2011 State of the County Health Report

An Overview of Selected Health Indicators for Mecklenburg County Residents

MECKLENBURG COUNTY
2011 STATE OF THE COUNTY HEALTH REPORT

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OVERVIEW

In North Carolina, the state requires each local health department to conduct a **community health assessment** (CHA) every four years for accreditation and as part of its consolidated contract with the state. During 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). While the SOTCH report is intended as a quick overview of community health indicator data rather that a comprehensive review of the priority issues identified during CHA, information pertaining to each these health priorities may be found in this document.

In Mecklenburg, the most recent Mecklenburg SOTCH report was issued in 2009 followed by a full Community Health Assessment report in 2010. Listed below are the identified priorities and recommendations from the 2010 CHA process.

FINDINGS AND RECOMMENDATIONS FROM COMMUNITY HEALTH ASSESSMENT

The 2010 Community Health Assessment identified the following nine priority health concerns for Mecklenburg County:

1. Prevention of Chronic Disease and Disability through Healthy Behaviors
2. Access to Care
3. Environmental Health – Healthy Places Supporting Healthy Choices
4. Substance Abuse Prevention & Treatment
5. Violence Prevention
6. Injury Prevention
7. Mental Health
8. Responsible Sexual Behavior, and
9. Maternal Child Health.

Health Disparities was not listed individually but considered a part of every priority area. Community Action Plans (CAPs) were developed for the top four identified priority areas. A copy of the full CHA report, a brochure highlighting the findings from the CHA and the CAPs may be found on the Health Department website under Health Statistics at www.meckhealth.org .

Participants of the October 27th Priority Setting meeting made recommendations for the top four health issues: Chronic Disease Prevention, Access to Care, Healthy Environments and Substance Abuse Prevention & Treatment. Example recommendations are included below. For a complete list of recommendations, see the CHA Priority Setting Exercise chapter at http://charmeck.org/mecklenburg/county/HealthDepartment/HealthStatistics/Pages/default.aspx.

Chronic Disease & Disability Prevention through Healthy Choices

- Create and encourage partnerships among community organizations to strengthen stake holders commitment and to share resources
- Increase education programs focusing on prevention of chronic disease

Access to Care

- Increase number of Federally Qualified Health Centers (FQHC)
- Foster partnerships with health department
- Create medical homes for people with no insurance
- Educate people about types of services available
- Increase number of free clinics to reduce ER use and locate them across the county

Environmental Health – Healthy Places Supporting Healthy Choices

- Increase access to community gardens particularly in food deserts or use vacant lots with a focus on “living green”
- Host a community-wide awareness day to promote active transportation (biking, taking the bus, carpooling etc.)
- Synchronize CHA efforts with other strategic efforts in the city and county like sustainable community initiatives, park & recreation, land use and development, education, historic sites, bus services and environment focus area

Substance Abuse Prevention & Treatment

- Increase/maintain current funding for treatment
- Increase funding for treatment during incarceration
- Create a public awareness/educational campaign to stress that substance abuse is an equal-opportunity disease and is a gateway to many risk-taking behaviors and chronic health problems

EMERGING ISSUES AND INITIATIVES

Emerging issues and themes from the 2010 CHA and supported by data from the 2011 SOTCH include but are not limited to:

- Environmental change and policies to bring about that change are needed to support individuals in choosing healthy behaviors; the restaurant smoking ban is a strong example as are no tobacco policies that have been adopted by local hospitals and

universities. Worksite wellness policies may also encourage physical activity and provide healthy food options.

- Community interventions are needed to address childhood obesity. An initiative that has been developed in response to this issue is the community Healthy Weight, Healthy Child Task Force and their *The Blueprint for a Healthier Generation, 2020*. http://charmeck.org/mecklenburg/county/HealthDepartment/hwhc/Documents/HWHC_Blueprint.pdf .
- Prescription drug abuse rates are rising. Nationally, the CDC reports that prescription drug abuse has become a leading cause of unintentional injury death. In 2009, more than 14% of Mecklenburg teens reported taking prescription drugs without a doctor's prescription (YRBS).
- Need for an increase in Alzheimer's disease (AD) services, facilities and providers as the population ages and lives longer. The CDC estimates that as many as half of those 85 and older may have AD. AD is now the 4th leading cause of death in the county.
- Changes in the healthcare safety net that will occur because of Health Care Reform in 2014 and the increase in Medicaid enrollment.
- Importance of including Public Health in community planning to address built environment issues that can influence health behaviors.
- Need to explore ways to include Public Health data with that from Environmental Health as well as other community indicators for more complete assessment of the community.

See the Emerging Health Issues section of this report for specific indicators related to emerging issues and trends.

For additional information on SOTCH and CHA reports, please contact the Mecklenburg County Health Department at 704.336.2900.

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MECKLENBURG COUNTY
State of the County Health Report
Summary Report

Increased reports; Moving in the wrong direction

Decreased reports; Moving in the right direction

No discernible change in data.
(Less than one percentage point change)

	HEALTH INDICATOR	Year of Report	Mecklenburg County	Previous Year Comparison* *(Mecklenburg Data)*	North Carolina
Maternal, Infant and Child Health	**Infant Mortality (<1yr.)** *(Rate per 1,000 Live Births)*	2009	6.1	No change	7.9
	Low Birth Weight (<=2500g) *(% of All Live Births)*	2009	9.3%	No change	9.1%
	Premature Births (<37 weeks) *(%of All Live Births)*	2009	12.5%	No change	13.2%
	No First Trimester Prenatal Care (PNC) *(% Not Entering PNC in the 1st Trimester of All Live Births)*	2009	13.9%	Decrease	15.6%
	Teen Pregnancy Rate (< 20 yrs.) *(per 1,000 females 10-19)* Live Births+ Induced Abortions+ Fetal Deaths	2009	29.3	Decrease	29.9
	10-14 (per 1,000 females 10-14)	*2009*	*1.6*	*No change*	*1.1*
	15-17 (per 1,000 females 15-17)	*2009*	*30.6*	*Decrease*	*30.1*
	18-19 (per 1,000 females 18-19)	*2009*	*94.7*	*Decrease*	*89.5*
	Teen Birth Rate (< 20 yrs.) *(per 1,000 females 10-19)* Live Births	2009	20.8	Decrease	23.1
	10-14 (per 1,000 females 10-14)	*2009*	*0.90*	*No change*	*0.6*
	15-17 (per 1,000 females 15-17)	*2009*	*22.0*	*Decrease*	*22.9*
	18-19 (per 1,000 females 18-19)	*2009*	*67.5*	*Decrease*	*70.0*
Chronic Conditions (Mortality)	**All Cancers** (Rates per 100,000 population)	2005 - 2009	171.8	Decrease	188.8
	Lung Cancer	*2005 - 2009*	*47.9*	*Increase*	*58.0*
	Breast Cancer (Rate per 100,000 females)	*2005 - 2009*	*24.3*	*No change*	*24.2*
	Prostate Cancer (Rate per 100,000 males)	*2005 - 2009*	*26.6*	*Decrease*	*26*
	Colon Cancer	*2005 - 2009*	*15.7*	*No change*	*16.7*
	Heart Disease *(Rate per 100,000 population)*	2005 - 2009	154.7	Decrease	194.7
	Stroke *(Rate per 100,000 population)*	2005 - 2009	45.5	Decrease	51.3
	Diabetes *(Rate per 100,000 population)*	2005 - 2009	18.8	Decrease	24
Injury (Mortality)	**Motor Vehicle Injuries** *(Rate per 100,000 population)*	2009	10.8	Increase	17.6
	All Other Unintentional Injuries *(Rate per 100,000 population)*	2009	19.8	Increase	28.7
	Intentional Injury - Homicide *(Rate per 100,000 population)*	2009	8.7	Decrease	7
	Intentional Injury - Suicide *(Rate per 100,000 population)*	2009	8.4	No change	11.9

	HEALTH INDICATOR	Year of Report	Mecklenburg County	Previous Year Comparison* *(Mecklenburg Data)*	North Carolina
Communicable Diseases (includes Sexually Transmitted Infections)	**E. Coli** *(Rate per 100,000 population)*	2010	2.0	Increase ⇧	DNA
	Chlamydia *(Rate per 100,000 population)*	2010	493.4	Decrease ⬇	449.5
	Gonorrhea *(Rate per 100,000 population)*	2010	173.4	Decrease ⬇	150.9
	Pertussis *(Rate per 100,000 population)*	2010	1.8	⬅ No change ➡	DNA
	Primary/Secondary Syphilis *(Rate per 100,000 population)*	2010	10.2	Decrease ⬇	4.2
	HIV Disease *(Rate per 100,000 population)*	2010	34.1	Decrease ⬇	15.9
	AIDS (Rate per 100,000 population)	*2010*	*13.6*	*Decrease* ⬇	*8.5*
	HIV-Related Deaths (Rate per 100,000 population)	*2009*	*7.5*	*Decrease* ⬇	*3.8*
	Tuberculosis *(Rate per 100,000 population)*	2010	4.3	⬅ No change ➡	3.1
	Salmonella *(Rate per 100,000 population)*	2010	21.9	Increase ⇧	DNA
	Shigella *(Rate Per 100,000 population)*	2010	2.7	Decrease ⬇	DNA
Environmental Health	**Total Days Ozone Level Exceeded Federal Compliance Levels**	2010	14	Decrease ⬇	DNA
	Lead Screenings				
	Total Children 6 yrs and under screened				
	Number of Confirmed Cases >= 10 ug/dL	*2009*	*2*	*Decrease* ⬇	*143*
	Number of Confirmed Cases >= 20 ug/dL	*2009*	*1*	⬅ *No change* ➡	*38*
Behavioral Risk Factors for Premature Deaths	**Smoking** *(% of Adults 18 years and over)*	2010	12%	Decrease ⬇	20%
	Overweight/Obesity (BMI>25.0) *(% of Adults 18 years and over)*	2010	59%	Decrease ⬇	65%
	No Physical Activity *(% of Adults 18 years and over)*	2010	20%	Decrease ⬇	26%
	Fruit & Veg (NOT 5 or more servings/day) *(% of Adults 18 years and over)*	2009	78%	⬅ No change ➡	79%
	High Blood Pressure *(% of Adults 18 years and over)*	2009	29%	Increase ⇧	32%
	High Cholesterol *(% of Adults 18 years and over)*	2009	34%	Decrease ⬇	40%
	No Seat Belt Use *(% of Adults 18 years and over)*	2010	0.4%	⬅ No change ➡	0.7%

DNA= Data not available

* Previous year comparison is based upon Mecklenburg County data and does not imply significant changes in data. Changes in health indicator status are measured by percentage point change of one or greater. Data changes less than one percentage point are considered to be similar.

Data Sources: NC DHHS: State Center for Health Statistics, HIV/STD Prevention and Care Branch
Mecklenburg County Health Department: Communicable Disease Program, Tuberculosis Program and Environmental Health Program

2011 STATE OF THE COUNTY HEALTH REPORT

Emerging Health Issues & Trends

Mecklenburg County is rapidly changing. Within the past decade the overall population has increased by 32%, with the vast majority of growth occurring among racial and ethnic minorities. This growing diversity brings new challenges to public health and requires renewed efforts to monitor and address emerging health issues in the county. The following section highlights several important changes in resident health status.

Emerging Trends for Demographics and Social Determinants of Health

1. ***Hispanic population in the county more than doubled over the decade.*** Between 2000 and 2010 Hispanics/Latinos accounted for the fastest growing population in Mecklenburg, increasing by almost 150%[1].

2. ***Economic downturn results in higher rates of unemployment and poverty.*** Increased reports of poverty, unemployment and lack of health insurance place vulnerable populations at increased risk for negative health outcomes. While recent data point to economic improvements, unemployment rates within Mecklenburg (12.8%) remain higher than Nation (10.8%)[1].

3. ***Lack of health insurance remains a challenge for vulnerable populations.*** In 2010, 17% of Mecklenburg Residents are uninsured for a total of approximately 156,337 individuals without health insurance[1].

Emerging Trends for Maternal and Child Health

4. ***Although overall Infant Mortality declines, minority infants continue to die at higher rates***. The 2009 Infant Mortality rate for Mecklenburg is 6.1 infant deaths per 1,000 live births. However, infants of Other Races died at a rate 4.1 times that of White infants[2].

5. ***Teen pregnancy rates decline.*** From 2000-2009, the pregnancy rate for teens ages 15-19 decreased by 23%, from 72.8 per 1,000 females in 2000 to 56.4 in 2009[2].

Emerging Trends for Leading Causes of Death

6. ***While cancer and cardiovascular disease are the leading causes of death,*** mortality rates from heart disease, cancer, and stroke have been declining over the past five years[2].

Emerging Trends for Mental Health

7. ***Alzheimer's disease (AD) is the 4th leading cause of death.*** The CDC estimates that as many as half of those 85 years and older may have AD. Of the 5,058 deaths that occurred in the county, 5%, or 262 deaths, were due to Alzheimer's disease[2,3].

8. ***Some Mecklenburg teens face mental health challenges that place them at increased risk for injury or death.*** In 2009, 28% of teens surveyed reported feeling sad or hopeless almost every day for two weeks or more in a row to the extent they stopped doing some usual activities; 14% of teens reported actually attempting suicide one or more times. From 2000 - 2009 there were a total of 22 suicides among youth ages 11 to 17 years[2,4].

Emerging Trends for Health Behaviors

9. ***Unhealthy behaviors, such as smoking and lack of physical activity present challenges for Mecklenburg Adults.*** In 2010, approximately 64% of adults were overweight or obese; 24% reported no physical exercise in the past month and 17% were current smokers[5].

Emerging Trends for Communicable Diseases/Sexually Transmitted Diseases (STDs)

10. ***Growing tuberculosis cases linked to increases among foreign-born populations.*** TB case reports within the foreign-born population increased from 41% of total case reports in 2002 to 65% of total case reports in 2010[6].

11. ***The North Carolina Electronic Disease Surveillance System (NC EDSS) improves STD case reporting* across North Carolina counties.** The NC STD Surveillance data system underwent extensive changes in 2008 to implement NC EDSS, resulting in increased chlamydia and gonorrhea case reporting across the state.

12. ***Syphilis cases remain higher than expected, while HIV Disease cases show signs of declining rates.*** Following a significant outbreak of new syphilis cases within North Carolina, Primary and Secondary cases in the county remain unusually high. HIV Disease reports for the county have declined from 55.9 cases per 100,000 in 2008 to 34.1 in 2010[7].

Emerging Trends for Health Disparities

13. ***HIV disease continues to disproportionately affect minority populations.*** Racial and ethnic minorities in Mecklenburg are nearly 9 times more likely to be reported with HIV Disease and died at a rate that was 11 times higher than that of Whites[2,7].

14. ***For some negative health behaviors, income may have a stronger influence than race.*** Minority populations reported higher rates of smoking, obesity and no physical activity in comparison to Whites. However, higher rates of these behaviors were found among residents with an annual income less than $50,000 in comparison to those with higher income[5].

Emerging Trends for Environmental Health

15. ***Several initiatives and policies have been implemented to improve Environmental Health in Mecklenburg[8].*** Initiatives to improve air quality include the Mecklenburg Air Quality Program, Clean Air Works!, and Clean Air Carolina. In 2010, nearly all restaurants in the county became smoke-free.

Emerging Trends for Injury

16. ***Unintentional injury is the leading cause of death for those 1-44 years of age,*** the 6th leading cause of death for all residents and one of the leading causes of death for Hispanics[2]***.***

Emerging Trends for Substance Abuse

17. ***Higher prevalence of binge drinking identified among adult males.*** In 2010, men are more than twice as likely to report binge drinking as are women (19.7% and 8.2%, respectively)[5].

18. ***Substance abuse issues among Mecklenburg teens are a growing concern.*** In 2009, nearly 33% of teens reported having had at least one drink of alcohol in the past thirty days. More than 14% of teens have taken prescription drugs such as OxyContin, Percocet, Demerol, Adoral, Ritalin, or Zanax without a doctor's prescription[4].

Sources:

[1]United States Census Bureau, American Community Survey. www.census.gov/acs. Last accessed 11/02/2011.

[2] North Carolina State Center for Health Statistics, www.schs.state.nc.us/SCHS/. Last accessed 11/02/2011.

[3]Centers for Disease Control. Alzheimer's Disease Fact Sheet. www.cdc.gov/aging/aginginfo/alzheimers.htm Last accessed 11/02/2011.

[4] Youth Risk Behavior Survey (YRBS) 2009.

[5] Behavioral Risk Factor Surveillance System (BRFSS) 2010.

[6] Mecklenburg County Health Department, Tuberculosis Control Program.

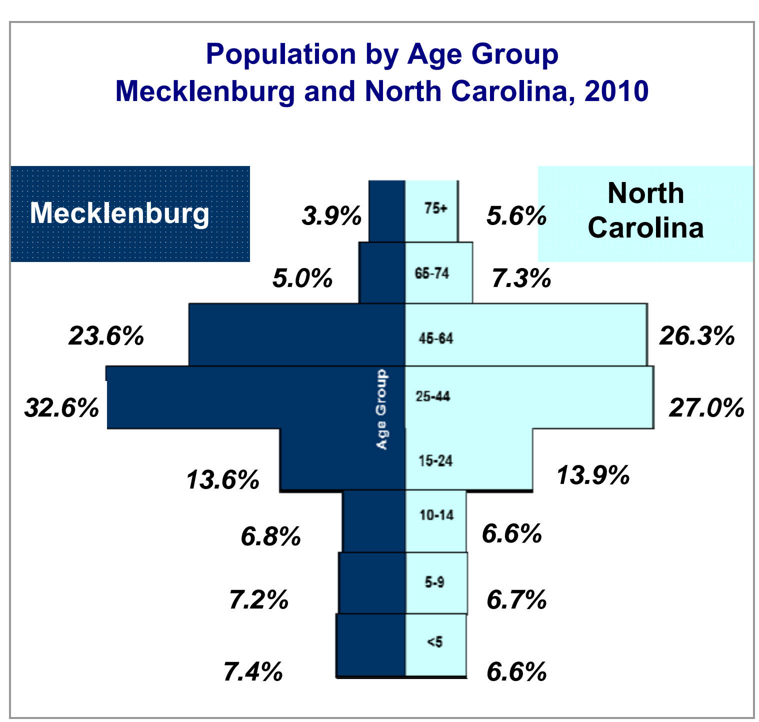
[7] NC DHHS HIV/STD Prevention and Care Unit, 2006 – 2010 STD Surveillance Reports.

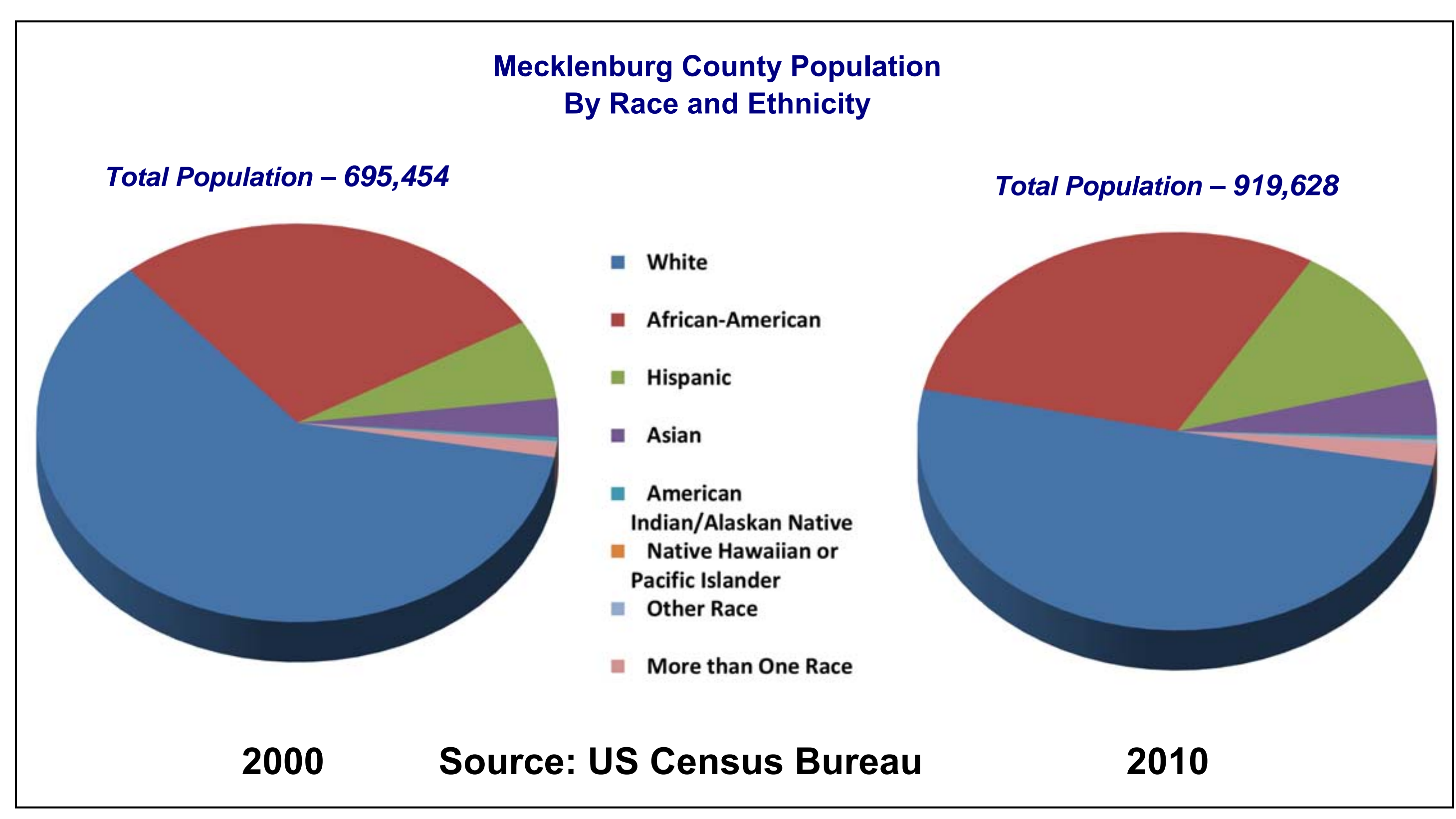
[8]Mecklenburg County Health Department, 2010 Mecklenburg County State of the Environment Report

Mecklenburg County Demographics

POPULATION TRENDS

- The total estimated population for Mecklenburg County for 2010 is 919,628. This is an increase of about 32% since the 2000 Census[1].
- The percentage of minorities has increased in the last ten years. The percentage of Whites has decreased from 61% of the total population to just over 50%.
- The Hispanic/Latino population increased almost 150% from 44,871 in 2000 to 111,944 in 2010.
- The 2008 Mecklenburg population is fairly young with a median age of 35.3 years[1].
- Mecklenburg County population is expected to reach 1,097,084 by 2020[2].





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Mecklenburg County Demographics

EDUCATION

- With a 2010-2011 enrollment of more than 135,000 students in grades K-12 attending 178 schools, Charlotte-Mecklenburg Schools (CMS) is one of the largest school systems in the Carolinas[3].
- More than 175,000 students are enrolled in degree or college-transfer programs at the 34 colleges, universities, community colleges and technical institutes located within the 13 county Charlotte Metro Region[3].
- Almost 40% of Mecklenburg County residents age 25 years and older have at least a bachelor's degree compared to about 27% of North Carolina residents[1].

Mecklenburg County Education	
Primary and Secondary Education, 2010	
Public Primary and Secondary Schools[3]	**# of schools**
Elementary Schools	100
Middle Schools	36
High Schools	33
Alternative/Special	4
Public school graduation rate[4]	73.5%
Per Pupil Expenditure[3]	$8,523
Private Schools[3]	68
Charter Schools[5]	11
Home Schools[6]	3300

ACCESS TO CARE

Health Insurance[1]

- According to the US Census in 2010, approximately 83% of Mecklenburg adult residents reported having some kind of health insurance including, prepaid plans such as HMOs, or government plans such as Medicare.
- Per the 2010 BRFSS 84% of Mecklenburg residents reported having a personal doctor and 13% reported not seeing a doctor because of cost.

Health Professionals and Hospital Data[7]

- As of 2010, there were about 27 doctors per 10,000 population and approximately 2,000 hospital beds in Mecklenburg County.

Mecklenburg Demographics	
Health Care Access, 2010	
Health Professionals & Hospital Data[7]	**#**
# of doctors per 10,000 population	27.1
# of dentists per 10,000 population	6.5
# of hospital beds	1,996
No Health Insurance[1]	**% of persons**
Total Population	*17.1%*
persons under 18 years of age	7.7%
persons 18-64 years of age	22.8%
persons 65 years and older	1.5%

Mecklenburg County Demographics

Mecklenburg County Social Determinants of Health, 2010[1]					
	Total Population	***White***	***Black***	***Asian***	***Hispanic***
Poverty	15%	10%	24%	20%	29%
Median Household Income	$52,188	$63,934	$36,413	$53,482	$39,876
Unemployment	13%	10%	20%	11%	12%
Uninsured	17%	14%	19%	17%	43%

SOCIAL DETERMINANTS OF HEALTH

The World Health Organization (WHO) Commission on Social Determinants of Health concluded in 2008 that the social conditions in which people are born, live and work, are the single most important determinant of one's health status. Low-income neighborhoods may offer inadequate healthcare services, lower quality educational opportunities, fewer job opportunities and higher crime rates when compared to more mixed-income or high-income communities. These factors may contribute to continued poverty and the development of poor health outcomes.

Poverty Status

In 2010, 15% of all persons in Mecklenburg lived in poverty compared to 18% across the state.

Blacks or African Americans (24%), Asians (20%) and Hispanics (29%) were more than twice as likely to live in poverty as Whites (10%).

Median Household Income

The 2010 median household income for Mecklenburg County was $52,188 compared to $43,326 for North Carolina.

The median household income was higher among Whites and Asians as compared to African Americans and Hispanics.

Unemployment Rate

The unemployment rate in Mecklenburg County has been steadily increasing since mid-2008. The average unemployment rate for 2009 was 10.7; in 2010 the unemployment rate was 12.8.

Unemployment rates were twice as high among African Americans as Whites, Asians and Hispanics.

Uninsured

17% of Mecklenburg County residents are uninsured.

Hispanics were almost three times more likely to be uninsured than Whites, African Americans or Asians.

Mecklenburg County Vulnerable Populations, 2010		
	Estimated % of population	***Estimated # of persons***
Disabled	8.3%	76,329
Poverty	15.3%	140,703
Uninsured	17.0%	156,337
Limited English Proficiency	8.3%	76,329
Homeless	0.7%	6,800
Children Less than 5 years of age	7.4%	68,052
Persons 65+ years of age	8.8%	80,927
Persons 85+ years of age	1.2%	11,036

VULNERABLE POPULATIONS

Groups that have not been well integrated into health care systems because of cultural, economic, geographic or health characteristics have been defined as vulnerable populations. These populations also may be at higher risk during disasters because of their vulnerability. Examples of vulnerable populations are persons with disabilities, impoverished, homeless, those persons with limited English proficiency, children aged 5 or less, persons aged 65 or more and persons aged 85 or more.

Disabled
Persons who are disabled are limited in everyday life because of physical, emotional, and/or mental health issues.

Poverty
*Pov*erty is the state of being poor: of not having enough money to take care of basic needs such as food, clothing, and housing. The Census Bureau reports annual poverty rates based on 100% Federal Poverty Level (FPL). For more information visit: http://www.census.gov/hhes/www/poverty/poverty.html.

Uninsured
Persons who are uninsured have no type of private insurance (insurance through an employer or insurance that is purchased from a private company) or public insurance (Medicare, Medicaid, or other federal or state plans).

Limited English Proficiency
The Census Bureau defines linguistic isolation as a household in which *NO* member 14 years old and over:

- Speaks only English or
- Speaks a non-English language and speaks English "very well."

In other words, all members 14 years old and over have at least some difficulty with English

Homeless
Homeless in Mecklenburg County are divided into 3 categories:

- US Dept. of Housing and Urban Development - an individual who lacks a fixed, regular, and adequate nighttime residence
- CMS McKinney Vento- children who are homeless
- Community Other - Homeless jail inmates , hospital inpatients and the recently foreclosed and evicted

For more information on homeless in Mecklenburg County please visit: http://charmeck.org/mecklenburg/county/CommunitySupportServices/HomelessSupportServices/Pages/default.aspx.

Sources
[1]United States Census Bureau, American Community Survey.: www.census.gov/acs. Last accessed 11/02/2011.

[2] North Carolina State Center for Health Statistics, www.schs.state.nc.us/SCHS/. Last accessed 11/02/2011.

[3]Charlotte Mecklenburg School District: www.cms.k12.nc.us. Last accessed 11/02/2011.

[4]Charlotte Chamber of Commerce: www.charlottechamber.com . Last accessed 11/17/2011.

[5] North Carolina Department of Public Instruction. Office of Charter Schools http://www.ncpublicschools.org/charterschools. Last accessed 12/01/2011

[6]North Carolina Department of Administration. Office of Non-Public Education. 2011 Home School Statistical Summary. http://www.ncdnpe.org/documents/hhh236.pdf Last accessed 12/01/2011

[7] NC Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina. http://www.shepscenter.unc.edu/hp/publications/2010_HPDS_DataBook.pdf Last Accessed 11/06/2011.

2011 STATE OF THE COUNTY HEALTH REPORT
Maternal and Child Health Highlights

2008/2009 Birth Highlights
Mecklenburg County Residents

2008

Total Births = 14,902
Live Birth Rate = 17.0 per 1,000

Racial Categories		
White	**9,285**	**62.3%**
Other Races	**5,617**	**37.7%**
‣ *Black or African American*	*4,660*	*83.0%*
‣ *Asian and/or Pacific Islander*	*859*	*15.3%*
‣ *American Indian*	*30*	*0.53%*
‣ *Other Non-White*	*68*	*1.2%*
Hispanic/Latino and Country of Origin		
Non-Hispanic	**11,782**	**79.1%**
Hispanic	**3,089**	**20.7%**
‣ *Mexican*	*1,564*	*50.6%*
‣ *Central or South American*	*1,329*	*43.0%*
‣ *Puerto Rican*	*132*	*4.3%*
‣ *Cuban*	*44*	*1.4%*
‣ *Other Hispanic*	*20*	*0.65%*
Unknown	**31**	**0.21%**
Age of Mother		
40 plus	**418**	**2.8%**
30 - 39 years	**6,216**	**41.7%**
20 - 29 years	**6,936**	**46.5%**
Teens Under the Age of 20	**1,332**	**8.9%**
‣ *Teens 10-14*	24	*1.8%*
‣ *Teens 15-17*	463	*34.8%*
‣ *Teens 18-19*	845	*63.4%*
Birth Outcomes & Prenatal Care		
Premature (<37 weeks)	**1,820**	12.2%
Very Premature (<32 weeks)	**293**	2.0%
Low Birth Weight (<=2500g)	**1,394**	9.4%
Very Low Birth Weight (<=1500g)	**265**	1.8%
First Trimester Prenatal Care	**12,270**	82.3%
Primary C-section	**2,960**	19.9%

2009

Total Births = 14,453
Live Birth Rate = 16.2 per 1,000

Racial Categories		
White	**8,915**	**61.7%**
Other Races	**5,538**	**38.3%**
‣ *Black or African American*	*4,499*	*81.2%*
‣ *Asian and/or Pacific Islander*	*920*	*16.6%*
‣ *American Indian*	*55*	*0.99%*
‣ *Other Non-White*	*64*	*1.2%*
Hispanic/Latino and Country of Origin		
Non-Hispanic	**11,527**	**79.8%**
Hispanic	**2,919**	**20.2%**
‣ *Mexican*	*1,475*	*50.5%*
‣ *Central or South American*	*1,218*	*41.7%*
‣ *Puerto Rican*	*153*	*5.2%*
‣ *Cuban*	*53*	*1.8%*
‣ *Other Hispanic*	*20*	*0.69%*
Unknown	**7**	**0.05%**
Age of Mother		
40 plus	**401**	**2.8%**
30 - 39 years	**6,223**	**43.1%**
20 - 29 years	**6,644**	**46.0%**
Teens Under the Age of 20	**1,185**	**8.2%**
‣ *Teens 10-14*	26	*2.2%*
‣ *Teens 15-17*	376	*31.7%*
‣ *Teens 18-19*	783	*66.1%*
Birth Outcomes & Prenatal Care		
Premature (<37 weeks)	**1,812**	12.5%
Very Premature (<32 weeks)	**289**	2.0%
Low Birth Weight (<=2500g)	**1,339**	9.3%
Very Low Birth Weight (<=1500g)	**255**	1.8%
First Trimester Prenatal Care	**12,301**	85.1%
Primary C-section	**2,995**	20.7%

Data Source: NC DHHS/State Center for Health Statistics

2011 STATE OF THE COUNTY HEALTH REPORT
Maternal and Child Health Highlights

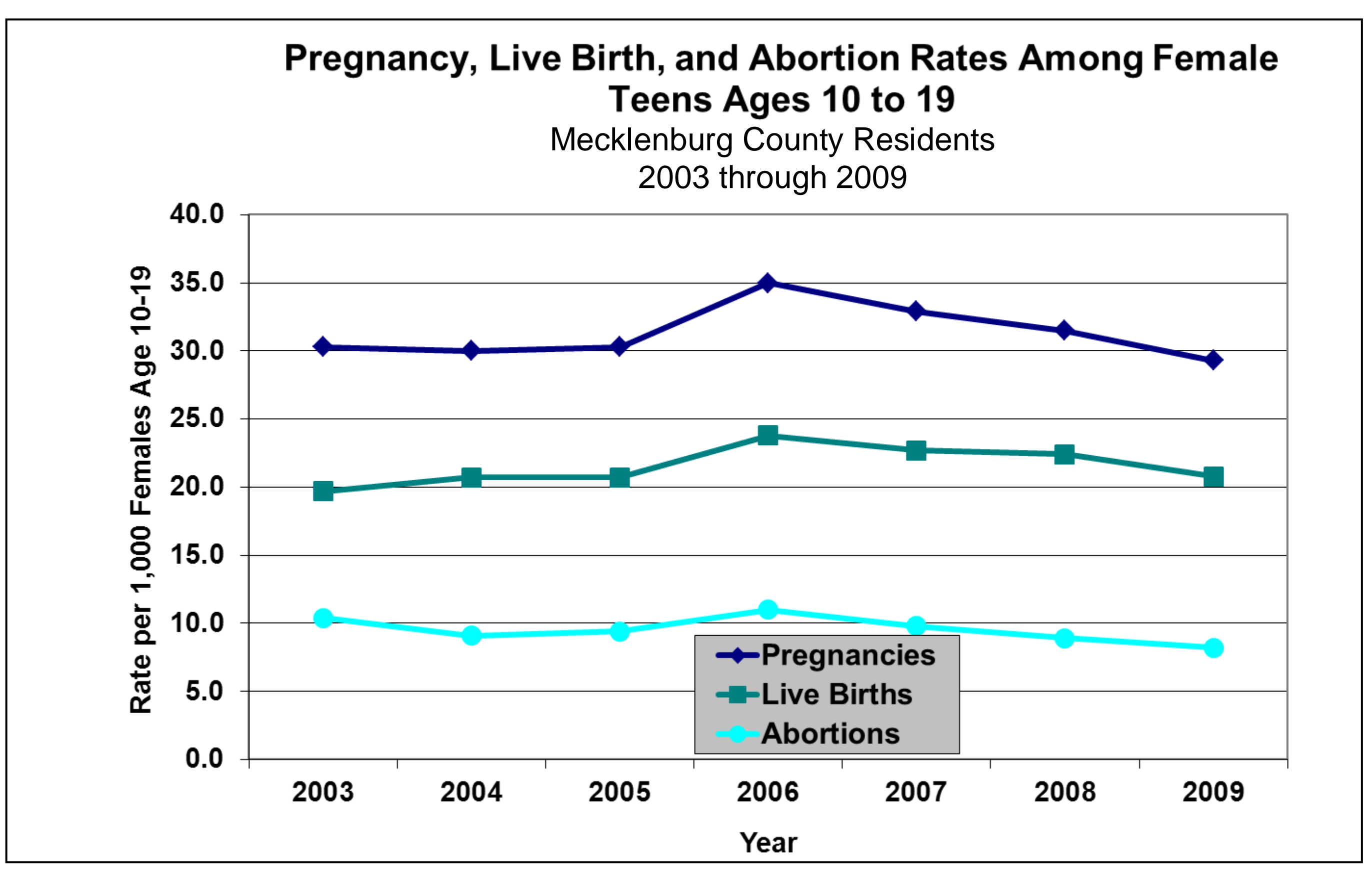
2008/2009 Teen Pregnancy Highlights
Mecklenburg County Residents

2008 - 2009 Teen Pregnancy Rates for Mecklenburg County (Rates per 1,000 females by age group)					
		2008 Rate	**2009 Rate**	**% Change**	
10 to 14	**Total**	1.2	1.6	**-33.3%**	increase*
	White	0.6	1.2	**-100.0%**	increase*
	Minorities	1.7	2.1	**-23.5%**	increase*
15 to 17	**Total**	32.9	30.6	**7.0%**	decrease
	White	20.2	20.1	**0.5%**	decrease
	Minorities	45.1	40.1	**11.1%**	decrease
18 to 19	**Total**	101.9	94.7	**7.1%**	decrease
	White	67.8	64.1	**5.5%**	decrease
	Minorities	131.0	119.2	**9.0%**	decrease
15 to 19	**Total**	60.1	56.4	**6.2%**	decrease
	White	38.7	37.8	**2.3%**	decrease
	Minorities	79.4	72.2	**9.1%**	decrease
10 to 19	**Total**	31.5	29.3	**7.0%**	decrease
	White	19.4	19.1	**1.5%**	decrease
	Minorities	44.0	41.8	**5.0%**	decrease

Note:
* Rates for the 10-14 year old age group should be interpreted with caution due to small numbers (rates based on less than 20 events are unstable) and therefore the focus should be on the number of pregnancies and not the rates for this age group. Hispanics can be any race and are included in both the White and Minority categories. Rates by race should be interpreted with caution and a true comparison by race should include all races and ethnicity (i.e. white non-Hispanic etc.) and Hispanics separately.

The data presented are for all Mecklenburg County pregnancies. Total pregnancies represent the sum of all induced abortions, live births, and fetal deaths at 20 or more weeks of gestation reported in the state. Not included are spontaneous fetal deaths (still births) occurring prior to 20 weeks gestation, which are not reportable to the state.

Data Source: NC DHHS/State Center for Health Statistics



Note:
Pregnancies include all induced abortions, live births, and fetal deaths >20wks gestation reported to the state.

Data Source: NC DHHS/State Center for Health Statistics

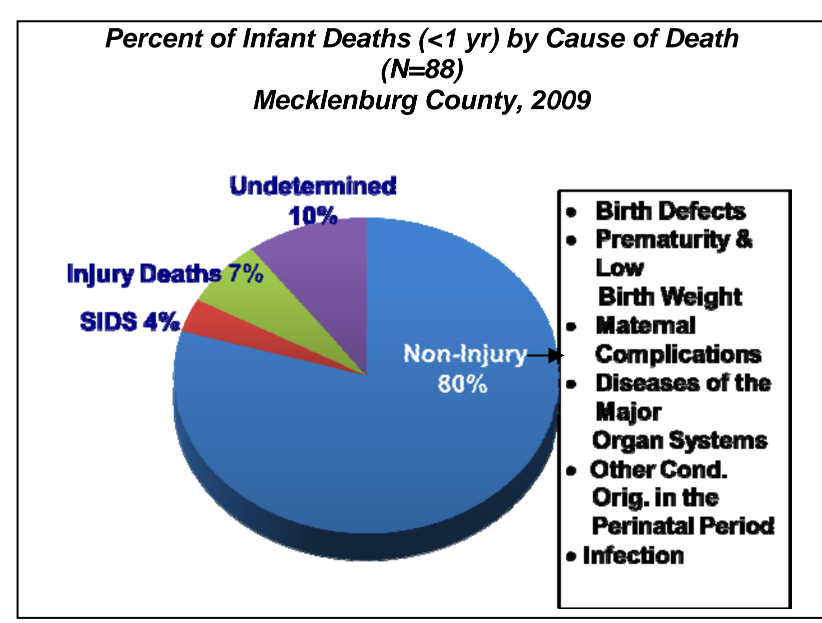
2011 STATE OF THE COUNTY HEALTH REPORT
Maternal and Child Health Highlights

2009 Infant and Childhood Injury and Death Highlights
Mecklenburg County Residents

INFANT DEATHS (<1 yr)

- The infant mortality rate was 6.1 per 1,000 live births. The rate for minority infants was 11.4 per 1,000 live births and four times higher than the rate for White infants (2.8 per 1,000 live births) and two times higher than the overall rate.
- The leading causes of death for infants are birth defects, prematurity and low birth weight, and unintentional injuries often due to accidental suffocation.
- Preventable deaths among infants often include accidental suffocation, drowning, and motor vehicle injuries.
- Deaths due to SIDS have remained low since 2006, while accidental suffocation and undetermined deaths with risk factors for an unsafe sleep environment continue to increase among infants.

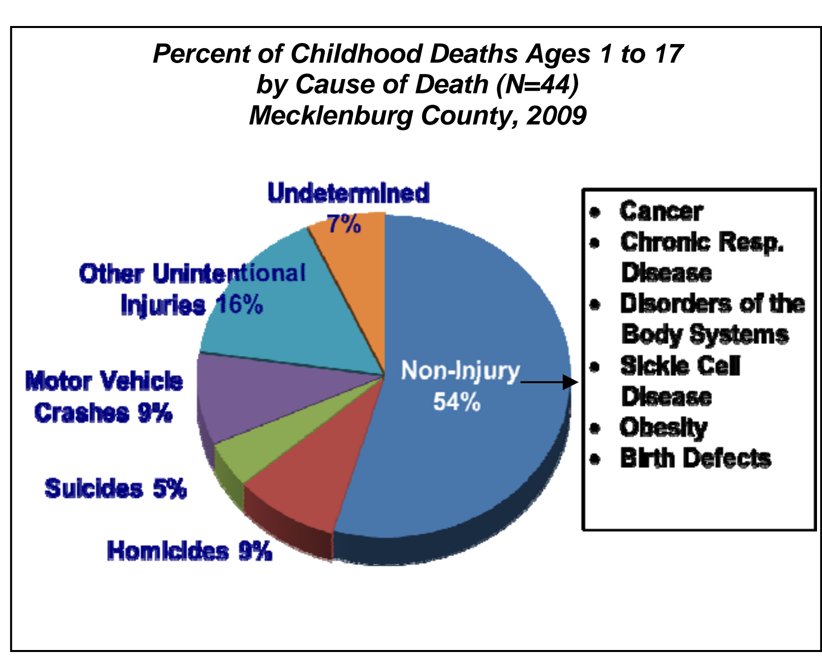
Percent of Infant Deaths (<1 yr) by Cause of Death (N=88)
Mecklenburg County, 2009



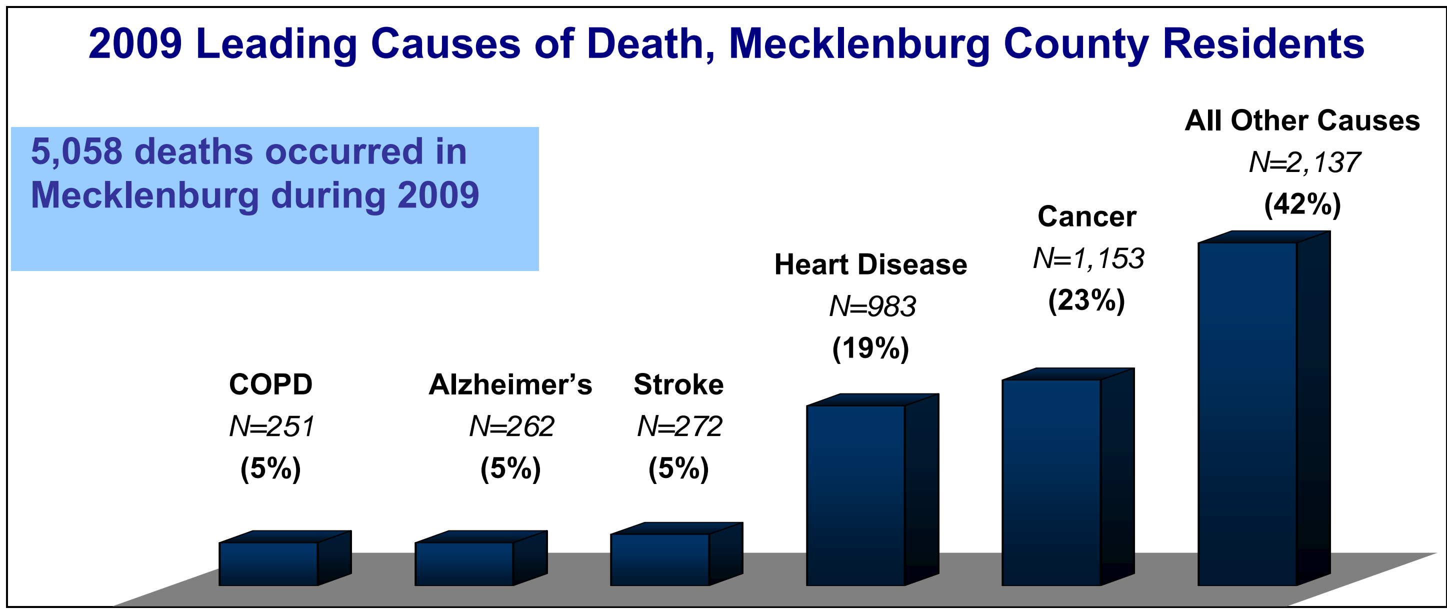
CHILDHOOD DEATHS (1-17 yrs)

- Injury is the leading cause of death for children ages 1-17.
- In 2009 the number of deaths due to motor vehicle injuries, homicides, and other unintentional injuries decreased while deaths due to suicide increased from 1 in 2008 to 2 in 2009.
- In 2009 there were 4 homicides. All four of these deaths occurred among teens age 12 to 17 and were the result of firearms. From 2005-2009 there have been 38 homicides. Of the 38 homicides, 68% were African American, 16% were White, and 16% were Hispanic.

Percent of Childhood Deaths Ages 1 to 17 by Cause of Death (N=44)
Mecklenburg County, 2009



2011 STATE OF THE COUNTY HEALTH REPORT
Leading Causes of Death



Top Ten Leading Causes of Death
National, State and Local Comparisons

Top Ten Leading Causes of Death Mecklenburg, North Carolina, 2009 and the United States 2008	Meck	NC	USA
Cancer	1	1	2
Heart Disease	2	2	1
Stroke	3	3	4
Alzheimer's Disease	4	6	6
Chronic Obstructive Pulmonary Disease (COPD)	5	4	3
Unintentional Injury	6	5	5
Kidney Disease	7	8	9
Diabetes	8	7	7
Influenza and Pneumonia	9	9	8
Septicemia	10	10	10

* 2008 data for US is preliminary

- Cancer, Heart Disease, and Stroke are the three leading causes of death in Mecklenburg County accounting for almost 50% of deaths in 2009.
- While in 2009, Mecklenburg, NC, and the USA all experienced the same top ten leading causes of death, Mecklenburg ranked differently than the state and/or the nation in some cases. Please see the chart to the left for a comparison of these rankings.
- Mecklenburg ranks higher for Alzheimer's Disease and lower for Chronic Obstructive Pulmonary Disease (COPD) than North Carolina and the United States; COPD refers to chronic diseases of the lower airway.

2011 STATE OF THE COUNTY HEALTH REPORT
Leading Causes of Death

Mecklenburg County Leading Causes of Death
Age, Gender and Racial Comparisons

- Women tend to live longer than men. As such, women die from Alzheimer's at higher rates than men. Men die from Unintentional Injuries at higher rates than women.
- While the top leading causes of death, Cancer and Heart Disease are similar among all racial groups, people of other races often die at higher rates and younger ages than whites.
- Homicide is a leading cause of death among adolescents and young adults, ages 15-24 and Unintentional Injury is the leading cause of death of adolescents and adults, ages 15-44, in Mecklenburg County.
- Cancer, Unintentional Injuries, Heart Disease, Homicide, and Birth Defects are the top five leading causes of death among Hispanic residents in Mecklenburg County in 2009.

Leading Causes of Death by Gender 2009 Mecklenburg County

Males	Females
1) Cancer	1) Cancer
2) Heart Disease	2) Heart Disease
3) Unintentional Injury	3) Alzheimer's Disease
4) Stroke	4) Stroke
5) COPD	5) COPD
6) Alzheimer's Disease	6) Unintentional Injury
7) Diabetes	7) Kidney Disease
8) Suicide	8) Septicemia
9) Kidney Disease	9) Diabetes
10) Influenza & Pneumonia	10) Influenza & Pneumonia

Leading Causes of Death by Age Group 2009 Mecklenburg County

Infants (< 1yr.)	Ages 25 - 44
* Prematurity & Immaturity	* Unintentional Injury
* Congenital Malformations	* Cancer
* Unintentional Injury	* Heart Disease
Ages 1 -14	**Ages 45 - 64**
* Unintentional Injury	* Cancer
* Cancer	* Heart Disease
* Anemias	* Unintentional Injury
Ages 15 - 24	**Ages 65+**
* Homicide	* Heart Disease
* Unintentional Injury	* Cancer
* Suicide	* Alzheimer's Disease

Leading Causes of Death by Race 2009 Mecklenburg County

Whites	Minorities
1) Cancer	1) Cancer
2) Heart Disease	2) Heart Disease
3) COPD	3) Stroke
4) Alzheimer's Disease	4) Diabetes
5) Stroke	5) Unintentional Injury
6) Unintentional Injury	6) Alzheimer's Disease
7) Kidney Disease	7) Kidney Disease
8) Suicide	8) HIV
9) Influenza & Pneumonia	9) COPD
10) Septicemia	10) Homicide

Source: NC DHHS/State Center for Health Statistics

2011 STATE OF THE COUNTY HEALTH REPORT
Behavior Risk Factor Surveillance System (BRFSS)

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 throughout all of the United States.

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.

2008-2010 Behavioral Risk Factor Surveillance System (BRFSS)
Mecklenburg, North Carolina and United States

Behavioral Risk Factor Surveillance System (BRFSS) Mecklenburg, North Carolina and United States, 2008-2010	2008			2009			2010		
	Meck	NC	USA	Meck	NC	USA	Meck	NC	USA
Health Care Access									
Has Health Insurance	85%	82%	86%	85%	82%	85%	85%	81%	85%
Has Personal Doctor	81%	78%	N/A	82%	78%	N/A	84%	78%	N/A
Fair/Poor Health Status	15%	18%	14%	16%	18%	15%	16%	18%	15%
Behavioral Health Risks									
Smoking	13%	21%	18%	17%	20%	18%	12%	20%	17%
Overweight/Obesity[1]	61%	66%	63%	64%	65%	63%	59%	65%	64%
No Physical Activity	19%	25%	25%	21%	26%	24%	20%	26%	24%
Fruit & Veg (≥5/day)[2]	N/A	N/A	N/A	22%	21%	24%	N/A	N/A	N/A
Chronic Conditions									
Arthritis[3]	N/A	N/A	N/A	21%	28%	26%	N/A	N/A	N/A
Diabetes	8%	9%	8%	6%	10%	8%	9%	10%	9%
Asthma	7%	8%	9%	7%	8%	9%	6%	8%	9%
Cardiovascular Disease[4]	6%	9%	N/A	6%	9%	N/A	6%	9%	N/A
High Blood Pressure[5]	N/A	N/A	N/A	29%	32%	29%	N/A	N/A	N/A
High Cholesterol[5]	N/A	N/A	N/A	36%	40%	38%	N/A	N/A	N/A

Source: NC DHHS/State Center for Health Statistics

[1] Overweight/Obesity-Body Mass Index (BMI)>25.0. BMI is computed as weight in kilograms divided by height in meters squared: (kg/m^2).

[2] Data for Fruit and Vegetable was not collected for 2008 and 2010.

[3] Diagnoses of arthritis includes arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia. Data was not collected for arthritis in 2008 and 2010.

[4] History of any cardiovascular diseases includes heart attack, coronary heart disease or stroke.

[5] Data for High Blood Pressure and High Cholesterol was not collected for 2008 and 2010.

Youth Risk Behavior Survey (YRBS)

The Youth Risk Behavior Survey (YRBS) was developed in 1990 by the Centers for Disease Control and Prevention (CDC) to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the United States. The YRBS is administered at the middle and/or high school level by individual states, counties and/or cities in odd-numbered years to coincide with the national high school administration of the YRBS conducted by the CDC.

The survey measures behaviors such as: unintentional injuries and violence; tobacco use, alcohol and other drug use; sexual behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies; nutrition; and physical activity. The YRBS also measures self-reported height and weight to allow calculation of body mass index.

In 2005 the YRBS was administered for the first time in Charlotte Mecklenburg High Schools. In 2007, the YRBS was also administered in Charlotte Mecklenburg Middle Schools. The YRBS was conducted by the Mecklenburg County Health Department in collaboration with the Charlotte Mecklenburg School District (CMS) in 23 public high schools and middle schools in randomly selected classes. The weighted survey results accurately reflect gender, race/ethnicity, and grade level distribution of public high school students in the Charlotte-Mecklenburg School District.

2007/2009 Middle School Youth Risk Behavior Survey (YRBS)
Charlotte-Mecklenburg Schools (CMS) and North Carolina

	2007		2009	
	CMS	NC	CMS	NC
Unintentional Injuries and Violence				
Rode in a car or other vehicle driven by someone else who had been drinking alcohol	27%	27%	28%	27%
Carried a weapon such as a gun, knife, club in the past 30 days	30%	37%	31%	39%
Was in a physical fight	62%	57%	60%	53%
Bullying and Harrasment				
Have been harassed or bullied on school property in the past year	26%	27%	39%	42%
Psychological Health				
Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities in the past year	21%	23%	23%	23%
Made a plan about how they would kill themselves	13%	16%	14%	19%
Substance Abuse				
Smoked cigarettes on one or more days in the past 30 days	7%	12%	6%	8%
Ever had a drink of alcohol, other than a few sips	29%	34%	33%	30%
Used marijuana one or more times in the past 30 days	7%	6%	7%	5%
Sexual Behavior				
Ever been taught about abstaining from sexual activity	74%	68%	70%	66%
Weight Management and Nutrition				
Described themselves as slightly or very overweight	21%	23%	24%	26%
Physical Activity				
Physically active for a total of 60 minutes or more per day on five or more of the past seven days	57%	55%	51%	60%
Selected Health Issues				
Current Asthma*	17%	20%	18%	19%

*Had ever been told by a doctor or nurse that they had asthma and who have asthma but had not had an episode of asthma or an asthma attack during the past 12 months or who had an episode of asthma or an asthma attack during the past 12 months.

2005 – 2009 High School Youth Risk Behavior Survey (YRBS)
Charlotte-Mecklenburg Schools, North Carolina and United States

	2005			2007			2009		
	CMS	NC	US	CMS	NC	US	CMS	NC	US
Unintentional Injuries									
Drove a car or other vehicle when they had been drinking alcohol in the past 30 days	8%	9%	10%	7%	9%	11%	6%	8%	10%
Carried a weapon such as a gun, knife, club in the past 30 days	19%	22%	19%	17%	21%	18%	14%	20%	18%
Was in a physical fight in the past year	31%	30%	36%	30%	30%	36%	31%	29%	32%
Bullying and Harrasment									
Have been harassed or bullied on school property in the past year	21%	26%	N/A	20%	22%	N/A	16%	17%	20%
Psychological Health									
Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities in the past year	27%	27%	29%	28%	27%	29%	28%	27%	26%
Attempted suicide one or more times in the past year	12%	13%	8%	13%	13%	7%	14%	10%	6%
Substance Abuse									
Smoked cigarettes on one or more days in the past 30 days	20%	25%	23%	15%	23%	20%	13%	18%	20%
Had at least one drink of alcohol on one or more days in the past 30 days	39%	42%	43%	6%	5%	4%	33%	35%	42%
Used marijuana one or more times in the past 30 days	23%	21%	20%	20%	19%	20%	21%	20%	21%
Sexual Behavior									
Ever had sexual intercourse	51%	51%	47%	47%	52%	48%	50%	51%	46%
Weight Management and Nutrition									
Are overweight (at or above the 95th percentile for body mass index, by age and sex)	11%	14%	13%	10%	13%	13%	17%	15%	16%
Physical Activity									
Physically active for a total of 60 minutes or more per day on five or more of the past seven days	39%	46%	36%	43%	44%	35%	43%	46%	37%
Selected Health Issues									
Current Asthma*	15%	N/A	N/A	18%	20%	11%	19%	22%	22%

*Had ever been told by a doctor or nurse that they had asthma and who have asthma but had not had an episode of asthma or an asthma attack during the past 12 months or who had an episode of asthma or an asthma attack during the past 12 months.

2011 STATE OF THE COUNTY HEALTH REPORT
Sexually Transmitted Infections (STIs)

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.

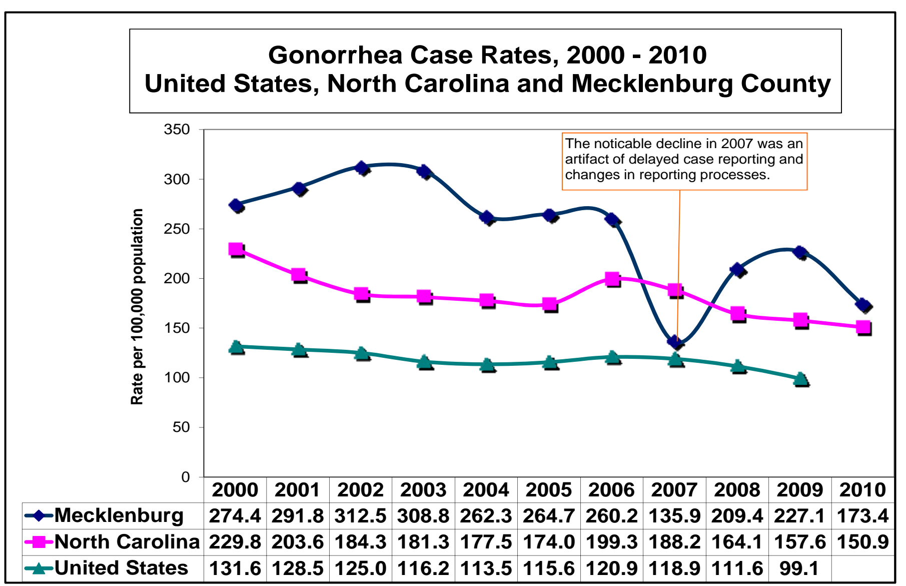
2007/2010 Sexually Transmitted Infections
Mecklenburg County Residents

	HIV DISEASE				EARLY SYPHILIS				CHLAMYDIA				GONORRHEA			
	2007 (N=387)		2010 (N=312)		2007 (N=141)		2010 (N=167)		2007 (N=1740)		2010 (N=4537)		2007 (N=1173)		2010 (N=1595)	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
Race																
White	91	24%	51	16%	23	16%	14	8%	246	14%	494	11%	98	8%	103	6%
Black	265	68%	236	76%	112	79%	146	87%	1263	73%	2659	59%	1019	87%	1140	71%
Native Am.	0	0%	0	0%	0	0%	***	0%	0	0%	9	<1%	0	0%	6	0%
Asian	0	0%	0	0%	0	0%	***	0%	24	1%	43	1%	12	1%	5	0%
Hispanic	30	8%	23	7%	6	4%	5	3%	175	10%	292	6%	28	2%	29	2%
Other	0	0%	2	1%	0	0%	0	0%	0	0%	24	<1%	0	0%	6	<1%
Missing	1	<1%	0	0%	0	0%	0	0%	32	2%	1016	22%	16	1%	306	20%
Age																
0-12	2	1%	0	0%	0	0%	0	0%	0	0%	7	<1%	1	<1%	***	<1%
13-19	20	5%	20	6%	6	4%	10	6%	656	38%	1472	32%	299	25%	480	30%
20-29	93	24%	119	38%	58	41%	78	47%	873	50%	2466	54%	604	51%	790	50%
30-39	121	31%	71	23%	38	27%	40	24%	168	10%	468	10%	179	15%	228	14%
40-49	104	27%	55	18%	32	23%	29	17%	35	2%	101	2%	72	6%	84	5%
50+	47	12%	47	15%	7	5%	10	6%	8	0%	21	<1%	17	1%	12	<1%
Missing	0	0%	0	0%	0	0%	0	0%	0	0%	2	<1%	1	<1%	****	<1%
Gender																
Male	285	74%	239	77%	112	79%	147	88%	423	24%	1251	28%	659	56%	758	48%
Female	102	26%	73	23%	29	21%	20	12%	1317	76%	3280	72%	514	44%	837	52%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%	6	<1%	0	0%	0	0%

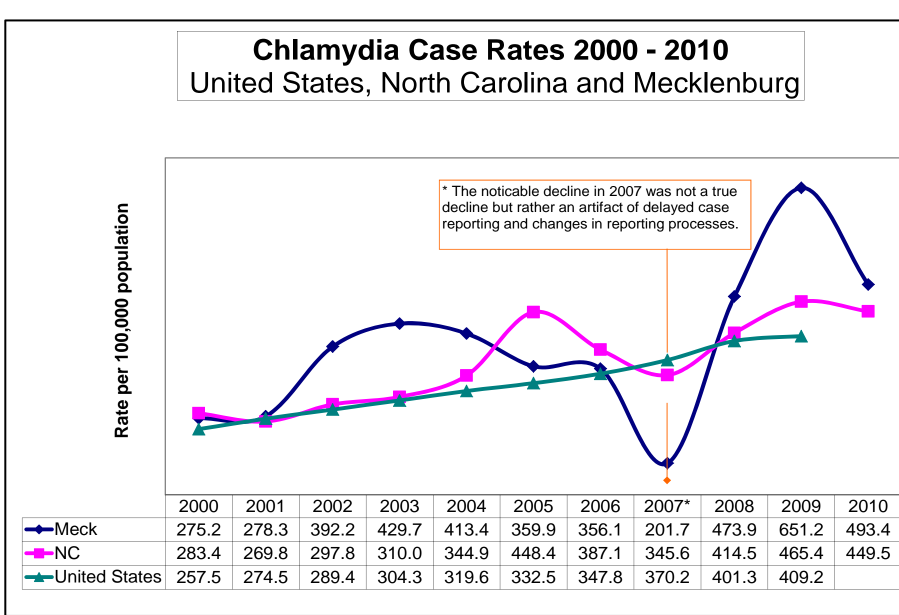
Data Sources: NC DHHS, HIV/STD Prevention and Care Unit (HIV/AIDS Surveillance Database, as of August 2011)
NC Electronic Disease Surveillance System (NC EDSS)

2011 STATE OF THE COUNTY HEALTH REPORT
Sexually Transmitted Infections (STIs)

2000 - 2010 Sexually Transmitted Infections: Mecklenburg, North Carolina and United States
Chlamydia and Gonorrhea Annual Case Rates (per 100,000 population)



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Mecklenburg	274.4	291.8	312.5	308.8	262.3	264.7	260.2	135.9	209.4	227.1	173.4
North Carolina	229.8	203.6	184.3	181.3	177.5	174.0	199.3	188.2	164.1	157.6	150.9
United States	131.6	128.5	125.0	116.2	113.5	115.6	120.9	118.9	111.6	99.1	



	2000	2001	2002	2003	2004	2005	2006	2007*	2008	2009	2010
Meck	275.2	278.3	392.2	429.7	413.4	359.9	356.1	201.7	473.9	651.2	493.4
NC	283.4	269.8	297.8	310.0	344.9	448.4	387.1	345.6	414.5	465.4	449.5
United States	257.5	274.5	289.4	304.3	319.6	332.5	347.8	370.2	401.3	409.2	

The North Carolina STD Surveillance data system underwent extensive changes in 2008 to implement NC EDSS (North Carolina Electronic Disease Surveillance System). The introduction of NC EDSS improved STD case reporting resulting in higher case rates for years 2008 through 2010.

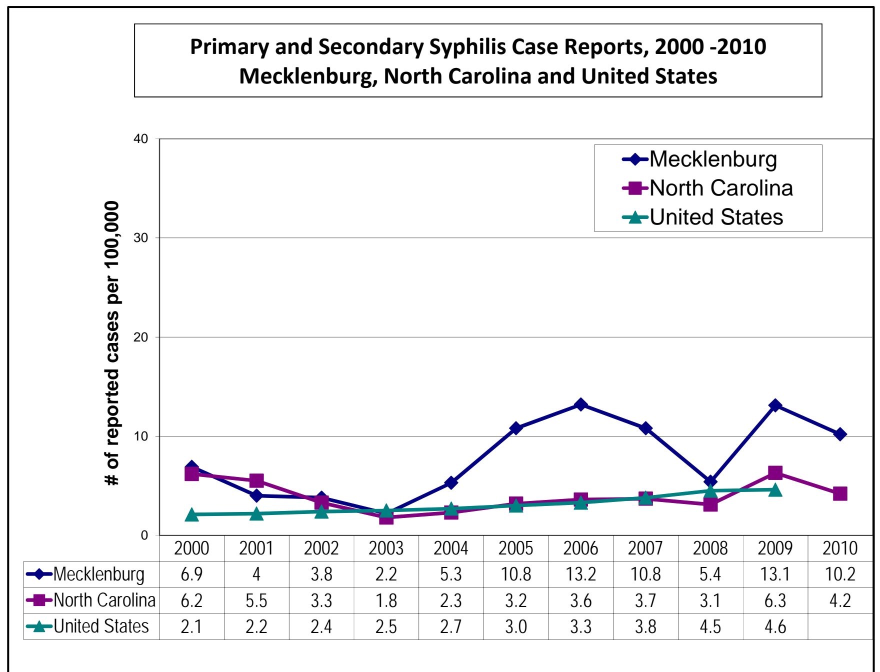
The increase in case reports during this time should be interpreted with caution as they are largely a result of changes to the reporting process.

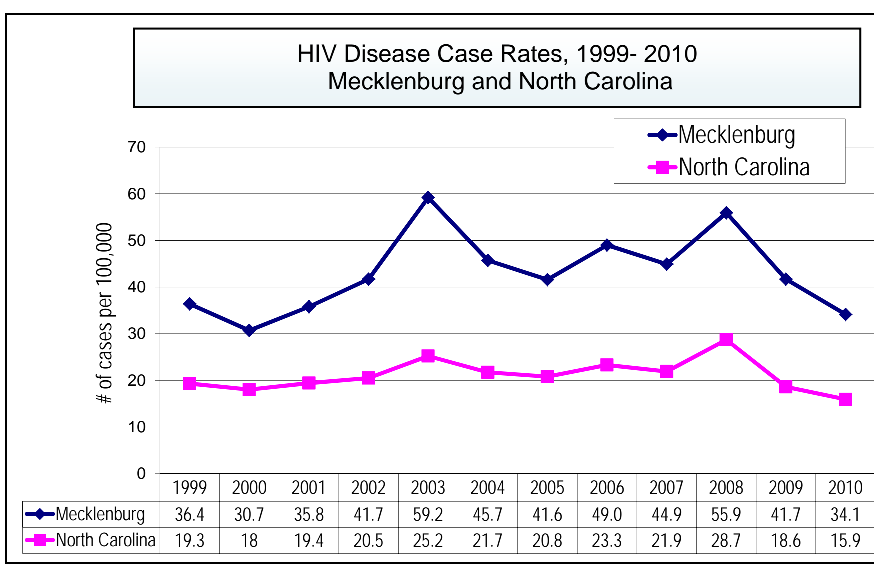
- Between 2002 and 2006, Gonorrhea and Chlamydia case rates declined for the county.
- A substantial decline in reports was noted during 2007 due to delays in case reporting and changes in personnel.
- Chlamydia and Gonorrhea case rates for Mecklenburg remain higher than those of the State and Nation.

Source: 2010 NC EDSS Mecklenburg Chlamydia and Gonorrhea reports; NC DHHS, HIV/STD Prevention and Care Unit: 2010 STD Surveillance Data; US Centers for Disease Control 2009 STD Surveillance Report

(As of November 1, 2010 national data for Chlamydia and Gonorrhea are not available for calendar year 2010.)

2000 - 2010 Sexually Transmitted Infections: Mecklenburg, North Carolina and United States Syphilis and HIV disease Annual Case Rates (per 100,000 population)





In 2009, North Carolina experienced a significant outbreak of new syphilis cases. Statewide reports were 84% higher than the previous year's report. The 2009 increase in syphilis occurred throughout the state and included many North Carolina counties. Mecklenburg County was one of six counties reporting the highest rate of syphilis increase for the state.

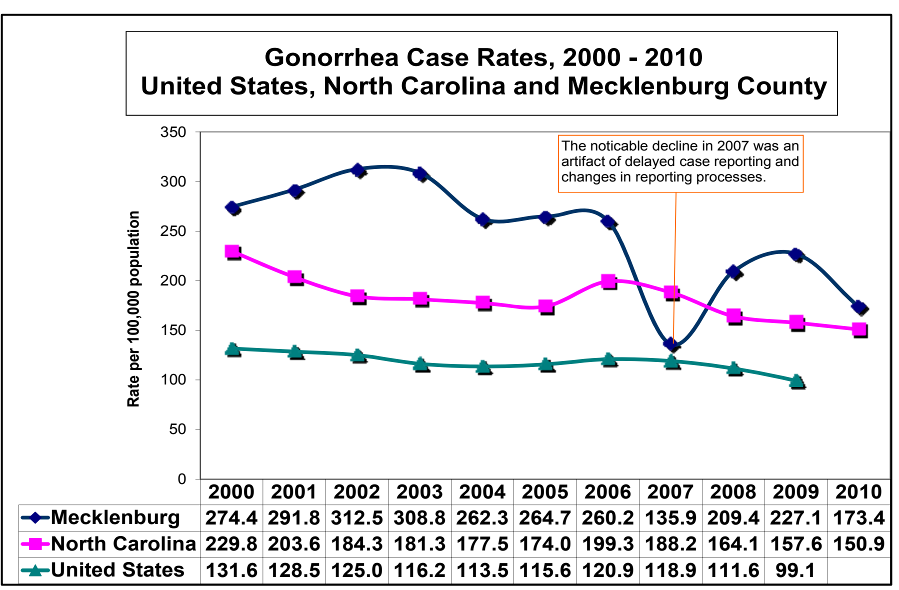
Syphilis case reports decreased in 2010; however reports are still higher than previous years.

- The 2010 Primary and Secondary case rate for the county (10.2 per 100,000) was 22% lower than the annual case rate for 2009 (13.1). However, reports for the county remain higher than both the State and Nation.
- The annual HIV disease case rate in the county has declined by 39% between 2008 and 2010, from 55.9 per 100,000 to 34.1 per 100,000.

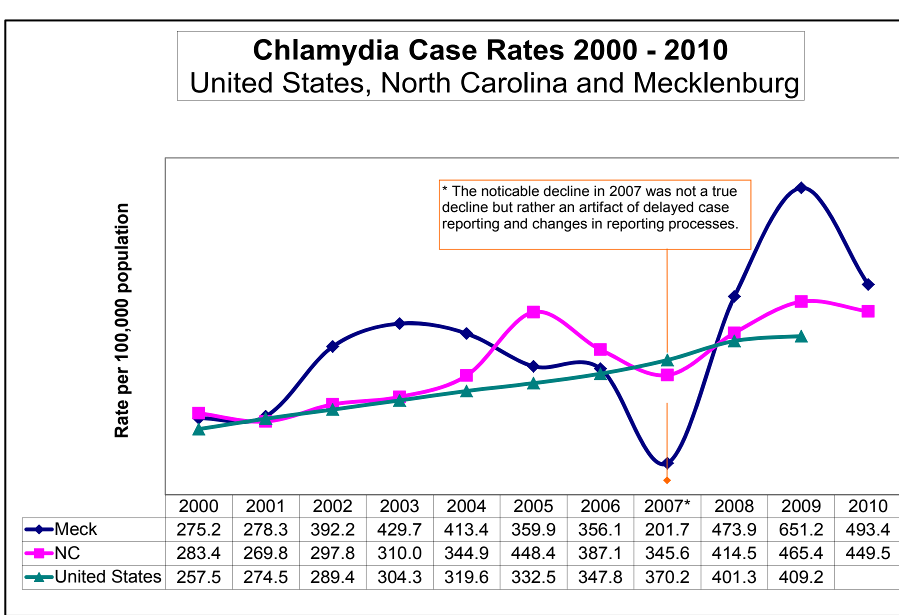
Source: NC DHHS, HIV/STD Prevention and Care Unit: 2010 STD Surveillance Data; US Centers for Disease Control 2009 STD Surveillance Report

(As of November 1, 2010 national data for Syphilis and HIV Disease are not available for calendar year 2010.)

2000 - 2010 Sexually Transmitted Infections: Mecklenburg, Ncfh˙ CUfc`]bU and United States Chlamydia and Gonorrhea Annual Case Rates (per 100,000 population)



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Mecklenburg	274.4	291.8	312.5	308.8	262.3	264.7	260.2	135.9	209.4	227.1	173.4
North Carolina	229.8	203.6	184.3	181.3	177.5	174.0	199.3	188.2	164.1	157.6	150.9
United States	131.6	128.5	125.0	116.2	113.5	115.6	120.9	118.9	111.6	99.1	



	2000	2001	2002	2003	2004	2005	2006	2007*	2008	2009	2010
Meck	275.2	278.3	392.2	429.7	413.4	359.9	356.1	201.7	473.9	651.2	493.4
NC	283.4	269.8	297.8	310.0	344.9	448.4	387.1	345.6	414.5	465.4	449.5
United States	257.5	274.5	289.4	304.3	319.6	332.5	347.8	370.2	401.3	409.2	

The North Carolina STD Surveillance data system underwent extensive changes in 2008 to implement NC EDSS (North Carolina Electronic Disease Surveillance System). The introduction of NC EDSS improved STD case reporting resulting in higher case rates for years 2008 through 2010.

The increase in case reports during this time should be interpreted with caution as they are largely a result of changes to the reporting process.

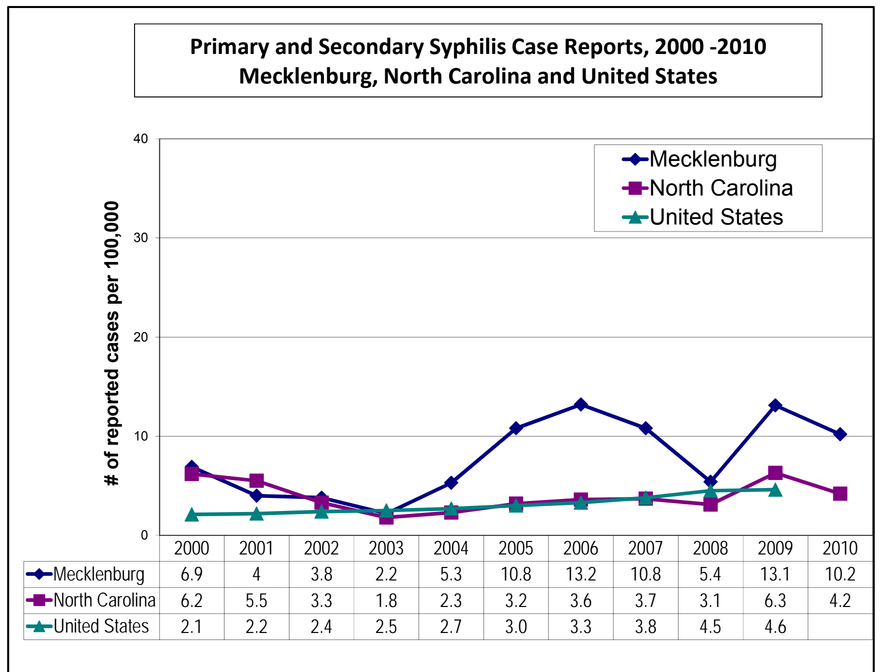
- Between 2002 and 2006, Gonorrhea and Chlamydia case rates declined for the county.
- A substantial decline in reports was noted during 2007 due to delays in case reporting and changes in personnel.
- Chlamydia and Gonorrhea case rates for Mecklenburg remain higher than those of the State and Nation.

Source: 2010 NC EDSS Mecklenburg Chlamydia and Gonorrhea reports; NC DHHS, HIV/STD Prevention and Care Unit: 2010 STD Surveillance Data; US Centers for Disease Control 2009 STD Surveillance Report

(As of November 1, 2010 national data for Chlamydia and Gonorrhea are not available for calendar year 2010.)

2011 STATE OF THE COUNTY HEALTH REPORT
Sexually Transmitted Infections (STIs)

2000 - 2010 Sexually Transmitted Infections: Mecklenburg, Ncfh\ ˙CUfc`]bU and United States Syphilis and HIV disease Annual Case Rates (per 100,000 population)

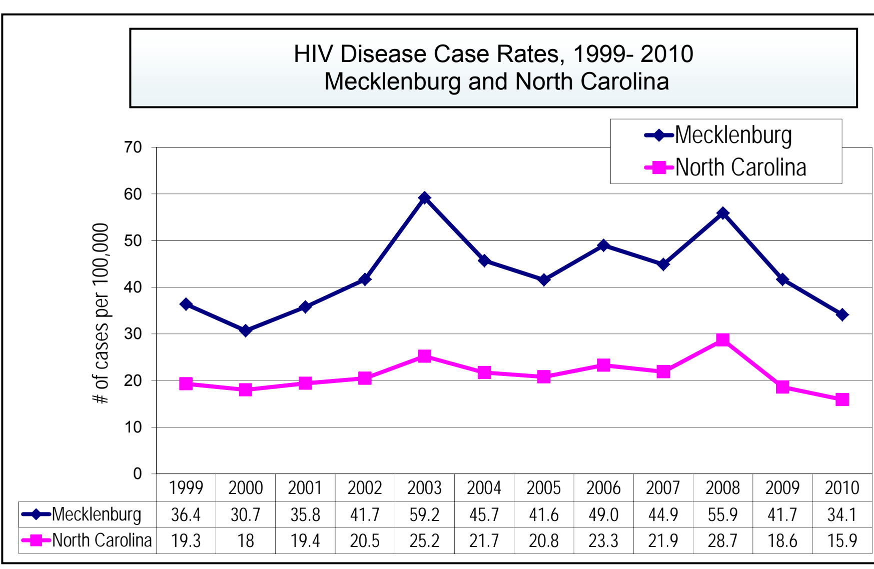


	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Mecklenburg	6.9	4	3.8	2.2	5.3	10.8	13.2	10.8	5.4	13.1	10.2
North Carolina	6.2	5.5	3.3	1.8	2.3	3.2	3.6	3.7	3.1	6.3	4.2
United States	2.1	2.2	2.4	2.5	2.7	3.0	3.3	3.8	4.5	4.6	

In 2009, North Carolina experienced a significant outbreak of new syphilis cases. Statewide reports were 84% higher than the previous year's report. The 2009 increase in syphilis occurred throughout the state and included many North Carolina counties. Mecklenburg County was one of six counties reporting the highest rate of syphilis increase for the state.

Syphilis case reports decreased in 2010; however reports are still higher than previous years.

- The 2010 Primary and Secondary case rate for the county (10.2 per 100,000) was 22% lower than the annual case rate for 2009 (13.1). However, reports for the county remain higher than both the State and Nation.
- The annual HIV disease case rate in the county has declined by 39% between 2008 and 2010, from 55.9 per 100,000 to 34.1 per 100,000.



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Mecklenburg	36.4	30.7	35.8	41.7	59.2	45.7	41.6	49.0	44.9	55.9	41.7	34.1
North Carolina	19.3	18	19.4	20.5	25.2	21.7	20.8	23.3	21.9	28.7	18.6	15.9

Source: NC DHHS, HIV/STD Prevention and Care Unit: 2010 STD Surveillance Data; US Centers for Disease Control 2009 STD Surveillance Report

(As of November 1, 2010 national data for Syphilis and HIV Disease are not available for calendar year 2010.)

Tuberculosis (TB)

Tuberculosis Case Report Highlights, 2009 - 2010
Mecklenburg County Residents

2009 Mecklenburg County Verified Tuberculosis (TB) Case Reports

Total TB Cases = 33

Annual Case Rate = 3.7 per 100,000 population

Gender	***Cases***	***%***
Male	*18*	*54.6%*
Female	*15*	*45.4%*
Racial Categories *(includes Hispanic Cases)*		
White	*6*	*18.2%*
Black or African American	*16*	*48.5%*
Asian or Pacific Islander	*11*	*33.3%*
American Indian	*0*	*0.0%*
Other/Unknown Racial Group	*0*	*0.0%*
Ethnicity (Hispanic/Latino)		
Non-Hispanic	*28*	*84.8%*
Hispanic	*5*	*15.2%*
Unknown/Missing	*0*	*0.0%*
Country of Origin		
U.S. Native	*19*	*57.6%*
Foreign-Born	*14*	*42.4%*
Age Group		
0 - 19 yrs	*5*	*15.1%*
20 - 29 yrs	*4*	*12.1%*
30 - 39 yrs	*6*	*18.2%*
40 - 49 yrs	*4*	*12.1%*
50 - 59 yrs	*6*	*18.2%*
over 60 yrs	*8*	*24.2%*
Behavioral and Occupational Risk Categories *(Within the Past Year)*		
Injected Drugs	*1*	*3.0%*
Non-Injecting Drug Use	*7*	*21.2%*
Excessive Alcohol Use	*5*	*15.1%*
Homeless	*2*	*6.1%*
Resident of Long-Term Care Facility	*0*	*0.0%*
Clinical Data		
Site of Disease		
Pulmonary	*19*	*57.6%*
Extra Pulmonary	*8*	*24.2%*
Both	*6*	*18.2%*

2010 Mecklenburg County Verified Tuberculosis (TB) Case Reports

Total TB Cases = 40

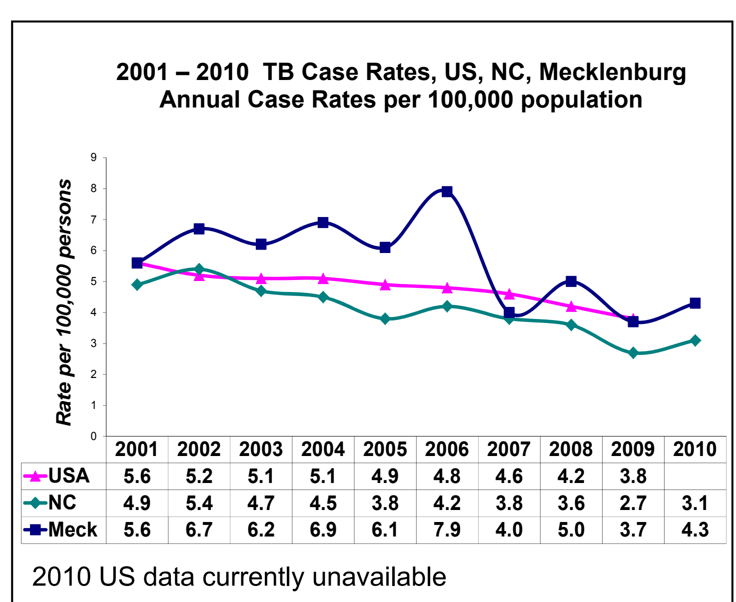
Annual Case Rate = 4.3 per 100,000 population

Gender	***Cases***	***%***
Male	*25*	*62.5%*
Female	*15*	*37.5%*
Racial Categories *(includes Hispanic Cases)*		
White	*16*	*40.0%*
Black or African American	*10*	*25.0%*
Asian or Pacific Islander	*14*	*35.0%*
American Indian	*0*	*0.0%*
Other/Unknown Racial Group	*0*	*0.0%*
Ethnicity (Hispanic/Latino)		
Non-Hispanic	*29*	*72.5%*
Hispanic	*11*	*27.5%*
Unknown/Missing	*0*	*0.0%*
Country of Origin		
U.S. Native	*14*	*35.0%*
Foreign-Born	*26*	*65.0%*
Age Group		
0 - 19 yrs	*7*	*17.5%*
20 - 29 yrs	*6*	*15.0%*
30 - 39 yrs	*6*	*15.0%*
40 - 49 yrs	*4*	*10.0%*
50 - 59 yrs	*9*	*22.5%*
over 60 yrs	*8*	*20.0%*
Behavioral and Occupational Risk Categories *(Within the Past Year)*		
Injected Drugs	*1*	*2.5%*
Non-Injecting Drug Use	*4*	*10.0%*
Excessive Alcohol Use	*2*	*5.0%*
Homeless	*0*	*0.0%*
Resident of Long-Term Care Facility	*0*	*0.0%*
Clinical Data		
Site of Disease		
Pulmonary	*28*	*70.0%*
Extra Pulmonary	*12*	*30.0%*
Both	*0*	*0.0%*

2011 STATE OF THE COUNTY HEALTH REPORT
Tuberculosis (TB)

MECKLENBURG TB CASE REPORTS: 2010 DEMOGRAPHIC PROFILE

- In 2010, 40 TB cases (a rate of 4.3 cases per 100,000 persons) were reported in Mecklenburg County. The 2010 case rate for Mecklenburg was higher than the State (3.1) and the 2009 case rate for the Nation (3.8).
- In comparison to 2006 (55 reported cases), Mecklenburg TB reports for 2010 declined by 27% and the annual case rate declined by 46%.

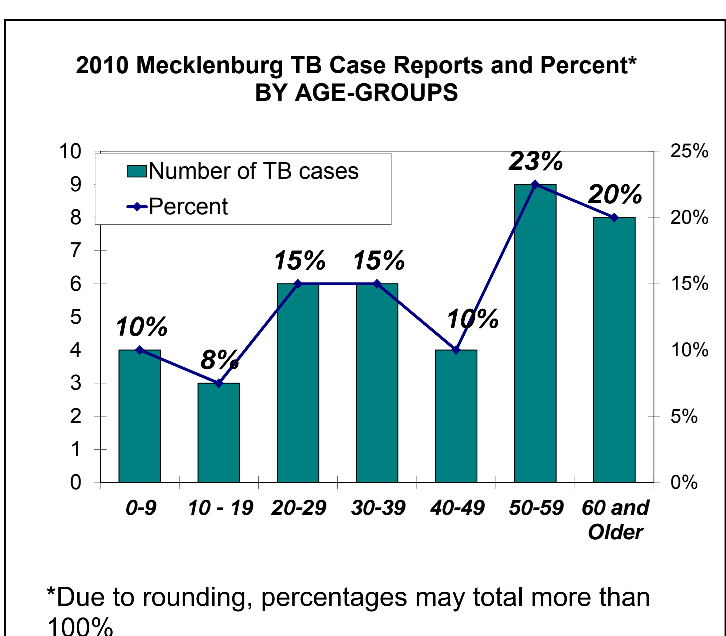


	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
USA	5.6	5.2	5.1	5.1	4.9	4.8	4.6	4.2	3.8	
NC	4.9	5.4	4.7	4.5	3.8	4.2	3.8	3.6	2.7	3.1
Meck	5.6	6.7	6.2	6.9	6.1	7.9	4.0	5.0	3.7	4.3

2010 US data currently unavailable

Age, Gender and Racial/Ethnic Differences

- The majority of the 2010 TB cases were reported among persons aged 50 and over (43%).
- Males (25 cases or 62.5%) were more likely than females (15 cases or 37.5%) to be reported with TB.
- While overall reports and case rates of TB have declined for the county, racial and ethnic minorities remain disproportionately impacted by tuberculosis.
- Non-Hispanic Whites accounted for 12.5% of new TB cases for the county. In comparison, Non-Hispanic African Americans represented 25% of reports while Hispanic/Latinos were 27.5% and Non-Hispanic Asian/Pacific Islanders were approximately 35% of new TB case reports for the county.
- Several factors contribute to these differences in reports, including increased reports among Foreign-Born persons, many of whom are racial/ethnic minorities.

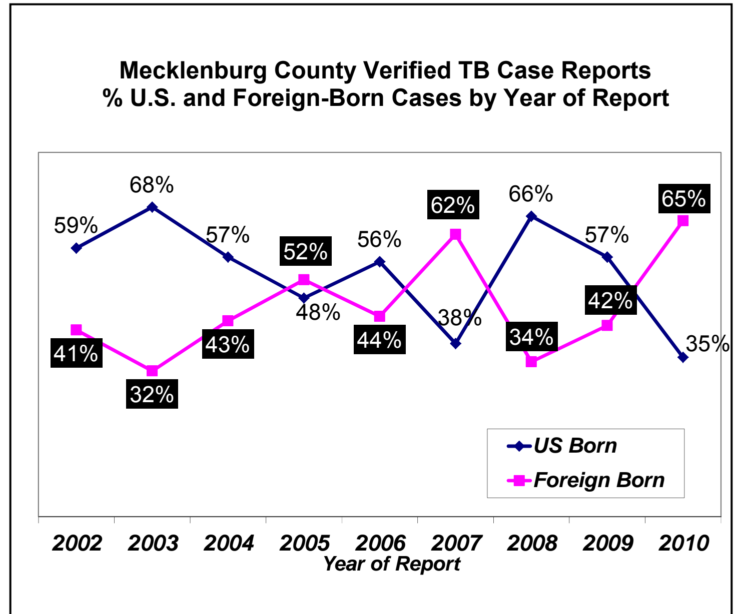


*Due to rounding, percentages may total more than 100%

2011 STATE OF THE COUNTY HEALTH REPORT
Tuberculosis (TB)

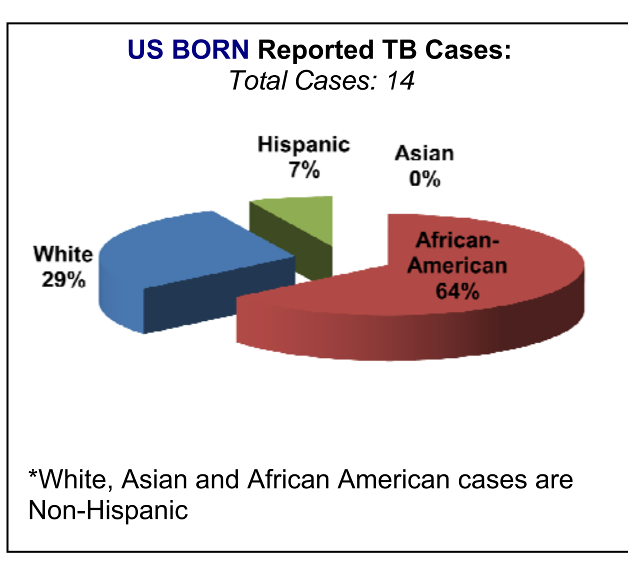
Country of Origin: U.S. and Foreign-Born Case Reports

- In general, TB case reports among US born persons has declined over time, while the proportion of TB cases among Foreign-Born individuals has increased.
- Foreign-Born TB cases increased from 41% of total case reports in 2002 to 65% of total case reports in 2010.
- During 2010, Non-Hispanic Asians accounted for the majority of foreign born TB reports (54%), while Non-Hispanic African Americans (64%) represented the majority of US Born TB cases.



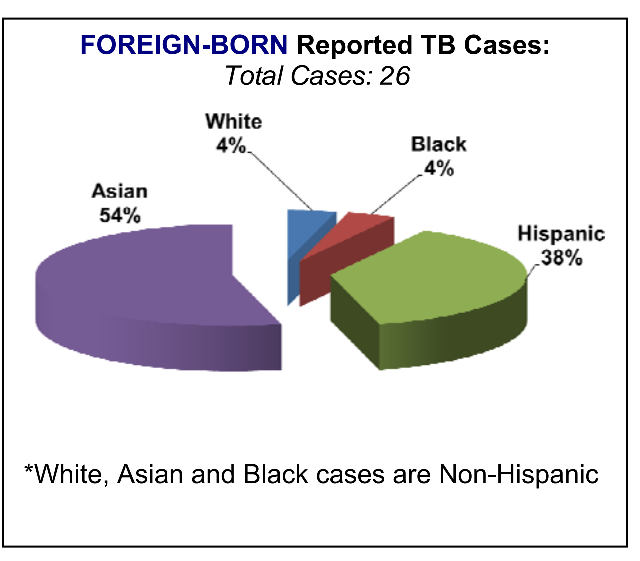
2010 Mecklenburg TB Reported Cases: US Born and Foreign-Born Cases
(% Distribution of Race/Ethnicity),
N=40 Cases

US BORN Reported TB Cases:
Total Cases: 14



*White, Asian and African American cases are Non-Hispanic

FOREIGN-BORN Reported TB Cases:
Total Cases: 26



*White, Asian and Black cases are Non-Hispanic

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.

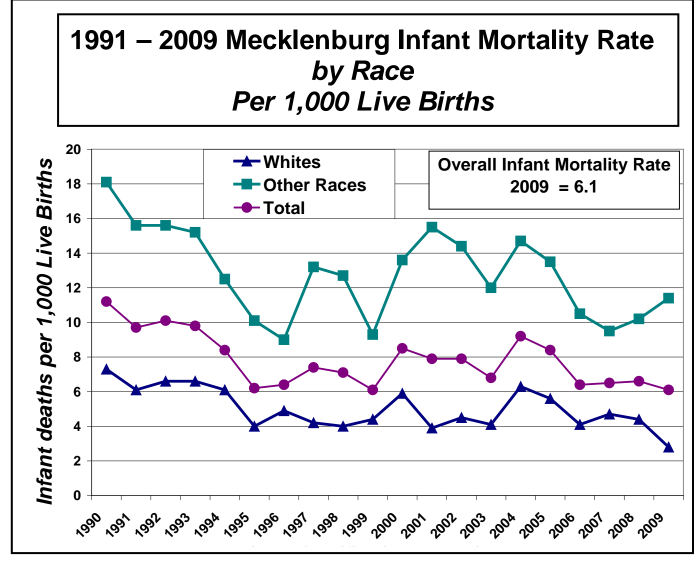
Recognizing that the causes of health disparities are multifactorial and complex, Mecklenburg County Health Department strives to provide local leaders, elected officials, health professionals and the broader community with information to assist in the making of policy, programs and choices which will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

HEALTH OUTCOMES

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 (including African Americans, American Indians, Asians, Native Hawaiian and persons of more than one race). 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.

The overall death rate is higher for people of Other Races than Whites in every age group. In data from 2005-2009, the age-adjusted rate for All Causes of Death is 1.5 times greater for African Americans than Whites. Consistent decreases in infant mortality rates were observed for both Whites and Minorities from 1990 to 1995, resulting in a lowered disparity gap. Since then the magnitude of racial/ethnic disparities have varied as infant deaths increased in some years (ex. 1999 through 2002) and declined for other years (ex. 2004 through 2007).

In 2009 the Infant Mortality rate for Other Races was 11.4 deaths per 1,000 live births, 4.1 times as high as the rate for White infants (2.8 deaths per 1,000 live births).



LEADING CAUSES OF DEATH

Leading causes of death for Mecklenburg County White and Other Race populations in 2009 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 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. The following tables provide more information on disparities in leading causes of death.

Racial Disparities in Leading Causes of Death
Mecklenburg County Residents, 2005 – 2009

Minority Death Rates Exceed White Rates for Select Health Conditions

2005 - 2009 Age-Adjusted Death Rates *(deaths per 100,000 population)*

	White Death Rate	*Black Death Rate*	*Disparity Ratio*
Heart Disease	**137.8**	**209.8**	**1.5**
Stroke	**39.0**	**65.4**	**1.7**
All Cancers	**157**	**226.5**	**1.4**
Breast Cancer	*12.6*	*17.9*	*1.4*
Prostate Cancer	*7.1*	*20.6*	*2.9*
Colon Cancer	*14.0*	*22.4*	*1.6*
Diabetes	**13.1**	**39.5**	**3.0**
HIV Disease (AIDS)	**2.2**	**24.5**	**11.1**

White Death Rates Exceed Minority Rates for Select Health Conditions

2005- 2009 Age-Adjusted Death Rates *(deaths per 100,000 population)*

	White Death Rate	*Black Death Rate*	*Disparity Ratio*
Chronic Lower Respiratory Disease	**40.2**	**31.9**	**1.3**
Chronic Liver Disease and Cirrhosis	**7.5**	**6.9**	**1.1**
Suicide	**10.1**	**4.8**	**2.1**

Death rates Age-Adjusted to US 2000 Population Standard
Data Source: NC DHHS, State Center for Health Statistics: 2009 County Data Book

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 312 cases of HIV disease reported in 2010, 236 (76%) were Black. See the previous section on sexually transmitted infections for more information. 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 2010 Mecklenburg Behavioral Risk Factor Surveillance Survey (BRFSS) show people of Other Races are more likely to report being overweight or obese in comparison to Whites. The percent of persons reporting no physical activity in the past month is nearly two times greater for people of Other Races in comparison to Whites (1.7 times). The percent reporting current smoking was only slightly higher for people of Other Races.

When looking at BRFSS responses by household incomes less than $50,000 per year and household income $50,000 or above, a higher percentage of individuals with < $50,000 than those with $50,000+ reported being overweight/obese (1.2 times), smoking (3.7 times) and no physical activity in the past month (2.7 times).

Disparities in Selected Health Risk Behaviors
2010 Behavior Risk Factor Surveillance System (BRFSS)

Health Risk Factors from the 2010 Behavioral Risk Factor Surveillance System								
	% Other Races	% White	Disparity Ratio	Significant	% Household Income <$50,000	% Household Income $50,000+	Disparity Ratio	Significant
Current Smoker	13.4	11.0	1.2	No	20.3	5.5	3.7	Yes
Overweight or Obese	64.1	56.2	1.1	No	67.0	54.2	1.2	Yes
No Exercise in Past Month	25.6	15.0	1.7	Yes	32.7	12.3	2.7	Yes

2011 STATE OF THE COUNTY HEALTH REPORT
Environmental Health Highlights

AIR QUALITY

Affected by numerous factors such as vehicle traffic, industry and geography, air quality is a regional issue as well as a county one. Mecklenburg County has a serious problem with ozone and does not comply with national standards. Because ozone levels have consistently remained at approximately 15% above federal compliance levels over the last 20 years, the EPA designated Mecklenburg County and surrounding areas an ozone "non-attainment" area in April 2004. The table on the right describes the number of days per year that the ozone levels have exceeded federal compliance levels. The number of days the ozone levels were high increased from 0 days in 2009 to 14 days in 2010.

Number of Days that Ozone Levels have Exceeded Federal Compliance Levels Mecklenburg County 2006-2010	
Year	**Number of Days**
2006	9
2007	19
2008	5
2009	0
2010	14

Smoke Free Restaurants and Bars Law

In May 2009 North Carolina's Smoke-Free Restaurants and Bars Law was passed by the N.C. General Assembly and signed by the Governor with an effective date of January 2, 2010.

All enclosed areas of almost all restaurants and bars are to be smoke-free as well as enclosed areas of hotels, motels, and inns, if food and drink are prepared there.

The Smoke-Free Restaurant and Bars Law is also starting to have an impact on smoke-free policies in the workplace. According to the 2010 BRFSS, almost 90% of adults state that smoke is not allowed in the workplace.

Air Quality Initiatives

Several clean air programs and community collaborations help to address the air quality issue in Mecklenburg County. Some of these initiatives are listed in the table on the following page.

For more information visit
www.charmeck.org/Deparments/LUESA/Air+Quality/Home

GROUND WATER QUALITY

Groundwater quality in Mecklenburg County is high quality source water for both domestic and industrial purposes. Groundwater is a source of drinking water for approximately 20% of Mecklenburg County residents and is also used for commercial and industrial purposes including irrigation.

Occasionally there may be a need for treatment of water for taste or odor and there are some areas of the county where groundwater has been impacted by manmade contamination and is not fit for human consumption.

There are more than 1,370 groundwater contamination sites in Mecklenburg County. Investigations of these sites have identified 250 contaminated private wells.

For more information visit
www.charmeck.org/Departments/GWS

2011 STATE OF THE COUNTY HEALTH REPORT
Environmental Health Highlights

Mecklenburg County Air Quality Initiatives	
Mecklenburg County Air Quality (MCAQ)	• Responsible for assuring good air quality for the community through a combination of regulatory and non-regulatory programs. • Grants to Replace Aging Diesel Engines (GRADE) – incentive funding to organizations that replace, repower and retrofit their heavy duty non-road construction equipment.
Clean Air Works!	• Launched in 2006, engages in employers in the effort to improve air quality by providing them with tools to help their employees take control of their commutes. • Currently 116 employer partners participate in this endeavor. • Over 280,000 lbs of nitrous oxide emissions have been reduced from our region's air.
Clean Air Carolina (CAC)	• Works to restore clean and safe air to the Charlotte region through coalition building, public policy advocacy and community outreach • Recently in partnership with Charlotte-Mecklenburg Schools, CAC received a federal grant to reduce diesel emissions from school buses and fuel trucks.

CARBON MONOXIDE

Carbon Monoxide (CO) is the number one cause of poisoning deaths in the United States, with more than 3,800 people known to die annually from CO (accidentally and intentionally). On January 1, 2004 an ordinance was passed requiring all dwelling units whether owned or leased, regardless of the source of energy used in the dwelling and regardless of whether the dwelling unit has an attached garage shall now contain at least one operable Carbon Monoxide Alarm.

For more information visit www.carbonmonoxide1.com.

LEAD SCREENING

The Childhood Lead Poisoning Prevention Program promotes childhood lead poisoning prevention, provides medical case management to children under six years of age who have elevated lead levels, and apply State rules and regulations addressing childhood lead poisoning prevention. Children under the age of six years, who reside in target housing (pre-1978), should have their blood tested for lead by their pediatrician or other health care provider. Below are the lead testing results for Mecklenburg County for 2010.

For more information visit http://www.charmeck.org/Departments/Health+Department/Environmental+Health/Programs-Services/Lead+Poisoning

Year	Screened < 6 years	Confirmed ≥10 ug/dL	Confirmed ≥20 ug/dL
2010	10,702	2	1

2011 STATE OF THE COUNTY HEALTH REPORT
Environmental Health Highlights

FOOD INSPECTIONS

The Food & Facilities Sanitation Program (F&FS) is a mandated program administered by the local Health Department pursuant to Chapter 130A of the General Statutes of North Carolina. F&FS Program staff issue permits for operation of these facilities and are required to conduct over 10,000 facility inspections per year to help maintain high levels of sanitation for protection of public health. In FY09 almost all (91.2%) of the required food inspections were completed, a huge increase from FY06 (56%). Additional staff being added to F&FS helped to contribute to the increase in inspections.

For more information visit www.charmeck.org/Departments/Health+Department/Environmental+Health/Programs-Services/Foodservice+and+Facilities

MECKLENBURG COUNTY COMMUNITY FOOD ASSESSMENT

An assessment conducted by the Health Department and Charlotte Mecklenburg Food Policy Council examined food stores available within Mecklenburg County census block groups (CBGs) to determine the existence of food deserts. A food desert is defined as an area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower income neighborhoods and communities.

Sixty CBGs in Mecklenburg were designated food deserts. There are 72,793 residents living in these food deserts, with a median income of approximately $31,000; one third of the residents are SNAP (food stamps) participants and the majority live in the northwest section of Charlotte.

BUILT ENVIRONMENT

Built environment refers to the manmade surroundings that provide the setting for human activity, ranging from large-scale civic surroundings to personal places. According to the CDC, built environment is now being recognized as having an impact on our health although traditionally decisions about the built environment have been made without active inclusion of public health. A greater understanding of opportunities to improve health outcomes through altering the built environment will strengthen linkages between public health, city planners and others involved in community design.

There are 37 miles of greenway in Mecklenburg County, up from 20 miles that were under construction in 2007. There are plans for 185 miles over the next 20 years.

The Health Department has added a staff position to coordinate Safe Routes to School (SRTS), a program to help schools and parents design and sustain walking and biking programs. SRTS has worked with 13 schools in the county as well as leveraged federal grant funding for education and infrastructure programs.

According to the Behavioral Risk Factor Surveillance System, over 17% of residents walk or bicycle for transportation, such as to and from work or shopping, or walk to the bus stop for one hour or more per week.

Data Sources:
Charlotte Mecklenburg School District
Charlotte Mecklenburg Utilities
2010 Mecklenburg County State of the Environment Report
Mecklenburg County Land Use and Environmental Services Agency
Mecklenburg County Health Department

- Fit City Challenge
- Fit Together Obesity Initiative
- Health Promotion, Wellness and Lifestyle
- Project Assist

Mecklenburg County Park and Recreation Department
Smoke Free Mecklenburg

2011 STATE OF THE COUNTY HEALTH REPORT
Injury and Violence Highlights

2009 Leading Causes of Death
UNINTENTIONAL Injury
Total Deaths: 231

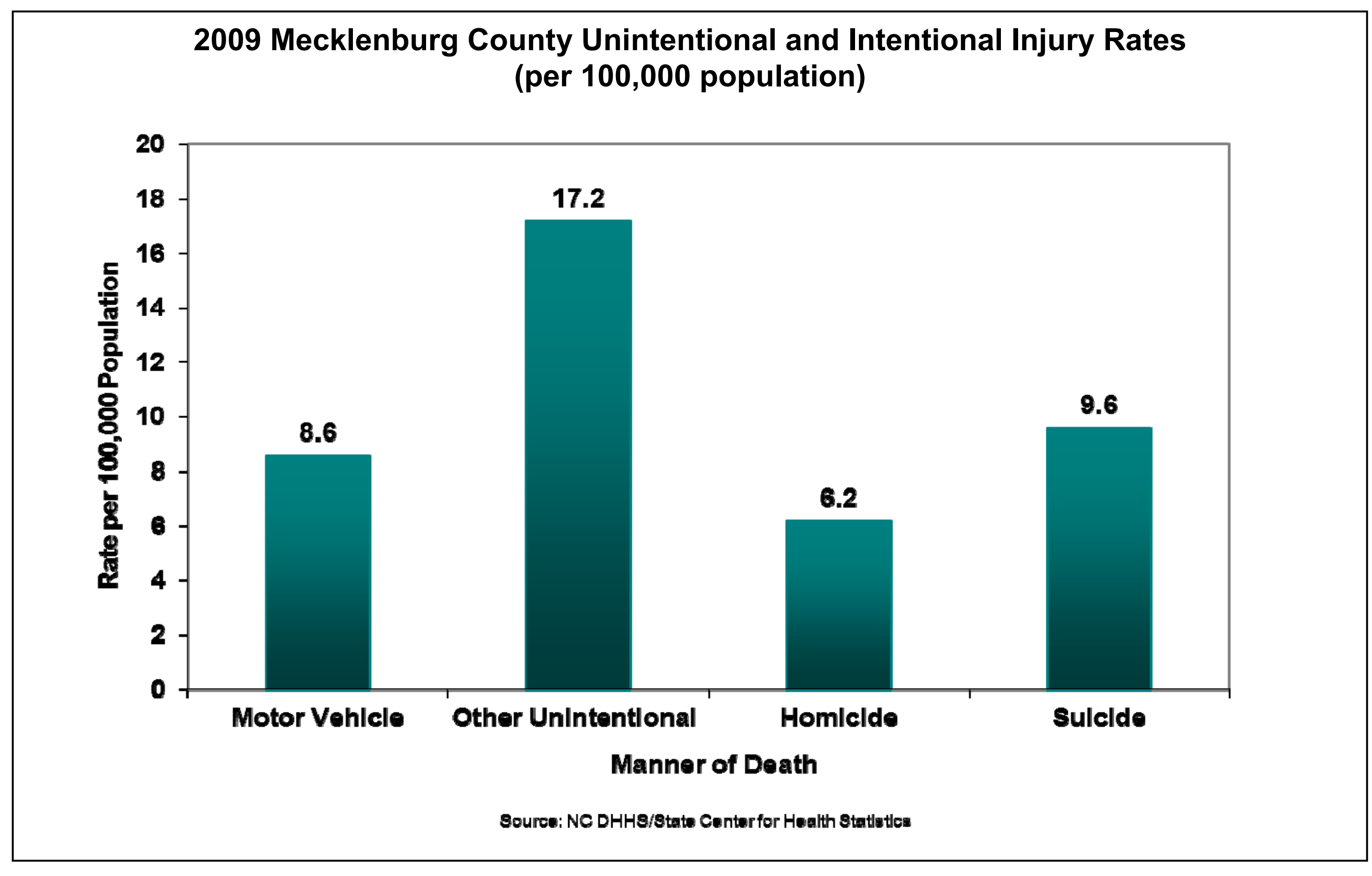
Leading Causes of Deaths due to Unintentional Injury

Cause	Percent
• *Motor Vehicle Injuries*	*33%*
• *Falls*	*21%*
• *Unintentional Poisonings*	*17%*
• *Suffocation/ Airway Obstruction*	*8%*
• *Drowning*	*3%*
• *All Other Injuries*	*18%*

2009 Leading Causes of Death
INTENTIONAL Injury
Total Deaths: 141

Leading Causes of Deaths due to Intentional Injury

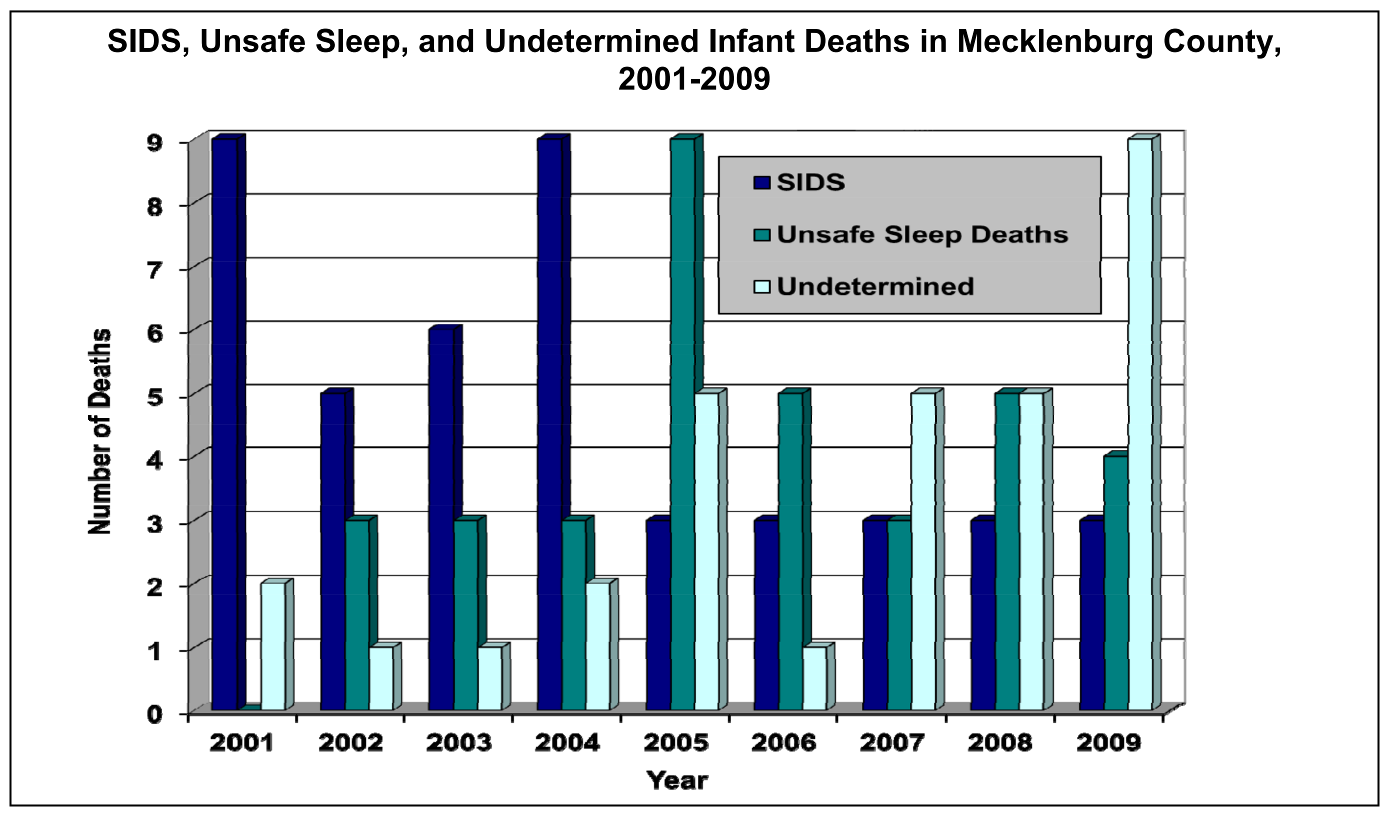
- ***Homicides*** ***55 deaths*** ***39%***
  - *Firearms* *(84%)*
  - *Sharp Object* *(9%)*
  - *All Other* *(7%)*
- ***Suicides*** ***86 deaths*** ***61%***
  - *Firearms* *(55%)*
  - *Hang/Suffocation* *(20%)*
  - *Ingestion* *(19%)*
  - *All Other* *(7%)*



SIDS and Unsafe Sleep Deaths
Mecklenburg County Community Child Fatality Prevention and Protection Team (CFPPT)

The Mecklenburg County Community Child Fatality Prevention and Protection Team (CFPPT) is a multi-disciplinary group charged by North Carolina Statute 7B-1406-1414 to review all infant and child fatalities from birth to age seventeen in Mecklenburg County. The mission of the team is to identify gaps and deficiencies in the comprehensive local child services system (public and private agencies), advocate for prevention efforts, recommend needed remedies and coordinate a response in order to better protect the community's children. Through monthly reviews of infant and child deaths by the Prevention Team (a subcommittee of the CFPPT), the issue of infant deaths related to or caused by unsafe sleep practices has been identified as a reoccurring problem in the community.

Unsafe sleep practices include infant's who are put down to sleep on their stomachs, on a surface or location other than a firm crib mattress, and/or in the presence of fluffy pillows, stuffed animals, blankets or other objects too close to the infant's face. Fatality reviews have found these types of unsafe sleep factors to be present in almost all SIDS, Accidental Suffocations (Unsafe Sleep Deaths), and Undetermined infant deaths. While the incidence of SIDS has remained unchanged in Mecklenburg County since 2006, the incidence of Unsafe Sleeps Deaths and Undetermined Deaths (with risk factors related to unsafe sleep practices) is increasing. Community efforts to increase awareness and provide education on proper Safe Sleep Practices is one of the primary goals of the CFPPT and will continue to be addressed through a coordinated response by the CFPPT.



Violence: Suicides, Homicides and other types of Violence

Violence is a serious problem in the US. It affects all age ranges and all types of people causing death, injury and disability, and increases the risk of physical, reproductive and emotional health problems which can devastate a community.

- Intentional Injury deaths are comprised of suicides and homicides. In 2009, suicide was the 11th leading cause of death in Mecklenburg County. There were 86 Suicides with a rate of 9.6 per 100,000 residents which is lower than the 2009 state rate of 12.4 per 100,000 and the national rate of 11.8 per 100,000 in 2008.

- The number of fatalities due to suicide among teens ages 17 or younger only reflects the most severe outcome of intentional self-harm. While these numbers may seem low, they do not reflect the prevalence of psychological issues and behaviors among youth that can lead to suicide. The number of suicide attempts among teens is often underreported and the 2009 Youth Risk Behavior Data shows suicidal behaviors are occurring among the youth in our community.

- From 2000 - 2009 there were a total of 22 suicides among youth ages 11 to 17 years. Of the 22 suicides, 77% (17) were males and 23% (5) were females. More than half were White Non-Hispanic at 59% (13) followed by 36% (8) among Black Non-Hispanic, and 5% (1) were Hispanic. A majority of these deaths occurred among youth 15 to 17 years of age at 77% (17) and 23% (5) were less than 15 years of age.

- Although nationally firearms are the most common cause of suicide among youth, 59% of teen suicides from 2000 to 2009 were due to hanging/strangulation/ suffocation and 41% were caused by firearms.

- Homicide was the 14th leading cause of death with a rate of 6.2 per 100,000 residents which is higher than the 2009 state rate of 6.0 per 100,000 and the national rate of 5.8 per 100,000 population in 2008.

- Homicide is the third leading cause of death for children ages 1 to 17 and is the leading cause of death for adolescents and young adults ages 15 to 24.

- Unlike suicide, deaths due to homicide show a wider gap for gender and race disparities. Homicides occur more often among Non-Hispanic Black Males than Non-Hispanic White males. Of the 4 teen Homicides, 2 were Non-Hispanic Black males and 2 were Non-Hispanic Black females. Of all homicide deaths in 2009, 7% occurred among children 17 years of age and younger and 87% among adolescents and adults ages 15 to 44 as a whole.

Injury and Violence Highlights

Deaths resulting from firearms, weapons and child abuse only represent the physical aspect of violence. However, exposure to violent behaviors such as bullying, domestic violence (DV) and dating violence can cause emotional harm leading to injury or death. Poverty, social isolation and increased pressure to succeed academically can also lead to emotional and physical harm. Domestic Violence, sexual abuse and child abuse can often be passed from generation to generation as a learned behavior. These behaviors can lead to difficulty in forming relationships and create an injurious environment for infants and small children. Recognition and reporting the signs and symptoms of these types of behaviors is essential for the intervention of social services and other agencies that protect children and serve families.

Domestic Violence is the largest risk factor associated with infant and child deaths. It results in not only physical and emotional trauma, but it can also lead to self-destructing behaviors that affects a child's ability to thrive in a social setting. From 2005-2009, there were 45 domestic violence related homicides in Mecklenburg County with an average of 9 per year. In some cases, domestic violence occurs in conjunction with substance abuse. Overall, 14% of infant and child deaths had a history of domestic violence in the home prior to the fatality or a caregiver had a history of DV. Increased efforts to support mental health services for adults and children impacted by domestic violence, provides an opportunity to reduce the risk of death for infants and children in our community. Support and expansion of services for domestic violence and substance abuse and implementation and enforcement of strong policies to reduce bullying in the schools should remain a high priority in Mecklenburg County.

While domestic violence in the home can put infants and children at risk of injury or death, violence among teens in relationships also known as teen dating violence is also a concern. Dating violence is a type of intimate partner violence between two people who are in a close relationship. The nature of dating violence can be physical, emotional or sexual.

According to the 2009 Mecklenburg County YRBS data, 11.7% of students reported being physically hurt by a boyfriend or girlfriend in the past 12 months and dating violence increased 18% from 2005 to 2009. Physical violence was more often reported by youth 16 to 18 years of age and by Black Non-Hispanic and Hispanic teens. The reporting of physical violence was almost equal between males and females but more females reported being sexually assaulted than males. Sexual assault was more often reported among teens ages 16 to 18 and among Black Non-Hispanic and Hispanic teens.

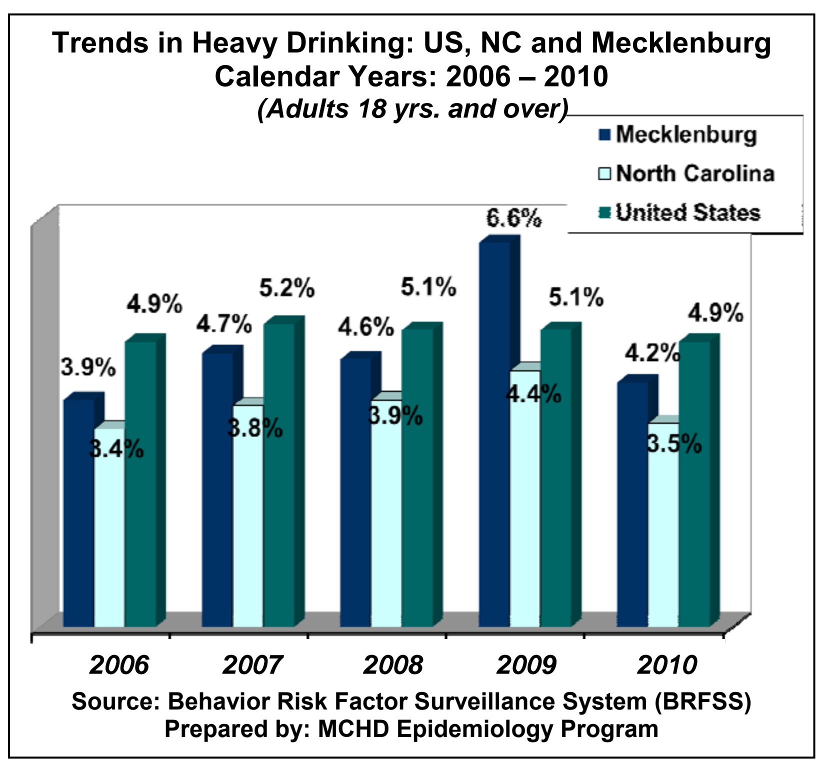
Dating violence can negatively impact a teen's health throughout life and result in behaviors that lead to poor academic performance, substance abuse, eating disorders and attempted suicide. Risk factors for harming a dating partner include but are not limited to depression, aggressive behavior, trauma symptoms (emotional or physical), alcohol use, having a friend involved in dating violence, belief that dating violence is acceptable, exposure to harsh parenting, exposure to inconsistent discipline and lack of parental supervision, monitoring and warmth.

2011 STATE OF THE COUNTY HEALTH REPORT
Substance Abuse

Substance abuse and its related problems continue to be a major public health concern for the nation. According to the Centers for Disease Control and Prevention (CDC), excessive alcohol consumption is the third leading preventable cause of death in the United States. In a 2011 survey sponsored by the Substance Abuse and Mental Health Services Administration, an estimated 22.6 million Americans aged 12 or older were current (past month) illicit drug users, meaning they had used an illicit drug during the month prior to the survey interview. This estimate represents 8.9% of the population. Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically. The use of alcohol and other illicit drugs has been linked with increases in motor vehicle crashes, crime, health care costs and losses in productivity.

Alcohol Consumption

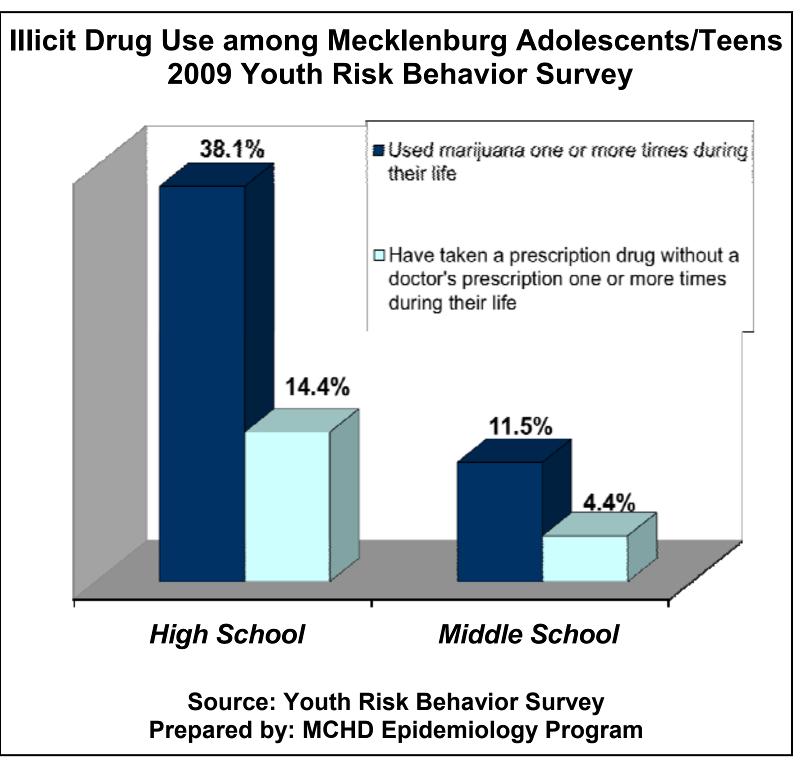
- Heavy drinking is defined as having more than 2 drinks per day for men and having more than 1 drink per day for women. Binge drinking is defined as having five or more drinks of alcohol for men or four or more drinks for women on one occasion.
- Among Mecklenburg County adults (persons 18 yrs. and older), reports of heavy drinking increased to 6.6% in 2009, but then decreased again in 2010 to 4.2%.
- Based upon the 2010 Behavior Risk Factor Surveillance System, reports of heavy drinking in Mecklenburg adults are similar for men and women (4.2%). However, men are more than twice as likely to report binge drinking as are women (19.7% and 8.2%, respectively).
- According to the 2009 Youth Risk Behavior Survey (YRBS), nearly 33% of Mecklenburg teens have had at least one drink of alcohol in the past thirty days
- Nearly 14% of teens reported binge drinking in the month prior to being interviewed.



Illicit Drug Use

- Use of illicit drugs increases as students move from Grade 6 to Grade 12.
- According to the 2009 YRBS, approximately 12% of Charlotte-Mecklenburg Middle School students reported ever using marijuana.
- In comparison, 38% of Charlotte-Mecklenburg High School students reported using marijuana once or more during their lifetime.
- Teen/adolescent use of prescription drugs such as OxyContin, Percocet, Demerol, Adoral, Ritalin or Zanax without a doctor's prescription is a growing concern for the nation.
- In Mecklenburg, 4% of Middle School students and 14% of High School students reported taking prescription drugs without a doctor's prescription.

Illicit Drug Use among Mecklenburg Adolescents/Teens
2009 Youth Risk Behavior Survey



Source: Youth Risk Behavior Survey
Prepared by: MCHD Epidemiology Program

Highlights from the 2010 Youth Drug Survey

The following data and statistics are from the 2010 Youth Drug Survey, published by the Center for Prevention Services (formerly Substance Abuse Prevention Services). For more information and additional statistics, please visit: www.preventionservices.org.

- Of the students surveyed in 2010, 15.3% admitted to consuming alcohol in the last 30 days, which is an increase from 14.0% in 2008.
- Of those who consumed alcohol in the past 30 days, 28.5% admitted to binge drinking.
- Marijuana use increases steadily by grade. Of the students surveyed, 1.9% of middle school students and 20.3% of high school students admitted to using marijuana in the past 30 days. For high school students, this is an increase from 15.8 in 2008.
- The primary source for substances, for those admitting to use, is from friends. 33% of students who reported alchohol use and 53% of students who admitted smoking cigarettes reported receiving these substances from their friends.