation's suicide rate has decreased slightly (~2%). Mental illness and mental disorders (e.g. schizophrenia, depression, and drug/alcohol abuse) are strong predictors of suicide. With regard to gender, men, especially those 65 years or older, are more likely than women to commit suicide. Whites and Reservation Indians have higher suicide rates than blacks.

The true incidence of suicide is unknown due to social biases in reporting. Often suicide is viewed as disgraceful and so in order to maintain a deceased person's dignity, a suicide death may be reported as a death caused by unintentional injury.

Crude mortality:

HEALTHY CAROLINIANS 2000 OBJECTIVE

MENTAL HEALTH PRIMARY GOALS:

Decrease by 20% the number of suicides in all age groups. Reduce suicide rate to no more than 10.6 per 100,000 population. (Baseline: 13.1 suicide deaths per 100,000 population between 1988-90; 13.2 suicide deaths per 100,000 projected for the year 2000)

Camden County has the highest suicide crude death rate in Eastern North Carolina (23.2), and Polk County has the highest suicide death rate in the state (26.7). These rates are almost twice those for the region (12.2), state (12.7), and nation (12.0). The highest age-adjusted rates are concentrated in the north-central, northeast, and extreme south of the region.

Age-adjusted mortality by race and gender:

HEALTHY PEOPLE 2000 GOAL

HEALTH STATUS OBJECTIVE 7.2:

Reduce suicides to no more than 10.5 per 100,000 people. (Age-adjusted baseline: 11.7 per 100,000 in 1987)

[Twenty-six (63%) of the region's 41 counties currently fail to meet the national objective.]

HEALTH STATUS OBJECTIVE 7.2A:

Special Population Target: Reduce suicides among youth aged 15-19 to no more than 8.2 per 100,000. (Baseline: 10.2 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 7.2B:

Special Population Target: Reduce suicides among men aged 20-34 to no more than 21.4 per 100,000. (Baseline: 25.2 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 7.2C:

Special Population Target: Reduce suicides among white men aged 65 and older to no more than 39.2 per 100,000. (Baseline: 46.7 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 7.2D:

Special Population Target: Reduce suicides among American Indian/Alaska Native men in Reservation states to no more than 17.0 per 100,000. (Age-adjusted baseline: 20.1 per 100,000 in 1987)

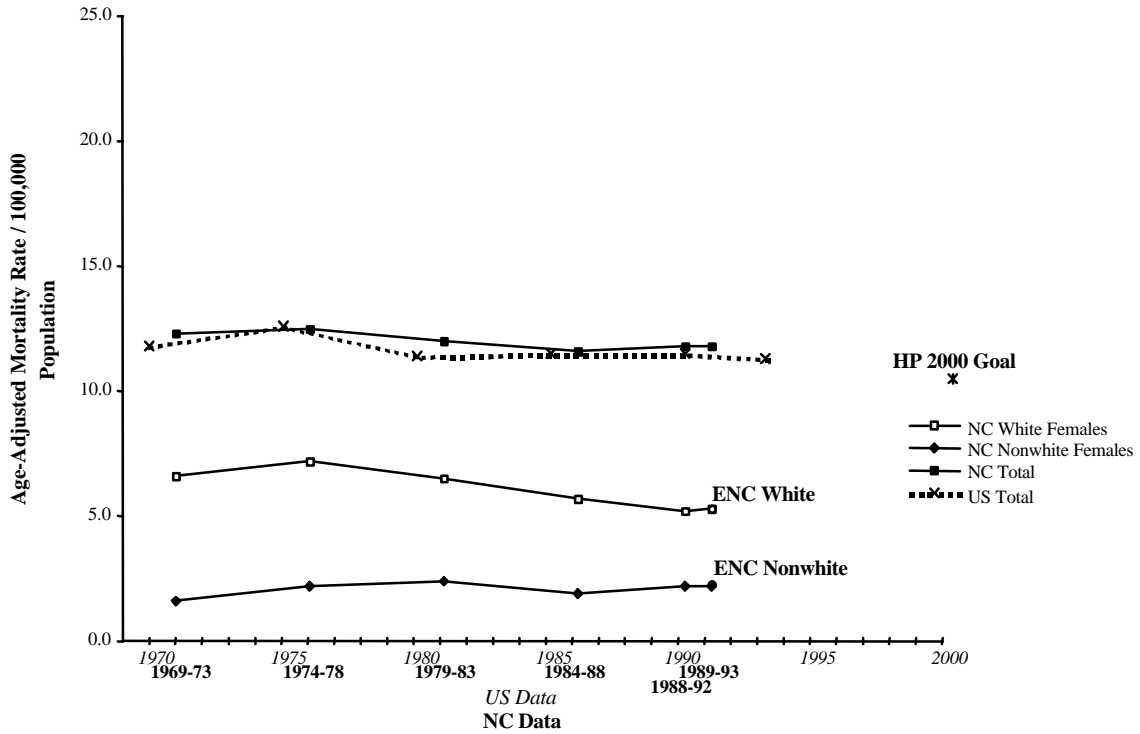
The age-adjusted suicide mortality rates in Eastern North Carolina range from 0.0 to 17.5 per 100,000. Tyrrell County, which has an age-adjusted mortality rate of 0.0 for its total population, reports the lowest suicide rate in the region. Brunswick County, on the other hand, has the highest age-adjusted suicide mortality rate in the region (17.5). High age-adjusted mortality rates from suicide occur predominantly along the coast, as do high crude mortality rates.

As the time series charts indicate for the state and nation, suicide deaths occur more often in the white population than in the nonwhite population. White females are 2.4 times more likely than nonwhite females to commit suicide. In addition, white males are 1.8 times more likely than nonwhite males to die from suicide. Still, some counties report zero suicide deaths for white males and white females. For white males, no suicide deaths were reported in Hyde and Tyrrell Counties. For white females, no suicide deaths were reported in Greene, Hoke, Jones, Martin, Perquimans, Tyrrell, and Washington Counties.

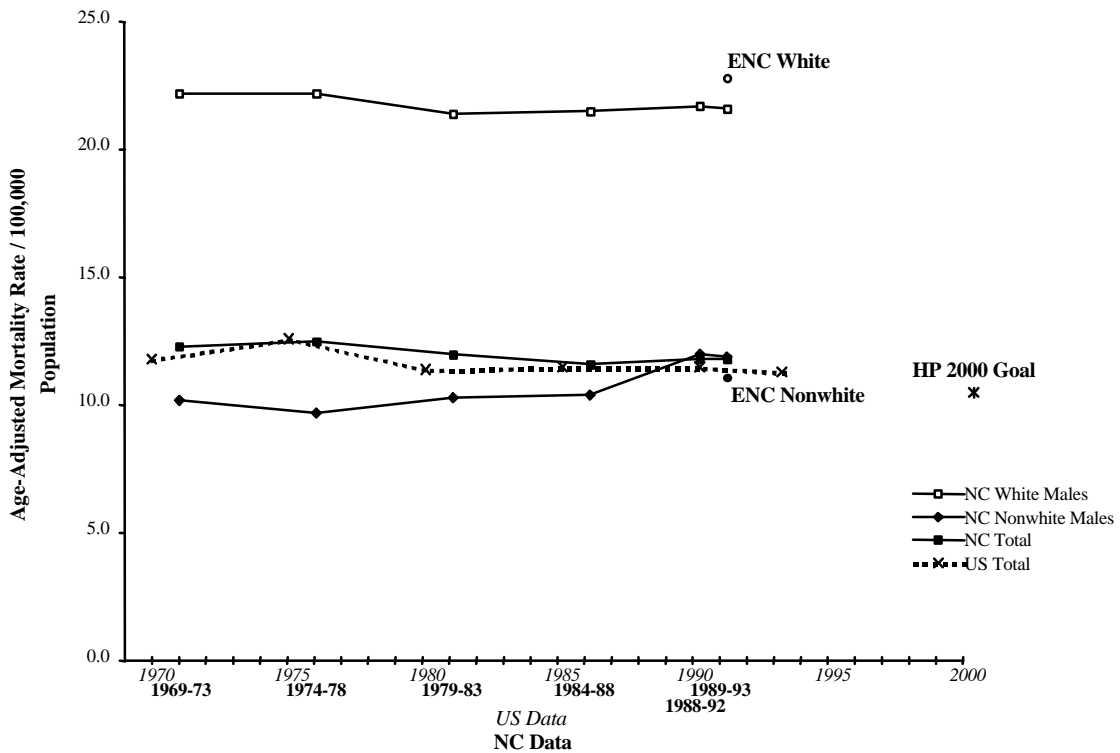
Disparity between suicide rates in men and women exist for both whites and nonwhites. The largest gender gap occurs in the nonwhite population, where men are 5.4 times more likely than females to die from suicide. In the white population, the suicide mortality rate for men is 4.1 times greater than the rate for females. With regard to the nonwhite population, 19 (46.3%) of the 41 counties in the region report a mortality rate of 0.0 for females, but only six counties (Dare, Duplin, Hyde, Jones, Pamlico, and Tyrrell) report a suicide rate of 0.0 for males.

Trends in Suicide

Suicide - Female Mortality
US and NC Age-Adjusted Rates, NC Race Specific, 1969-1993



Suicide - Male Mortality
US and NC Age-Adjusted Rates, NC Race Specific, 1969-1993



Sources: NC Five Year Averages - State Center for Health and Environmental Statistics.
 US Individual Years - Monthly Vital Statistics Report.
 HP 2000 Goal - Healthy People 2000: National Health Promotion and Prevention Objectives.
 US Department of Health and Human Services / Public Health Service.

Suicide Eastern North Carolina

County	1990-1994			Race-Gender Specific Age-Adjusted Death Rates 1989-1993				
	Population	Deaths	Crude Death Rate	White Males	White Females	Minority Males	Minority Females	Total
Beaufort	42,735	25	11.7	28.1	7.8	3.4	4.8	13.1
Bertie	20,438	14	13.7	47.0	6.7	7.6	0.0	12.7
Bladen	28,986	20	13.8	26.4	2.1	9.4	7.4	11.9
Brunswick	54,857	48	17.5	36.3	3.6	13.8	0.0	17.5
Camden	6,034	7	23.2	22.3	4.7	14.5	0.0	11.8
Carteret	54,930	39	14.2	19.4	6.9	7.4	8.6	12.8
Chowan	13,793	4	5.8	3.8	1.7	20.9	6.6	6.8
Columbus	50,000	28	11.2	22.1	4.4	8.9	0.0	9.9
Craven	83,333	55	13.2	25.2	5.2	16.7	1.9	13.5
Cumberland	283,810	149	10.5	19.3	5.9	9.1	1.5	10.2
Currituck	14,493	15	20.7	18.4	3.2	45.8	0.0	12.2
Dare	23,704	16	13.5	17.4	5.8	0.0	0.0	11.0
Duplin	41,060	31	15.1	31.7	5.6	0.0	0.0	12.1
Edgecombe	56,693	36	12.7	33.9	4.8	12.3	0.8	11.9
Gates	9,524	10	21.0	24.8	20.1	26.0	0.0	17.0
Greene	15,789	6	7.6	12.1	0.0	7.9	8.3	6.1
Halifax	56,566	28	9.9	24.2	5.5	8.9	1.5	10.0
Harnett	71,186	42	11.8	18.3	4.7	18.0	2.3	11.1
Hertford	22,535	8	7.1	3.4	7.1	13.5	0.0	5.7
Hoke	24,138	7	5.8	11.5	0.0	2.7	4.0	4.6
Hyde	5,405	2	7.4	0.0	24.0	0.0	0.0	8.3
Johnston	86,550	74	17.1	30.1	3.9	3.1	8.9	14.6
Jones	9,428	0	0.0	10.8	0.0	0.0	0.0	2.9
Lenoir	58,015	38	13.1	28.7	2.8	14.2	0.0	12.0
Martin	25,455	14	11.0	27.3	0.0	28.4	0.0	12.8
Nash	79,710	55	13.8	27.8	2.6	10.4	5.8	12.5
New Hanover	127,632	97	15.2	26.3	7.9	13.2	1.8	15.0
Northampton	20,833	5	4.8	19.5	1.6	10.0	3.6	8.3
Onslow	148,571	78	10.5	17.4	5.8	10.3	6.1	11.1
Pamlico	11,570	7	12.1	24.0	4.4	0.0	0.0	10.2
Pasquotank	32,075	17	10.6	18.0	10.8	9.5	0.0	10.9
Pender	31,250	20	12.8	21.5	6.4	19.3	2.4	12.9
Perquimans	10,417	5	9.6	32.3	0.0	17.5	15.8	16.2
Pitt	112,409	77	13.7	25.2	8.3	12.4	0.0	12.7
Robeson	107,018	61	11.4	29.2	2.9	12.1	3.4	11.0
Sampson	48,333	29	12.0	21.7	3.1	10.0	0.0	9.4
Scotland	34,409	16	9.3	17.0	5.7	17.6	6.6	11.6
Tyrrell	3,851	0	0.0	0.0	0.0	0.0	0.0	0.0
Washington	13,953	6	8.6	17.4	0.0	6.9	6.3	8.8
Wayne	107,368	51	9.5	19.2	4.5	4.9	0.0	8.8
Wilson	66,667	53	15.9	20.0	7.1	21.5	1.3	11.7
29 County Region								
	1,167,355	702	12.0	22.2 ²	5.5 ²	11.4 ²	2.0 ²	11.3 ²
41 County Region								
	2,115,523	1,293	12.2	22.8 ²	5.3 ²	11.1 ²	2.3 ²	11.5 ²
North Carolina								
	6,846,572	4,346	12.7	21.6	5.3	11.9	2.2	11.8
United States								
	255,039,000	31,102 ⁴	12.0 ¹	19.7 ³	4.6 ³	12.4 ³	2.6 ³	11.3 ³

¹ Number is for 1994 only

³ NC DEHNR, data 1993

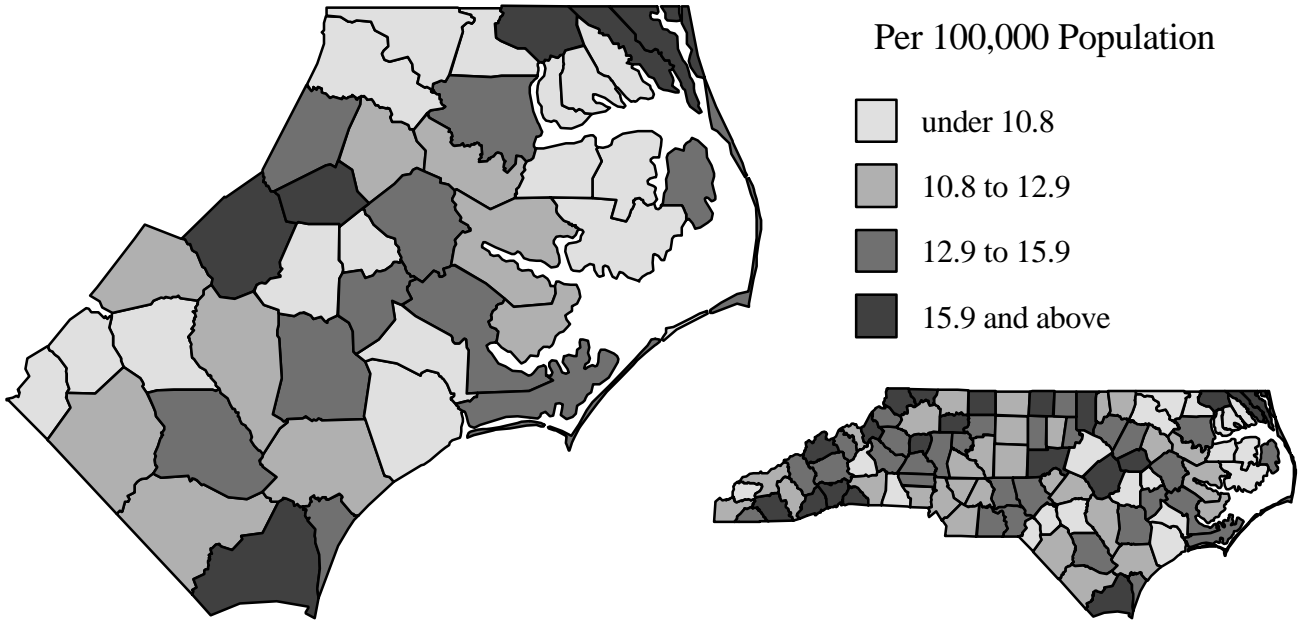
² Estimated

⁴ Health, United States, data 1993

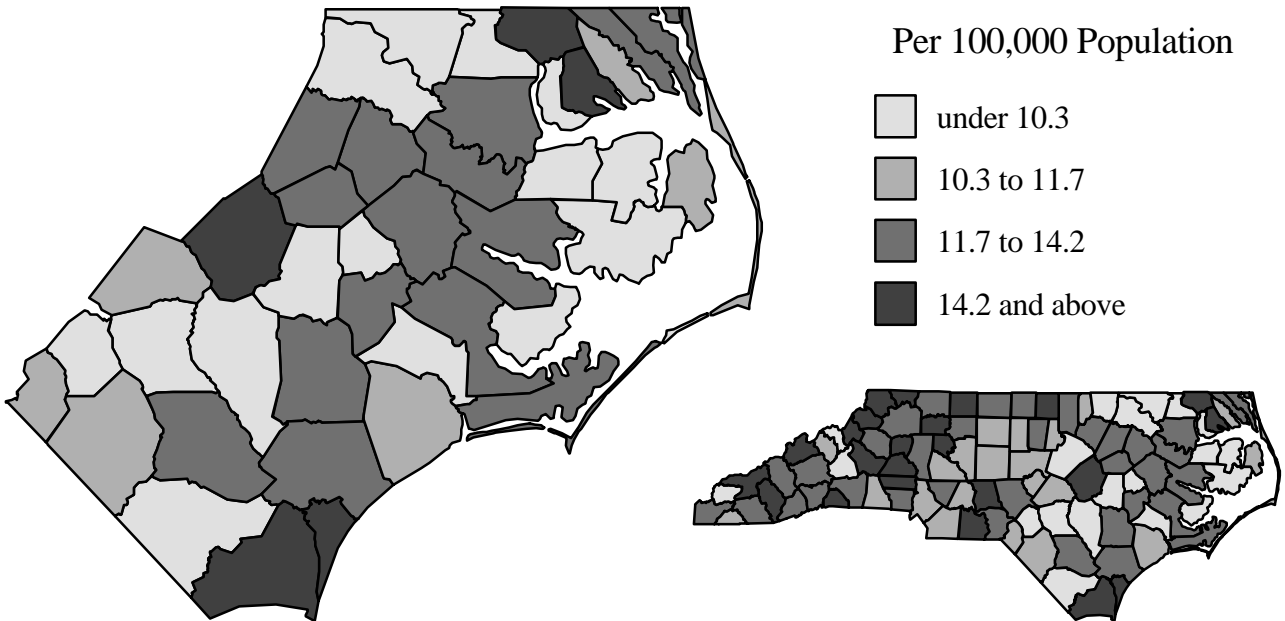
Suicide

Eastern North Carolina

Crude Mortality Rates: 1990 - 1994



Age-Adjusted Mortality Rates: 1989 - 1993

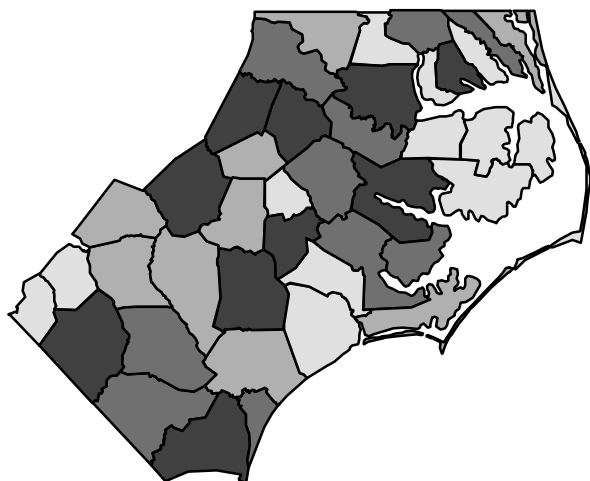


Suicide

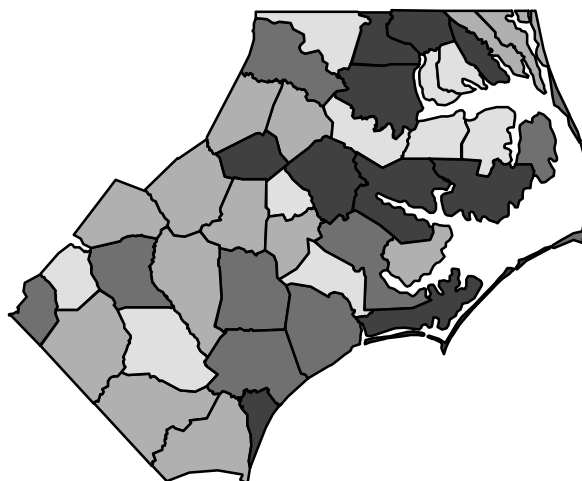
Age-Adjusted Mortality Rates 1989-1993

Per 100,000 Population

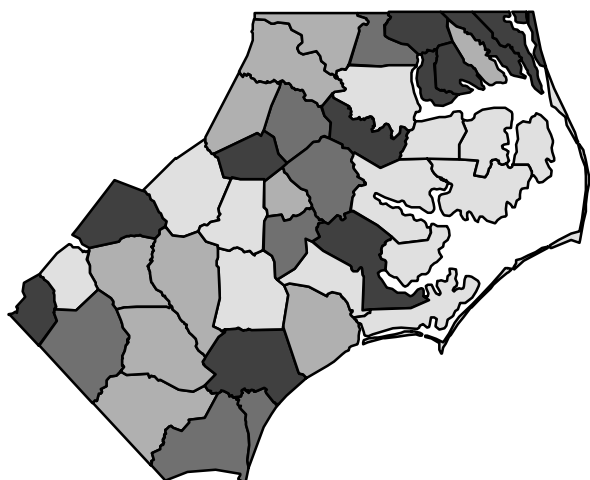
White Males



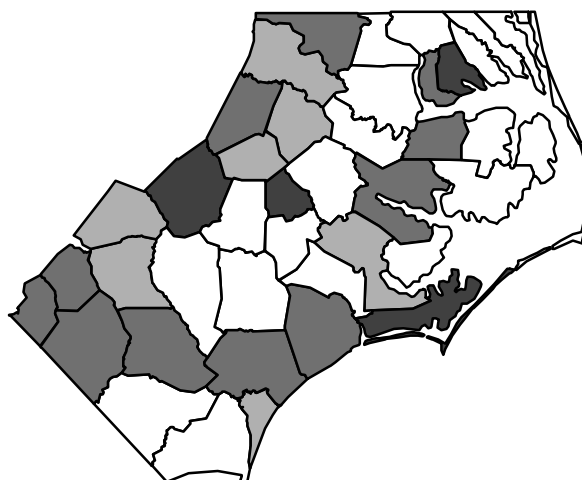
White Females



Nonwhite Males



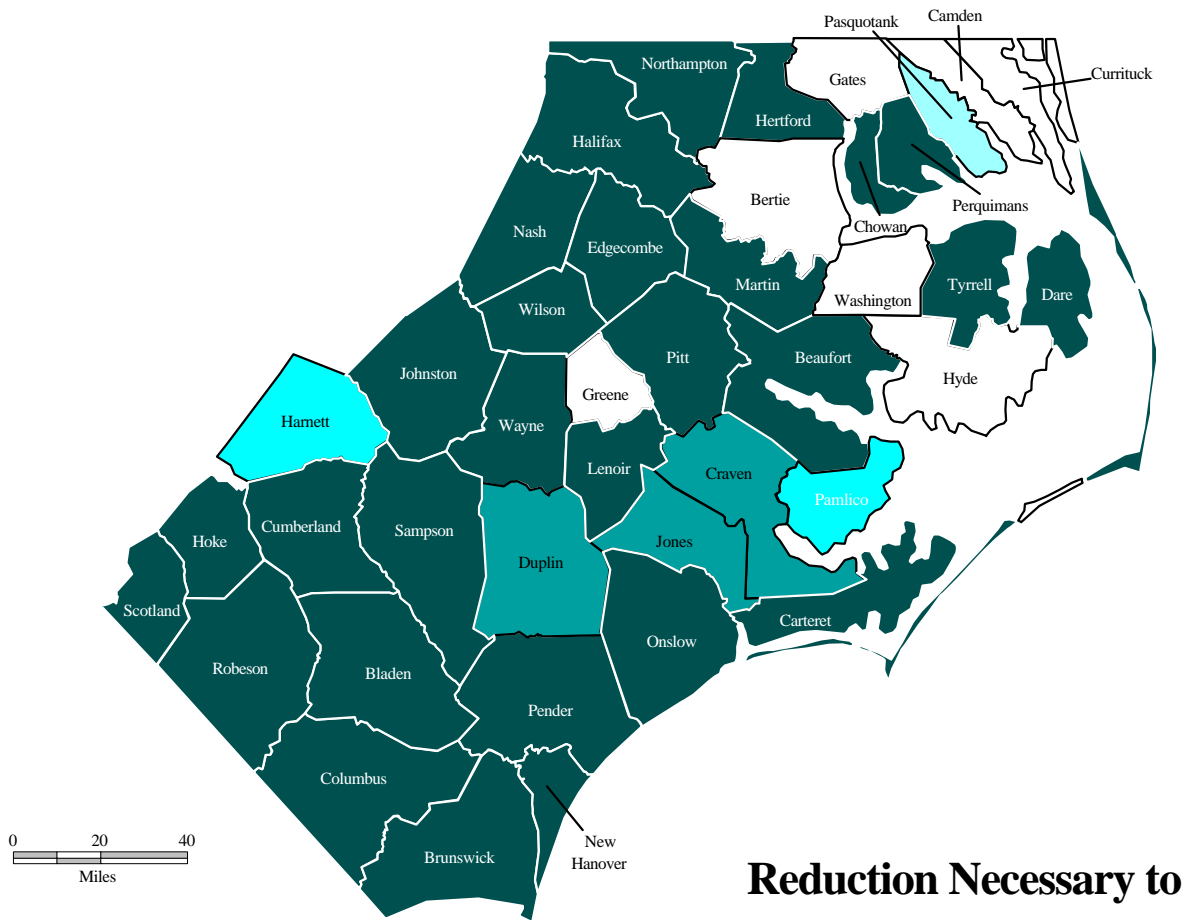
Nonwhite Females



Chronic Liver Disease and Cirrhosis

Chronic Liver Disease and Cirrhosis Objectives

Based on 1989-1993 Age-Adjusted Mortality Rates



Reduction Necessary to Reach HP 2000 Objective

- ☐ Met or surpassed objectives (7)
- ☐ 0.1% to 10.0% (1)
- ☐ 10.1% to 20.0% (2)
- ☐ 20.1% to 30.0% (3)
- ☐ 30.1% or more (28)

Healthy People 2000 Goal

Health Status Objective 4.2:

Reduce Liver Disease Deaths to no more than 6.0 per 100,000 Population

Mortality Source: NC State Center for Health and Environmental Statistics

CHRONIC LIVER DISEASE AND CIRRHOSIS

Chronic liver disease and cirrhosis arise primarily from excessive alcohol consumption, so prevention of alcohol abuse is the key to reducing disease rates. Chronic liver disease and cirrhosis disproportionately affect nonwhite populations. The number of deaths attributed to liver disease and cirrhosis has declined more rapidly among black and Native American women than among white males, but still the total rate for nonwhites remains almost 70% higher than the rate for whites. This trend is particularly evident for the American Indian male population, which experiences mortality rates three times the rate of white men.¹

Crude mortality:

Chowan County, the county with the highest chronic liver disease and cirrhosis mortality (crude) in the eastern region of the state, has a death rate of 21.7 deaths per 100,000 population. Gates County has the lowest mortality rate attributed to liver disease and cirrhosis (2.1). Chowan County's mortality rate is also the highest in the state. Gates County has the lowest mortality rate in the state. Of the ten counties with the highest mortality rates in the state, six of these are located in Eastern North Carolina.

Age-adjusted mortality by race and gender:

HEALTHY PEOPLE 2000 GOAL

HEALTH STATUS OBJECTIVE 4.2:

Reduce cirrhosis deaths to no more than 6 per 100,000 people. (Age-adjusted baseline: 9.2 per 100,000 in 1987)

[Currently, 83% of the counties in Eastern North Carolina fail to meet this goal; therefore, chronic liver disease and cirrhosis warrants considerable attention. The age-adjusted mortality rates range from 0.8 in Gates County to 16.7 in Hertford County.]

HEALTH STATUS OBJECTIVE 4.2A:

Special Population Target: Reduce cirrhosis deaths among black males to no more than 12 per 100,000. (Baseline: 22.6 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 4.2B:

Special Population Target: Reduce cirrhosis deaths among American Indians/Alaska Natives to no more than 10 per 100,000. (Baseline: 20.5 per 100,000 in 1987)

HEALTH STATUS OBJECTIVE 4.2C:

Special Population Target: Reduce cirrhosis deaths among Hispanics to no more than 10 per 100,000. (Baseline: 14.2 per 100,000 in 1990)

The region's highest age-adjusted death rate for chronic liver disease and cirrhosis (16.7) is in Hertford County; while the lowest rate (0.8) is found in Gates County. In some counties there are no deaths attributed to chronic liver disease/cirrhosis. Gates County reports a death rate of 0.0 for the white male population while Camden, Currituck, Hoke, Tyrrell, and Washington counties have a white female mortality rate of 0.0. There are a greater number of counties that report a mortality rate of 0.0 for the nonwhite population. The following counties report a mortality rate of 0.0 for nonwhite females: Bertie, Camden, Currituck, Dare, Duplin, Gates, Greene, Hyde, Jones, Perquimans, and Washington. Regarding nonwhite males, Camden, Currituck, Gates, Greene, and Hyde Counties report zero deaths per 100,000.

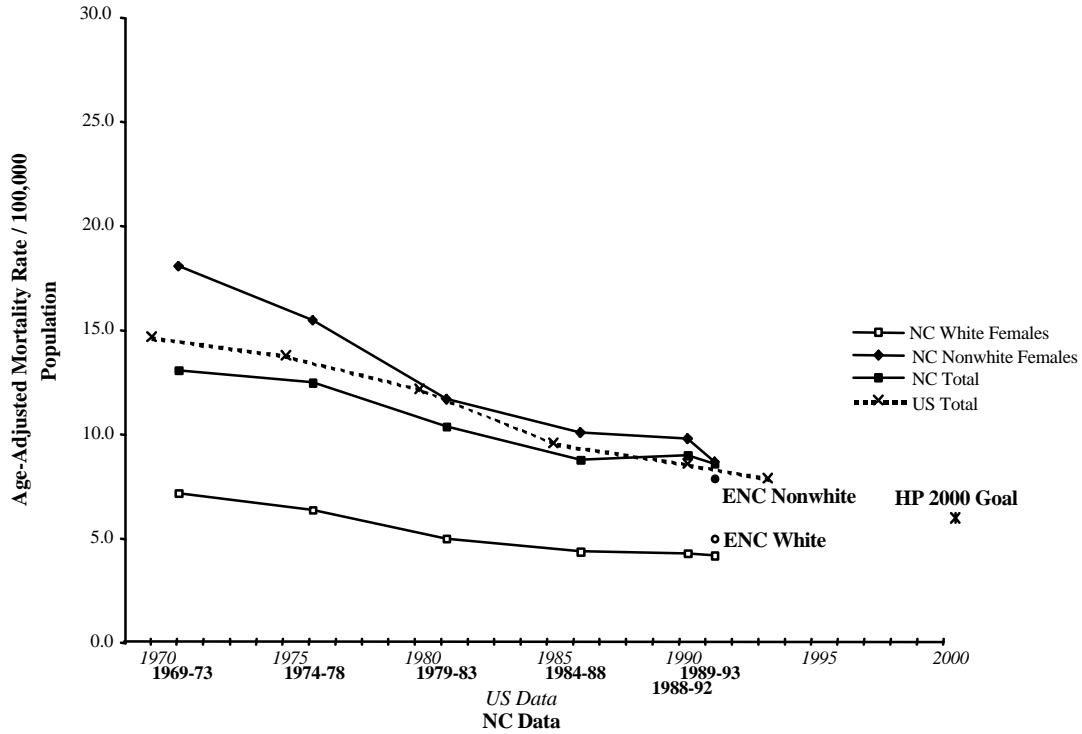
As shown by the time series charts of age-adjusted rates by gender and race, the nonwhite population suffers disproportionately from chronic liver disease and cirrhosis. Nonwhite women are 2.1 times more likely than white women to die from chronic liver disease and cirrhosis, and nonwhite men are 1.8 times more likely than white men to die from this. Mortality rates for chronic liver disease and cirrhosis vary the greatest among nonwhite males, ranging from 0.0 (Camden, Currituck, Gates, Greene, and Hyde Counties) to 32.1 (Tyrrell County).

Considering that men are more likely than women to die from chronic liver disease and cirrhosis, it is not surprising that the gender gap in rates is wider than the racial gap. The mortality rate for liver disease and cirrhosis in white males is 2.6 times greater than the rate for white females, and the nonwhite male rate is 2.3 times greater than the rate for nonwhite females.

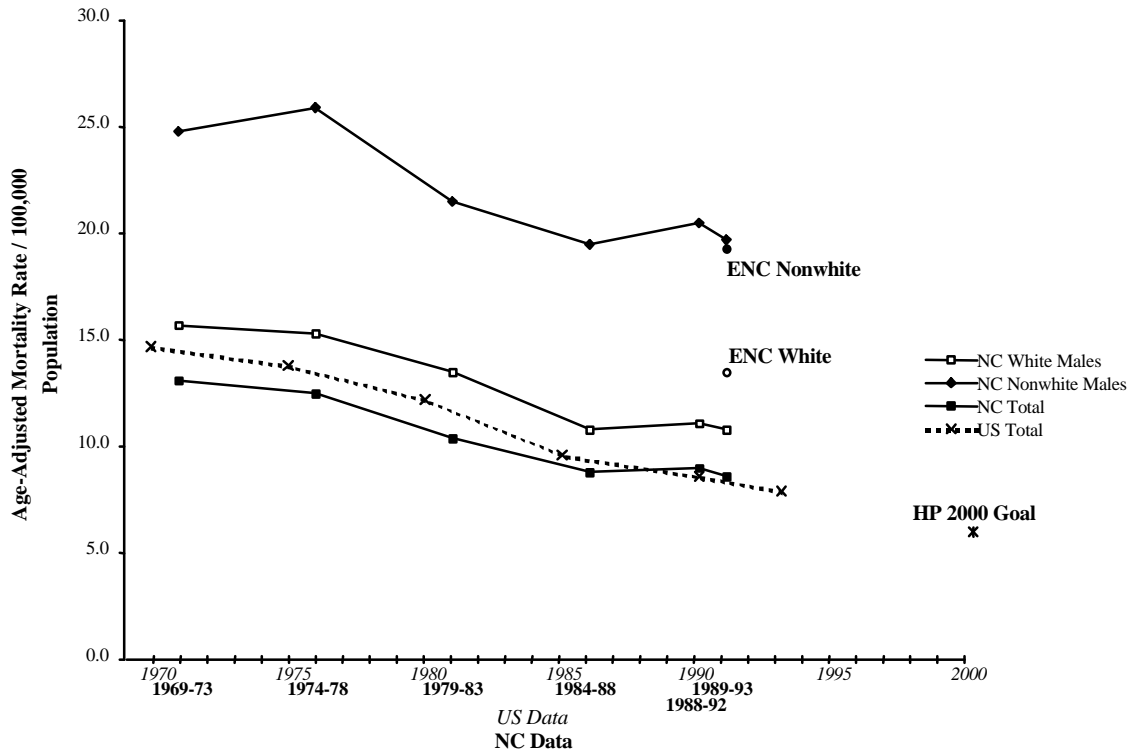
1. Healthy People 2000: National Health Promotion and Disease Prevention Objectives. U.S. Department of Health and Human Services/Public Health Service. "Alcohol and Other Drugs." p.167.

Trends in Chronic Liver Disease and Cirrhosis

Chronic Liver Disease and Cirrhosis - Female Mortality
 US and NC Age-Adjusted Rates, NC Race Specific, 1969-1993



Chronic Liver Disease and Cirrhosis - Male Mortality
 US and NC Age-Adjusted Rates, NC Race Specific, 1969-1993



Sources: NC Five Year Averages - State Center for Health and Environmental Statistics.
 US Individual Years - Monthly Vital Statistics Report.
 HP 2000 Goal - Healthy People 2000: National Health Promotion and Prevention Objectives.
 US Department of Health and Human Services / Public Health Service.

Chronic Liver Disease and Cirrhosis Eastern North Carolina

County	1990-1994			Race-Gender Specific Age-Adjusted Death Rates 1989-1993				
	Population	Deaths	Crude Death Rate	White Males	White Females	Minority Males	Minority Females	Total
Beaufort	42,623	26	12.2	14.4	3.5	26.0	6.5	10.3
Bertie	20,513	8	7.8	11.3	10.7	2.6	0.0	5.5
Bladen	29,008	19	13.1	15.8	3.3	19.0	9.7	11.0
Brunswick	54,667	41	15.0	6.9	10.1	24.2	4.1	9.2
Camden	6,061	1	3.3	7.8	0.0	0.0	0.0	3.1
Carteret	54,839	34	12.4	12.3	5.1	15.2	19.1	9.4
Chowan	13,825	15	21.7	23.3	4.5	12.3	9.7	12.7
Columbus	50,370	34	13.5	12.3	7.2	17.1	7.0	10.2
Craven	82,979	39	9.4	12.5	5.2	13.4	3.8	8.4
Cumberland	283,544	112	7.9	11.5	3.2	19.8	9.9	9.5
Currituck	14,545	8	11.0	13.6	0.0	0.0	0.0	5.7
Dare	23,529	12	10.2	12.2	4.3	38.1	0.0	8.7
Duplin	40,909	18	8.8	14.3	3.3	13.5	0.0	7.7
Edgecombe	56,627	47	16.6	22.9	5.9	20.4	12.3	15.0
Gates	9,524	1	2.1	0.0	2.0	0.0	0.0	0.8
Greene	15,789	3	3.8	3.0	4.4	0.0	0.0	2.2
Halifax	56,471	48	17.0	12.4	3.9	30.1	12.2	13.9
Harnett	71,233	26	7.3	7.2	5.8	8.5	6.7	6.9
Hertford	22,485	19	16.9	21.9	2.2	26.2	16.6	16.7
Hoke	24,194	15	12.4	19.9	0.0	26.4	12.0	14.5
Hyde	5,405	2	7.4	8.7	5.1	0.0	0.0	4.9
Johnston	86,667	52	12.0	13.4	6.6	25.1	6.1	10.5
Jones	9,434	5	10.6	5.7	9.0	19.9	0.0	7.8
Lenoir	58,065	36	12.4	11.2	2.9	25.9	10.1	10.2
Martin	25,600	16	12.5	10.8	11.5	15.1	9.0	11.3
Nash	79,688	51	12.8	15.7	7.6	26.3	11.4	13.4
New Hanover	127,660	90	14.1	15.6	6.0	18.0	12.3	11.1
Northampton	20,690	15	14.5	23.2	6.0	18.8	5.5	12.4
Onslow	147,692	48	6.5	17.4	7.3	17.5	2.3	11.8
Pamlico	11,538	6	10.4	2.3	4.4	30.3	13.1	7.2
Pasquotank	32,258	10	6.2	4.4	5.0	8.7	9.7	6.4
Pender	31,148	19	12.2	9.8	4.5	24.3	7.5	9.2
Perquimans	10,435	6	11.5	15.8	8.2	13.5	0.0	10.5
Pitt	112,500	63	11.2	18.5	3.3	21.2	6.5	11.3
Robeson	107,018	61	11.4	14.6	4.3	16.5	9.1	11.1
Sampson	48,684	37	15.2	15.2	5.6	12.9	2.1	8.9
Scotland	34,091	15	8.8	17.4	2.8	5.5	7.5	8.9
Tyrrell	3,846	2	10.4	8.9	0.0	32.1	21.1	13.1
Washington	13,793	2	2.9	2.1	0.0	14.9	0.0	3.2
Wayne	106,931	54	10.1	11.7	3.8	27.1	6.8	10.0
Wilson	66,667	50	15.0	18.0	1.6	29.3	5.2	11.1
29 County Region								
	1,165,260	645	11.1	14.3 ²	4.8 ²	20.3 ²	7.3 ²	10.5 ²
41 County Region								
	2,113,541	1,166	11.0	13.5 ²	5.0 ²	19.3 ²	7.9 ²	10.2 ²
North Carolina								
	6,833,663	3,451	10.1	10.8	4.2	19.7	8.7	8.6
United States								
	255,039,000	14,793 ⁴	9.8 ¹	10.8 ³	4.6 ³	13.8 ³	6.2 ³	7.9 ³

¹ Number is for 1994 only

² Estimated

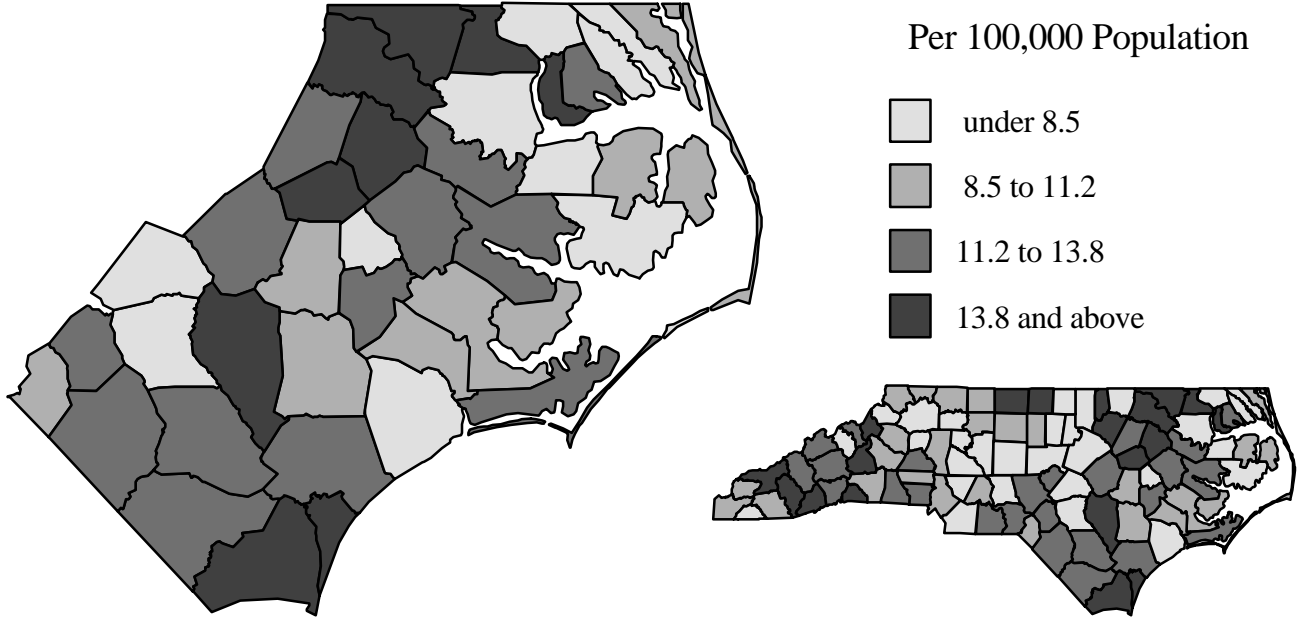
³ NC DEHNR, data 1993

⁴ Health, United States, data 1993

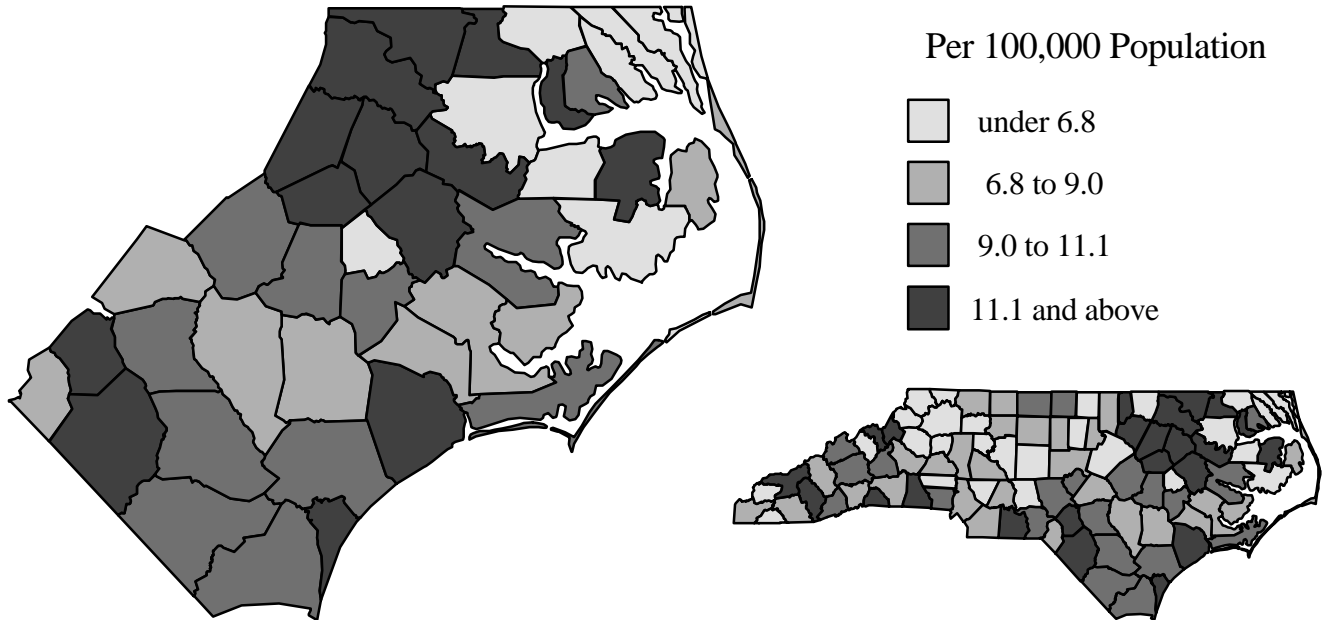
Chronic Liver Disease and Cirrhosis

Eastern North Carolina

Crude Mortality Rates: 1990 - 1994



Age-Adjusted Mortality Rates: 1989 - 1993

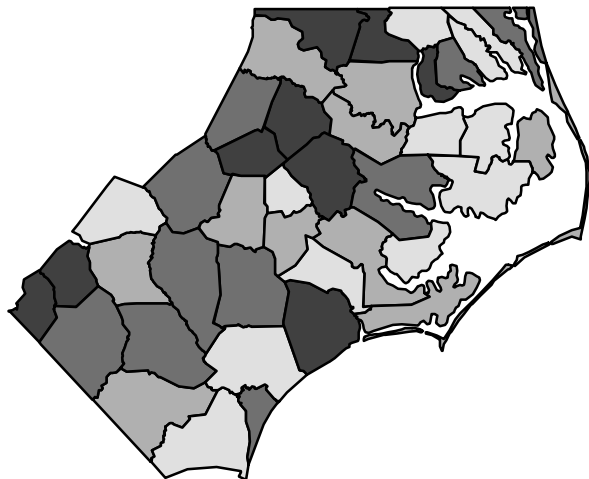


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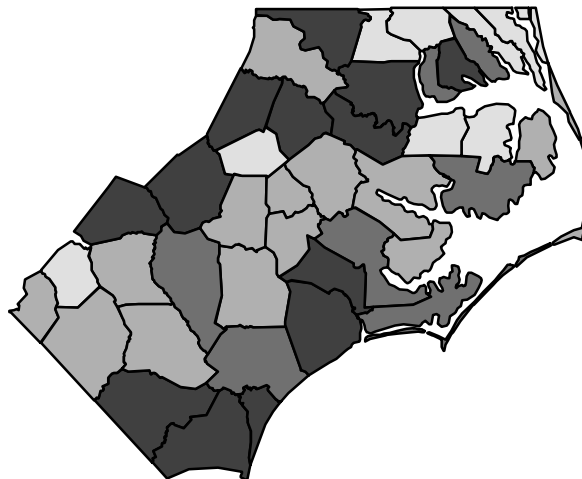
Age-Adjusted Mortality Rates 1989-1993

Per 100,000 Population

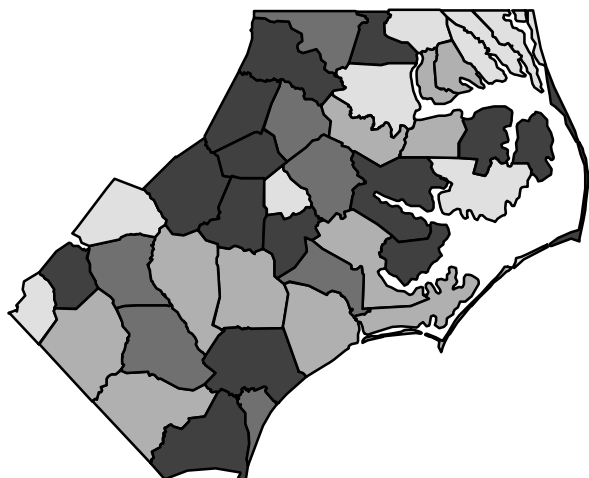
White Males



White Females



Nonwhite Males



Nonwhite Females

