2005 State of the County Health Report

An Overview of Selected Health Indicators for Mecklenburg County Residents

Demographics
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Leading Causes of Death
Sexually Transmitted
Infections
Health Disparities





MECKLENBURG COUNTY: A HEALTHY PLACE

to LIVE, WORK and RECREATE

Mecklenburg County State of the County Health Report

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In North Carolina, the state requires each local health department to conduct a community health assessment (CHA) every four years as part of their consolidated contracts with the state. On the years between health assessments, health directors have agreed to submit an abbreviated State of the County Health Report (SOTCH Report). Unlike the full CHA report which has specific criteria, the SOTCH report may take on a variety of formats. In Mecklenburg County, this report consists of an overview of selected health indicators presented in tables and charts, available in hard copy and on the department website www.meckhealth.org

The next full community health assessment for Mecklenburg County will be conducted in 2006. In Mecklenburg County, CHA is led by Mecklenburg Healthy Carolinians and the Mecklenburg County Health Department. For additional information on the SOTCH Report, community health assessments, or Mecklenburg Healthy Carolinians, please call the Mecklenburg County Health Department at 704.336.2900.

Mecklenburg County Demographics

Demographic, Educational Attainment, Economic and Health Care Access Data

2004 ESTIMATED POPULATION¹: 756,016

Population Data ¹									
Population by Race/Ethnicity	Number	%	Population By Age	Number	%				
White	481,737	63.7%	0-14	170,512	22.6%				
African-American	212,281	28.1%	15-24	92,345	12.2%				
Asian/Pacific Islander	26,640	3.5%	25-44	261,303	34.6%				
American Indian/Alaskan Native	1,367	0.2%	45-64	171,652	22.7%				
Other Race	10,058	1.3%	65+	60,204	8.0%				
More than One Race	23,933	3.2%							
Ethnicity									
Hispanic ²	59,645	7.9%							

	Educa	ition Data	
Educational Attainment ¹	%	Primary and Secondary Schools ³	# of schools
% less than 12th grade education	14.0%	Elementary Schools	87
% High School Diploma	19.4%	Middle Schools	30
% Some College or College Degree	66.6%	High Schools	17
		Alternative/Special	4
Institutions of Higher Education ⁴		Private	58
University of North Carolina-Charlotte			
Queens University		Public school drop out rate ³	19.4%
Johnson & Wales University		Per Pupil Expenditure ³	\$7,272
Johnson C. Smith University			

Economic Data							
Five Largest Employers in Mecklenburg County ⁴	Unemployment Rate⁵	5.1%					
Wachovia	Median Family Income ¹	\$60,607					
Carolinas HealthCare System	% of All Persons Living In Poverty ¹	11.6%					
Charlotte Mecklenburg Schools	persons 18 years or older	9.2%					
Bank of America	persons 65 years and older	8.2%					
State of North Carolina	Households speaking						
	English less than very well ¹	8.2%					

Central Piedmont Community College

King's College Montreat College Pfeiffer University

Mecklenburg County Demographics, cont.

Health Care Access									
Health Professionals and Hospital Data ⁶	#	% Have Health Insurance ⁷	% of person						
# of doctors per 10,000 population	24.9	children under 18 years of age ⁸	92.4%						
# of dentists per 10,000 population	6.2	persons 18 years or older	84.3%						
# of hospital beds	1989	persons who are employed for wages	86.0%						

References

¹American Community Survey 2003, US Census Bureau. Educational attainment is based on the county population 25 years and older. Please visit website www.census.gov/acs/www/Products/index.htm for more information. Last updated Nov 17, 2005

² Hispanics are considered an ethnic group, not a race and are also counted in the appropriate racial category.

³ Charlotte-Mecklenburg Schools, 2003-2004. The drop out rate is based on the August 2005 status of 2001-2002 ninth grade students. Please visit www.cms.k12.nc.us for more information. Last updated Aug 29, 2005

⁴ Charlotte Chamber of Commerce 01/2005. Please visit <u>www.charlottechamber.com</u> for more information

⁵ NC Employment Security Commission 2004. Please visit <u>www.ncesc.com/lmi/laborStats/laborStatMain.asp</u> for more information.

⁶ NC Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina 2004. Please visit www.shepscenter.unc.edu/hp/prof04.htm for more information. Last updated Sep 1, 2005

⁷ Behavioral Risk Factor Surveillance System (BRFSS) 2004. Please visit www.schs.state.nc.us/SCHS/brfss/2004/meck/topics.html for more information. Last updated Apr 6, 2005.

⁸ Child Health Assessment and Monitoring Program Survey (CHAMP) 2005 Preliminary Results. Please visit www.schs.state.nc.us/SCHS/champ/index.html for more information. Last updated Aug 18, 2005.

⁹ NC DHHS/ State Center for Health Statistics (SCHS) 2004. Please visit <u>www.schs.state.nc.us/SCHS/</u> for more information. Last updated Nov 15, 2005.

Birth Highlights

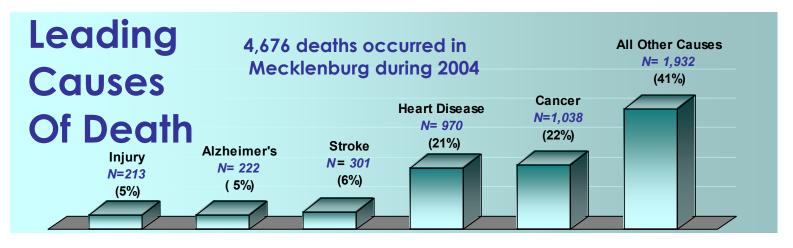
2003/2004 Statistics for Mecklenburg County Residents

2003		
Total Births = 12,773 Live Birth Rate = 17.0 per 1,000 pe	opulation	
Racial Categories		
Whites Other Races • Black or African American • Asian or Pacific Islander • American Indian • Other Non-White		34.7% 84.1% 14.4% 0.9%
Hispanic/Latino and Country of Origin		
Non-Hispanic Hispanic Mexican Central or South American Puerto Rican Cuban Other Hispanic Unknown	10,735 2,038 1,236 697 60 12 18 15	16.0% 60.6% 34.2% 2.9% 0.6%
Age of Mother		
40 plus 30 - 39 years 20 - 29 years Teens Under the Age of 20 ► Teens 10-14 ► Teens 15-17 ► Teens 18-19	1,012 21 374	43.5% 45.7% 7.9%
Birth Outcomes		
Premature (<37 weeks) Very Premature (<32 weeks)	1,505 252	12.2% 2.0%
Low Birth Weight (<=2500g) Very Low Birth Weight (<=1500g)	1,093 225	8.9% 1.8%
First Trimester Prenatal Care	10,488	85.3%
C-Sections	2,238	17.5%

2004								
Total Births = 12,952 Live Birth Rate = 16.8 per 1,000 population								
Racial Categories								
Whites Other Races • Black or African American • Asian or Pacific Islander • American Indian • Other Non-White	8,519 4,433 3,760 617 32 24	84.8% 13.9% 0.7%						
Hispanic/Latino and Country of Origin								
Non-Hispanic Hispanic Mexican Central or South American Puerto Rican Cuban Other Hispanic Unknown	10,616 2,321 1,422 789 68 26 16 15	61.3% 34.0% 2.9% 1.1% 0.7%						
Age of Mother								
40 plus 30 - 39 years 20 - 29 years Teens Under the Age of 20 Teens 10-14 Teens 15-17 Teens 18-19	336 5,595 5,926 1,095 30 372 693	43.2% 45.8% 8.5% 2.7% 34.0%						
Birth Outcomes								
Premature (<37 weeks) Very Premature (<32 weeks)	1,502 248	11.6% 1.9%						
Low Birth Weight (<=2500g) Very Low Birth Weight (<=1500g)	1,079 232	8.3% 1.8%						
First Trimester Prenatal Care	10,642	82.2%						
C-Sections	2,397	18.5%						

Source: NC DHHS/State Center for Health Statistics

Prepared by Mecklenburg County Health Department, Epidemiology Program, November 2005



Top Ten Leading Causes of Death Mecklenburg and North Carolina 2004, United States, 2003

	Meck	NC	USA
Cancer	1	2	1
Heart Disease	2	1	2
Stroke	3	3	3
Alzheimer's Disease	4	7	8
Unintentional Injury	5	4	5
Chronic Obstructive			
Pulmonary Disease	6	5	4
(COPD)			
Kidney Disease	7	9	9
Diabetes	8	6	6
HIV Disease	9	*	*
Septicemia	10	10	10
* not in Top Ten for NC or USA			

Mecklenburg ranks comparably with NC and the US with the following exceptions: Mecklenburg ranks higher for Alzheimer's and HIV Disease; for diabetes and COPD Mecklenburg ranks lower. COPD refers to chronic diseases of the lower airway such as chronic bronchitis and emphysema. US data is preliminary as of July 2003.

Leading Causes of Death by Age Group 2004 Mecklenburg County

Infants Ages 25 - 44 * Congenital Defects * Unintentional Injury * Prematurity and * Cancer * HIV Disease **Immaturity** Ages 1 -14 Ages 45 - 64 * Unintentional Injury * Cancer * Heart Disease * Cancer * Homicide * Stroke Ages 15 - 24 Ages 65+ * Heart Disease * Unintentional Injury

Homicide and motor vehicle crashes are the leading killers of adolescents and young adults, ages 15 -24, in Mecklenburg.

Leading Causes of Death by Gender 2004 Mecklenburg County

Males

1) Heart Disease

2) Cancer

2) Garlooi

3) Unintentional Injury

4) Stroke

5) COPD

6) Kidney Disease

Females

- 1) Cancer
- 2) Heart Disease
- 3) Alzheimer's Disease
- 4) Stroke
- 5) COPD
- 6) Unintentional Injury

Women tend to live longer than men. Women die from Alzheimer's at higher rates than men. Men die from Unintentional Injuries at higher rates than women.

Leading Causes of Death by Race 2004 Mecklenburg County

Whites

1) Cancer

* Homicide

* Suicide

- 2) Heart Disease
- 3) Stroke
- 4) Alzheimer's Disease
- 5) COPD
- 6) Unintentional Injury

Other Races

1) Cancer

* Cancer

* Stroke

- 2) Heart Disease
- 3) Stroke
- 4) HIV Disease
- 5) Unintentional Injury
- 6) Kidney Disease

While the three leading causes of death are similar among all racial groups, people of other races often die at higher rates and younger ages than whites.

Behavior Risk Factor Surveillance System

2002 - 2004 Health Outcomes for Mecklenburg County

The Behavioral Risk Factor Surveillance System (BRFSS) is a random telephone survey of state residents aged 18 and older in households with telephones. BRFSS was initially developed in the early 1980s by the Centers for Disease Control and Prevention (CDC) in collaboration with state health departments and is currently conducted in all 50 states, the District of Columbia, and three United States territories.

Through BRFSS, information is collected in a routine, standardized manner on a variety of health behaviors and preventive health practices related to the leading causes of death and disability such as cardiovascular disease, cancer, diabetes, and injuries.

The following is an overview of BRFSS survey data for Mecklenburg County.

Behavioral Risk Factor Surveillance System (BRFSS) Mecklenburg, North Carolina and United States, 2002-2004											
		2002			2003		2004				
	Meck	NC	USA	Meck	NC	USA	Meck	NC	USA		
Health Care Access											
Has Health Insurance	84%	83%	85%	85%	83%	85%	84%	83%	85%		
Has Personal Doctor	77%	80%	79%	81%	81%	80%	81%	81%	N/A		
Fair/Poor Health Status	15%	21%	16%	18%	19%	16%	12%	19%	15%		
Behavioral Health Risks											
Smoking	19%	26%	23%	20%	25%	22%	18%	23%	21%		
Overweight/Obesity ¹	53%	59%	59%	55%	61%	59%	59%	63%	60%		
No Physical Activity	25%	30%	25%	22%	25%	25%	22%	25%	23%		
Fruit & Veg (>=5/day) ²	24%	24%	24%	22%	23%	24%	N/A	N/A	N/A		
Chronic Conditions											
Arthritis ²	24%	29%	27%	22%	29%	27%	N/A	N/A	N/A		
Diabetes	4%	7%	7%	7%	8%	8%	7%	10%	7%		
Asthma	6%	7%	8%	4%	7%	8%	7%	8%	8%		
Cardiovascular Disease ³	N/A	N/A	N/A	7%	8%	8%	N/A	N/A	N/A		
High Blood Pressure ³	N/A	N/A	N/A	25%	29%	26%	N/A	N/A	N/A		
High Cholesterol ³	N/A	N/A	N/A	34%	34%	34%	N/A	N/A	N/A		

Source: NC DHHS/State Center for Health Statistics

¹ *Overweight/Obesity*- Body Mass Index (BMI) greater than 25.0. (BMI is computed as weight in kilograms divided by height in meters squared:(kg/ m2).

² Data for Fruit and Vegetable Consumption and Arthritis were not collected for 2004.

³ Data for cardiovascular disease, high blood pressure and high cholesterol are collected every 2 years.

Sexually Transmitted Infections

2002/ 2004 Statistics for Mecklenburg County Residents

HIV disease refers to all people infected with the human immunodeficiency virus, regardless of an AIDS defining condition. AIDS cases are a subset of HIV disease.

Syphilis is a curable sexually transmitted infection caused by a bacterium called *Treponema pallidum*. The course of the disease is divided into four stages – primary, secondary, latent, and tertiary (late). Early syphilis includes primary, secondary and latent stages of the disease.

Chlamydia is a curable sexually transmitted infection, which is caused by a bacterium called *Chlamydia trachomatis*. It can cause serious problems in men and women as well as in newborn babies of infected mothers.

Gonorrhea is a curable sexually transmitted infection caused by a bacterium called *Neisseria gonorrhoeae*. These bacteria can infect the genital tract, the mouth, and the rectum.

The following table includes demographic information for sexually transmitted infections in Mecklenburg County.

	HIV DISEASE			Е	ARLY S	SYPHILI	S		CHLAMYDIA GONORRHEA							
	20 (N≕	306)	20 (N=	04 344)	20 (N=	02 68)	20 (N=		20 (N= 2	02 2880)	20 (N=3		20 (N=2		20 (N=2	
Characteristics	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
Race																
White	52	17%	105	31%	4	6%	19	23%	388	13%	401	13%	195	8%	164	8%
Black	233	76%	228	66%	58	85%	62	76%	2206	77%	2447	77%	2040	89%	1802	89%
Native Am.	1	0%	0	0%	0	0%	0	0%	11	0%	2	0%	4	0%	0	0%
Asian	2	1%	1	0%	0	0%	0	0%	32	1%	45	1%	7	0%	11	1%
Hispanic	14	5%	10	3%	6	9%	1	1%	237	8%	289	9%	46	2%	42	2%
Other	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	0	0%	0	0%	0	0%	0	0%	6	0%	0	0%	3	0%	0	0%
Age																
0 - 12	0	0%	1	0%	0	0%	0	0%	21	1%	9	0%	8	0%	3	0%
13-19	10	3%	11	3%	4	6%	5	6%	1129	39%	1330	42%	629	27%	571	28%
20-29	66	22%	69	20%	27	40%	22	27%	1378	48%	1493	47%	1070	47%	967	48%
30-39	114	37%	102	30%	21	31%	32	39%	288	10%	279	9%	425	19%	309	15%
40-49	80	26%	111	32%	13	19%	15	18%	51	2%	63	2%	121	5%	136	7%
50+	36	12%	50	15%	3	4%	8	10%	13	0%	12	0%	41	2%	33	2%
Missing	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%	0	0%
Gender																
Male	219	72%	268	78%	42	62%	54	66%	618	21%	632	20%	1212	53%	1110	55%
Female	87	28%	76	22%	26	38%	28	34%	2262	79%	2554	80%	1067	46%	909	45%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

Source: NC DHHS, HIV/STD Prevention and Care

Prepared by Mecklenburg County Health Department/Epidemiology, 03/02

Mecklenburg County Racial and Ethnic Differences in Health

While health disparities are readily demonstrated through data, the causes and means for prevention are not well understood. Research suggests issues of social inequality are involved and must be addressed before differences in health outcomes among racial and ethnic groups can be eliminated. Topics being studied include differences in access to health care, the effects of racism and segregation, and socioeconomic status (SES). The Centers for Disease Control and Prevention notes SES is "central to eliminating health disparities because it is closely tied to health and longevity. At all income levels, people with higher SES have better health than those at the level below them." SES status includes income, education, occupation, and neighborhood and community characteristics.

Recognizing that the causes of health disparities are multifactorial and complex, Mecklenburg County Health Department strives to provide local leaders, elected officials, health professionals and the broader community with information to assist in the making of policy, programs, and choices which will result in good health for all.

HEALTH OUTCOME DIFFERENCES

When comparing Mecklenburg to North Carolina and the United States, most health indicators for the total county appear favorable. Rates for many causes of death have been decreasing during the past decade in both White and Other Race populations. The overall mortality rate has been falling for both groups since 1994. However, this decrease in rates has not always been accompanied by an elimination of differences between White and Other Race rates.

Figure 1: Mecklenburg Infant Mortality Rates By Race Group, 1994 - 2004 18.0 Deaths/1000 Live Births 16.0 14.0 12.0 10.0 8.0 6.0 4.0 20 0.0 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 White Other Races

The overall death rate is higher for people of Other Races than

Whites in every age group. In data from 1999-2003, the age-adjusted rate for All Causes of Death is 1.3 times greater for Other races than Whites. While both whites and minorities saw a decline in infant mortality from 1990 until 1995, this trend has not continued since then, and the gap between White and Other Races, while some years showing a decrease, remains wide. The 2004 Infant Mortality rate is 2.3 times greater for Other Races than Whites. (Figure 1).

LEADING CAUSES OF DEATH

Leading causes of death for Mecklenburg County White and Other Race populations in 2004 are presented in a previous section of this report. Coronary health disease, cancer, and stroke are leading causes of death for both Whites and Other Races, including African Americans, Asians, and Native Americans. However, people of Other Races may die at higher rates and younger ages. Unlike other groups, Hispanics in Mecklenburg County die at the highest rates from motor vehicle injury and homicide. This difference may be explained because rates for heart disease, cancer, and stroke increase with age, and the Hispanic population in Mecklenburg County is younger than the population as a whole. See Figure 2 for more information on disparities in leading causes of death.

HEALTH RISK BEHAVIORS

Unprotected sex is a health risk behavior. The high Other Race mortality rate seen with HIV disease stems from the disproportionate number of HIV disease cases experienced by the African American community. Of 344 cases of HIV disease reported in 2004, 228 (66%) were black. See the previous section on sexually transmitted diseases for more information.

Racial and Ethnic Differences in Health, cont.

Figure 2. Racial Disparities in Leading Causes of Death

AGE-ADJUSTED 1999-2003 MORTALITY RATES FOR OTHER RACES EXCEED WHITE RATES:

- 1.4 times for heart disease
- 1.2 times for all cancer
- 1.2 times for breast cancer
- 1.4 times for colon cancer
- 2.2 times for prostate cancer
- 1.6 times for stroke.

OTHER RACES HAVE HIGHER RATES OF DEATH FROM MOTOR VEHICLE INJURY, HIV DISEASE, DIABETES, AND HOMICIDE:

- 1.2 times for motor vehicle injury
- 12.3 times for HIV disease
- 2.9 times for diabetes, and
- 3.7 times for homicide.

WHITES DIE AT HIGHER RATES
FROM CHRONIC OBSTRUCTIVE
PULMONARY DISEASE,
ALZHEIMER'S DISEASE,
PNEUMONIA & INFLUENZA, AND
SUICIDE:

- 1.5 times for chronic obstructive pulmonary disease
- 1.4 times for Alzheimer's dz
- 1.3 times for pneumonia & influenza
- 1.7 times for suicide.

Health Risk Behavior, cont.

Health behaviors contributing to the prevention of heart disease, some forms of cancer, stroke, and diabetes include not using tobacco products, maintaining a healthy weight, eating a diet rich in fruits and vegetables, and engaging in regular physical activity. Data from the 2004 Mecklenburg Behavioral Risk Factor Surveillance Survey (BRFSS) show the % of Whites compared with the % of Other Races reporting smoking and not eating 5 or more servings of fruits & vegetables per day [2003] similar (Figure 3). The % of people of Other Races is greater than the % of Whites in those reporting overweight or obesity (1.1 times) and not getting any physical activity per month (2.4 times).

When looking at BRFSS responses by household incomes less than \$50,000/yr and household income \$50,000 or above, a higher % of individuals with < \$50,000 than those with \$50,000+ reported smoking (2.1 times), eating less than 5 or more servings of fruits & vegetables per day (1.2 times) [2003], and no physical activity (2.6 times). The % reporting overweight or obesity was similar.

Figure 3. Health Risk Factors from the 2004 Behavioral Risk Factor Surveillance System										
	% Other Races	% White	Disparity Ratio	% Household Income <\$50,000	% Household Income \$50,000+	Disparity Ratio				
Current Smoker	17.7	18.2	1	26.2	12.7	2				
Overweight or Obese	64.2	56.8	1.1	59.5	56.7	1				
No Exercise in Past Mo.	35.5	14.7	2.4	30.9	11.7	2.6				
No 5+ Fruits & Veg Per Day [2003]	79.4	76.8	1	81.2	75.5	1.1				

DATA SOURCES/INFORMATION

Data are from the Behavioral Risk Factor Surveillance System, NC DHHS/State Center for Health Statistics and prepared by the Mecklenburg County Health Department Epidemiology Program.