# 2006 Community Health Assessment

## Mecklenburg County

***MECKLENBURG COUNTY: A HEALTHY PLACE to LIVE, WORK and RECREATE***

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# EXECUTIVE SUMMARY

## INTRODUCTION

In the practice of public health, the community is the patient and the health of the community is monitored and evaluated on a regular basis by examining key indicators such as infant mortality, communicable disease rates, and STD infections. Every four years, Mecklenburg Healthy Carolinians and the Mecklenburg County Health Department conduct a more extensive examination of the community through a state developed process known as community health assessment (CHA). In addition to providing a picture of the community's health, CHA meets requirements for state accreditation of local health departments, the state consolidated contract with local health departments, and certification by the Governor's Task Force on Healthy Carolinians. Findings from the CHA are used by the Health Department for strategic planning and by Healthy Carolinians to develop or endorse collaborative community action addressing identified priority issues.

## MECKLENBURG HIGHLIGHTS FROM THE COMMUNITY DATA OVERVIEW

- Cancer and cardiovascular disease are the leading causes of death, but mortality rates from heart disease, cancer, and stroke have been declining over the past five years.
- Disparate outcomes in mortality for racial/ethnic groups persist. For example, from 2000-2004, people of Other Races died from diabetes at 2.7 times the rate for Whites.
- Alzheimer's disease is the 4th leading cause of death; White women, the group with the longest life expectancy, make up the majority of Alzheimer's disease deaths.
- Unintentional injury is the 5th leading cause of death for the total population, the leading cause of death for those 1-44 years of age, and the leading cause of death for Hispanics.
- In 2005, 33% of adults reported elevated cholesterol; 27% high blood pressure; 56% overweight or obesity; 21% no physical exercise in the past month; 16% current smoking; and 76% eating less than five servings of fruits and vegetables per day.
- In 2005, 20% of teens reported current smoking. Almost 90% of teens reported drinking a soft drink or sweetened beverage one or more times on a typical day. Approximately 40% reported watching three or more hours per day of TV on an average school day.
- In 2005, 17.9% of adults, or approximately 102,300 people, reported not having any kind of health care coverage. Over 20% of adults under 65 and 16.8% of those under 65 employed for wages reported no coverage.
- On average, 27% of fatal traffic crashes in the county are alcohol related.
- In 2005, nearly 40% of teens reported having had at least one drink of alcohol in the past thirty days.
- Since 1990, the pregnancy rate in teens, ages 15-19, has decreased by 49%.
- In 2005, one out of every five babies born was to an Hispanic mother.
- The infant mortality rate for Other Races from 2001-2005 was 2.9 times greater than the White rate.
- In 2005, 27% 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; 12% of teens reported actually attempting suicide one or more times.

# EXECUTIVE SUMMARY

## RANKING PRIORITY FOCUS AREAS

Eight priority focus areas emerged from the initial examination of health data. Sixty-five individuals representing a variety of community agencies and groups were asked to review data specific to these eight priorities and rank them using the following five criteria: magnitude; severity; intervention effectiveness; public concern; and urgency. Health disparities were to be considered a part of every topic rather than a separate focus area. The resulting ranking was as follows:

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

## RECOMMENDATIONS

Participants made the following recommendations for addressing the four highest ranked priority focus areas.

### *Chronic Disease Prevention through Healthy Choices*

- Advocacy training to adopt laws and policies that support healthy choices (tobacco cessation, healthy eating, and physical activity)

- Development of effective communications and social marketing strategies to promote positive health choices

### *Access to Care*

- Policy Change
    - Area health care collaborative
    - How to address those who are underinsured or "higher income" uninsured
    - Use of extended providers (NP, PA, RDH)
    - Supply of dental care

- Information Spread
    - How to navigate the systems
    - Universal financial screening
    - Education on what services are available and how to access them for BOTH patients and providers

### *Environmental Health – Healthy Places Supporting Healthy Choices*

- Smoke free workplaces by 2008
- Increase awareness of environmental health, especially within the business community
- Create advocates in the business community (raise the profile and create change)
- Have worksites implement policies that promote health (more supportive work environment)

### *Mental Health*

- Community education: prevention and promotion of mental health
    - Public awareness of issues and services available
    - School curriculum, training for staff, and strategic school plan to address mental health issue
    - Faith-based training
    - Reduce stigma

- Parent training and education
    - Community-based services
    - Need more community based treatment options including school-based services
    - Increased access to medications
    - Integration of primary care and mental health
    - Crisis services, jail diversion
    - Transition management

# INTRODUCTION & OVERVIEW

## CHARGE

Community Health Assessment (CHA) involves the use of quantitative and qualitative health data in identifying and prioritizing public health issues. Findings and recommendations are used in the development or endorsement of collaborative community action plans. The North Carolina Division of Public Health requires each local health department to conduct a comprehensive CHA every four years to fulfill the terms of the state consolidated contract. Certification by North Carolina Healthy Carolinians also calls for CHA on a four-year cycle, as does the state accreditation process for local health departments.

## PROCESS SUMMARY

In Mecklenburg County, Community Health Assessment is led by a Steering Committee from Mecklenburg Healthy Carolinians (MHC) and implemented by the Healthy Carolinians Coordinator and the Mecklenburg County Health Department Epidemiology Program (MCHD EP). The Epidemiology Program collects primary and secondary data from a variety of sources including formal reporting systems, vital records, the State Center for Health Statistics County Data Book, surveys, community reports, and focus groups to assemble a picture of health issues and concerns for the county. With guidance from the steering committeee and based on the data, priority concerns are identified. These concerns are then presented to a community group which ranks them and makes recommendations. Prioritized areas and recommendations are used to develop, affirm, or modify community action plans.

## STEERING COMMITTEE

The Steering Committee for the 2006 CHA consisted of the following members:

- Jen Algire, Executive Director, Community Health Services
- Kerry Burch, Healthy Carolinians Coordinator, Mecklenburg County Health Department
- Laura Clark, Research Associate, United Way of the Central Carolinas
- Susan Long-Marin, Epidemiology Manager, Mecklenburg County Health Department, and
- Kristin Wade, Assistant Vice-President, Carolinas HealthCare System.

MCHD Epidemiology staff included Charisse Jenkins, Donna Smith, and Sara Zimmerman.

## COMMUNITY DATA COMPILATION

Development of a community data overview allows the identification of community health assets as well as areas requiring attention. This section of the CHA includes statistics on specific community health indicators as well as information on geographic, socioeconomic, and demographic features. Data review began with collecting Mecklenburg specific information from known primary and secondary data sources including formal reporting systems, vital records, the State Center for Health Statistics County Data Book, surveys, community reports, and focus groups. See the section on Data & Information Sources for a more complete overview of data sources used. Data were organized by specific public health issues (e.g. communicable disease, chronic disease). Mecklenburg quantitative data were compared with state and national figures. Qualitative data from focus groups provided additional detail. Quick facts, positive trends, and areas for improvement were used to summarize each section.

## IDENTIFICATION OF PRIORITY CONCERNS

In the 2002 CHA, ten priority focus areas were identified through 1) a community leadership opinion survey; 2) a review of NC Healthy Carolinians and Healthy People 2010 goals and objectives; and 3) an examination of the coummunity data overview. Those ten focus areas, presented as prioritized, were:

Access to Care, Health Risk Behaviors, Cardiovascular Disease and Diabetes, Responsible Sexual Behavior, Substance Abuse, Cancer, Injury, Environmental Health and Respiratory Disease, Mental Health, and Maternal Child Health.

Health Disparities was not listed as a separate issue because it was considered an overarching concern, a part of every focus area.

In 2006, the Steering Committee reviewed the ten priority focus areas from the 2002 CHA to ascertain if they remained current concerns and to determine whether other concerns should be added to the list. Examination of the community data overview and results from an opinion survey of those attending the 2006 Healthy Carolinians Community Health Forum (see attachments for survey instrument and findings) suggested that these focus areas remained of current concern and interest. However, the decision was made to regroup them with a focus on common prevention strategies and healthy choices into the following eight areas:

1. Access to Care
2. Chronic Disease Prevention Through Healthy Choices
3. Enivronmental Health – Healthy Places Supporting Health Choices
4. Injury Prevention
5. Maternal Child Health
6. Mental Health
7. Responsible Sexual Behavior, and
8. Substance Abuse Prevention.

Health Disparities was again considered an overarching issue. One new topic that arose for discussion was Emergency Preparedness. It was decided, however, that because Preparedness is currently receiving high attention and funding on local, state, and federal levels that it would not be listed as a priority concern. This decision was backed by a lower concern score on the opinion survey.

## RANKING PRIORITY CONCERNS

The eight priority focus areas accompanied by data summaries were presented to a community meeting of 65 individuals representing a variety of community agencies and groups. (See Priority Ranking Exercise Section for a list of the attendees and the groups they represented as well as additional detail on the process and findings.) Attendees were divided into ten assigned groups and asked to rank each of the eight focus areas with a one to ten score for each of the following five critera: 1) magnitude, 2) severity, 3) intervention effectiveness, 4) public concern, and 5) urgency. Scores were calculated and the rankings presented as follows:

## RANKING PRIORITY CONCERNS (CONTINUED)

1. Chronic Disease Prevention Through Healthy Choices
2. Access to Care
3. Environmental Health – Healthy Places Supporting Healthy Choices
4. Mental Health
5. Substance Abuse Prevention
6. Injury Prevention
7. Responsible Sexual Behavior, and
8. Maternal Child Health.

## RECOMMENDATIONS

Attendees were then asked to self select into four groups based on the four highest ranked areas of concern and come up with at least two recommendations for addressing them. The recommendations are as follows.

### *Chronic Disease Prevention through Healthy Choices*

- Advocacy training to adopt laws and policies that support healthy choices (tobacco cessation, healthy eating, and physical activity)
- Development of effective communications and social marketing strategies to promote positive health choices

### *Access to Care*

- Policy Change
  - Area health care collaborative
  - How to address those who are underinsured or "higher income" uninsured
  - Use of extended providers (NP, PA, RDH)
  - Supply of dental care
- Information Spread
  - How to navigate the systems
  - Universal financial screening
  - Education on what services are available and how to access them for BOTH patients and providers

### *Environmental Health – Healthy Places Supporting Healthy Choices*

- Smoke free workplaces by 2008
- Make the community more aware of environmental health, especially the business community
- Create advocates in the business community (raise the profile and create change)
- Have worksites implement policies that promote health (more supportive work environment)

## RECCOMENDATIONS (CONTINUED)

### *Mental Health*

- Community education: prevention and promotion of mental health
  - Public awareness of issues and services available
  - School curriculum, training for staff, and strategic school plan to address mental health issue
  - Faith-based training
  - Reduce stigma
  - Parent training and education

- Community-based services
  - Need more community based treatment options including school-based services
  - Increased access to medications
  - Integration of primary care and mental health
  - Crisis services, jail diversion
  - Transition management

## APPLICATION/COMMUNICATING FINDINGS/COMMUNITY ACTION PLANS

The Health Department uses the identified priorities and recommendations from the community meeting in strategic planning. Healthy Carolinians works to develop or endorse collaborative community action addressing identified priority issues. A review of assets in Mecklenburg County shows numerous agencies, non-profits and existing collaborations already taking on projects to address priority focus areas. Examples of the work of these groups can be seen in the Community Action Plans section of this report. In cases where there are no existing groups addressing priority areas, Healthy Carolinians will explore opportunities for development.

The final CHA report will be posted on the Health Department and the Healthy Carolinians websites www.meckhealth.org and www.mecklenburghealthycarolinians.org . This document serves as a reference for many organizations developing grant proposals and programming. A brochure summarizing findings and recommendations will be developed and mailed to area funders, community leaders, elected officials, and other groups with missions that include healthcare and prevention. The Health Director will present the findings to the Board of County Commissioners. See the Communications Plan section for additional detail on how the findings and recommendations from the CHA will be disseminated.

# Priority Setting Exercise

## List of Attendees

## Ranking Results

## Recommendations

## Example of Criteria Scoring Page

## Data Summaries for Priority Areas

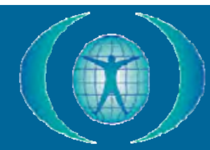
# LIST OF ATTENDEES

## Participant List

Mecklenburg Community Health Assessment Priority Ranking Exercise
Myers Park Baptist Church, February 6, 2007

| Name | | Agency |
|---|---|---|
| Jen | Algire | Community Health Services |
| Carolyn | Allison | Metrolina Comprehensive Health Centers |
| Susan | Basini | MedAssist |
| Maria | Bonaiuto | Mecklenburg County Health Department, School Health |
| Bill | Brandon | UNC Charlotte |
| Domonique | Brown | Mecklenburg County Health Department, Community Health |
| Tony | Bucci | Charlotte-Mecklenburg Schools |
| LaTonya | Chavis | Charlotte Reach 2010 |
| Laura | Clark | United Way |
| Carmel | Clements | Mecklenburg County Health Department, Communicable Disease Control |
| Vivian | Coleman | Charlotte Department of Transportation |
| Grayce | Crockett | Area Mental Health |
| Sue | Dissinger | YMCA of Greater Charlotte |
| Mike | Dulin, MD | CMC - Eastland Family Clinic |
| Beth | Edes | Mecklenburg County Health Department, Information Services |
| Cheryl | Emanuel | Mecklenburg County Health Department, Community Health |
| Gina | Esquivel | Metrolina AIDS Project |
| Ellis | Fields | Mental Health Association of Central Carolinas, Inc. |
| Regina | Fleenor | American Heart / American Stroke Association |
| Linda | Gallehugh | Teen Health Connection |
| Jacqueline | Glenn | Mecklenburg County Health Department, Community Services |
| John | Glorioso | Mecklenburg County Health Department, Syphilis Elimination Project |
| Sarah | Greene | Area Mental Health |
| Byron | Grimmett | Physicans Reach Out |
| Jill | Haynes | Presbyterian Healthcare |
| Michele | Miller Houck | Southeast Anesthesiology / Women's Summit |
| Lorraine | Houser | Mecklenburg County Health Department |
| Nancy | Hudson | Charlotte Community Health Clinic, Inc. |
| Tina | Hunt | Metrolina Native American Association |
| Shirley | Hutchins | Mecklenburg County Health Department, Clinical Services |
| Toan | Huynh, MD | Asian Community Representative |
| Janice | Allen Jackson | Mecklenburg County Government |
| Janice | Janken | Queens University |
| Jennifer | Jones | Presbyterian Healthcare |
| Pat | Lambright | Sickle Cell Regional Network |
| Nancy | Langenfeld | Charlotte-Mecklenburg Schools |
| Priscilla | Laula | Mecklenburg County Health Department, Health Promotion |
| Jon | Levin | Mecklenburg County Health Department, Health Promotion |
| Maria | Long | Presbyterian Cancer Center |
| Carlos | Martinez | Area Mental Health |
| Mona | McGruder | Mecklenburg County Health Department, School Health |

| Participant List, cont.<br>Mecklenburg Community Health Assessment Priority Ranking Exercise<br>Myers Park Baptist Church, February 6, 2007 | | |
|---|---|---|
| **Name** | | **Agency** |
| Lisa | Millner | Mecklenburg County Health Department, School Health |
| Winifred | Muhammad | Charlotte Mecklenburg Schools Prevention & Intervention Services |
| Cindy | Murphy | Chemical Dependency Center |
| MyChau | Nguyen | Presbyterian Hospital |
| Laura | Ours | Mecklenburg County Health Department, Health Communication |
| Trena | Palmer | Charlotte-Mecklenburg Senior Centers |
| Ron | Reeve | Area Mental Health, Consumer and Family Advisory Committee |
| Donna | Reid | Mecklenburg County Health Department, School Health |
| Kristi | Roe | Charlotte-Mecklenburg Schools |
| Carolyn J | Scruggs | Mecklenburg County Medical Society |
| Angelique | Seifert | Charlotte Mecklenburg Schools Prevention & Intervention Services |
| Kristen | Shaben | Mecklenburg County Health Department, Health Promotion |
| Karen | Simon | Substance Abuse Prevention Services |
| Michael | Taylor | Mecklenburg County Department of Social Services |
| Dianne | Thomas | Mecklenburg County Health Department, Fit City Challenge |
| Marilyn | Thompson | Florence Crittenton Services |
| Kate | Uslan | Mecklenburg County Health Department, Health Promotion |
| Kristin | Wade | Carolinas Medical Center |
| Ann | White | Metrolina AIDS Project |
| Janice | Williams | Carolinas Medical Center, Injury Prevention Center |



## Ranking Priority Health Areas

### 2006 Mecklenburg Community Health Assessment

| Health Area | Score |
|---|---|
| Chronic Disease Prevention | 8.01 |
| Access to Care | 7.19 |
| Environmental Health | 6.98 |
| Mental Health | 6.97 |
| Substance Abuse Prevention | 6.76 |
| Injury Prevention | 6.60 |
| Responsible Sexual Behavior | 6.54 |
| Maternal and Child Health | 5.76 |

## RECOMMENDATIONS FROM THE COMMUNITY PRIORITY SETTING EXERCISE

### 1. *Chronic Disease Prevention through Healthy Choices*

- Advocacy training to adopt laws and policies that support healthy choices (tobacco cessation, healthy eating, and physical activity)
- Development of effective communications and social marketing strategies to promote positive health choices

### 2. *Access to Care*

- Policy Change
    - Area health care collaborative
    - How to address those who are underinsured or "higher income" uninsured
    - Use of extended providers (NP, PA, RDH)
    - Supply of dental care
- Information Spread
    - How to navigate the systems
    - Universal financial screening
    - Education on what services are available and how to access them for BOTH patients and providers

### 3. *Environmental Health – Healthy Places Supporting Healthy Choices*

- Smoke free workplaces by 2008
- Make the community more aware of environmental health, especially the business community
- Create advocates in the business community (raise the profile and create change)
- Have worksites implement policies that promote health (more supportive work environment)

### 4. *Mental Health*

- Community education: prevention and promotion of mental health
    - Public awareness of issues and services available
    - School curriculum, training for staff, and strategic school plan to address mental health issue
    - Faith-based training
    - Reduce stigma
    - Parent training and education
- Community-based services
    - Need more community based treatment options including school-based services
    - Increased access to medications
    - Integration of primary care and mental health
    - Crisis services, jail diversion
    - Transition management

# CRITERIA SCORING PAGE

## Topic Area 1: SUBSTANCE ABUSE PREVENTION

Please rank the above health topic by scoring the following criteria from 1 to 10.

| CRITERIA FOR RANKING | SCORE |
|---|---|
| **Magnitude:** Proportion of the population affected or vulnerable?<br>*1=Affects very few, 10=Affects very many* | |
| **Severity:** Impact on mortality, morbidity, disability, and quality of life?<br>*1=Not very severe, 10=Extremely severe* | |
| **Public Concern:** Degree of public concern and awareness?<br>*1=Public is not concerned/aware, 10=Public is very concerned/aware* | |
| **Intervention Effectiveness:** Proven interventions exist that are feasible from a practical, economic, and political viewpoint?<br>*1=No effective interventions, 10=Several effective interventions* | |
| **Urgency:** Need for action based on degree and rate of growth (or decline); potential for affecting and amplifying other health or socioeconomic issues; or timing for public awareness, collaboration, and funding is present?<br>*1= While issue is important there is no need to address it immediately, 10=Issue requires immediate attention* | |

## ACCESS TO CARE

- Health access or access to care refers not only to health insurance coverage but to the willingness and ability to utilize services and the further ability to respond appropriately to care provided. Those with health insurance, whether private or public, may chose not to use it for a variety of reasons, including lack of trust between community and provider; cultural differences regarding care; lack of knowledge to navigate the system; and incompatible locations and hours. Focus groups with people of color in Mecklenburg County suggest a need for culturally appropriate education and information and culturally competent providers.

- People who do access health care may not receive its benefits because low health literacy prevents them from understanding the information they receive. As many as half of all adults may be affected by limited health literacy, the ability to read, understand and act on health information.

- The majority of uninsured adults are working. In Mecklenburg County, 16.8% of those under 65 and employed reported no insurance coverage in 2005 (BRFSS). National figures show that only 28% of the uninsured are unemployed or working part time (MEPS 2003, ERIU, U of Michigan). A little less than half of the uninsured (48%) are not considered low income (annual income less than 200% of the federal poverty level, about $40,000 for a family of four, not quite $20,000 for an individual).

- In 2005, 17.9% or about 102,000 adults reported no health insurance at some time in the past year,(BRFSS); National figures for 2003-2004 suggest that 10.3% of the population is chronically uninsured (for at least two years). Not all the uninsured may be seeking medical care. However, while this does influence demand, a public health perspective would encourage everyone to seek preventive care. In 2005, 13% of Mecklenburg residents reported not seeing a doctor in the past year because of cost and 23% reported no medical home (BRFSS). Children are more likely than adults to have medical coverage because of eligibility for Medicaid and state Children's Health Insurance Plans (North Carolina Health Choice). In 2004, 9.4% of Mecklenburg children 0-17 years were estimated to be without health insurance of any form (CPS, UNC).

- In 2005, local safety net clinics provided medical care to approximately 31,000 patients in the following sites: Carolinas Medical Center's four ambulatory clinics (24,000); Metrolina Comprehensive Health Care Center (3,000); Seven Community Free Clinics (2,500); and Physician's Reach Out (1,500) [through the Carolinas HealthCare System (500) and Presbyterian (1,000).Networks].

- Care options are most limited for those who do not qualify as low-income (may earn more than 200% of poverty but work for an employer who does not offer health insurance or cannot afford the premiums) and for the undocumented.

- Dental care options for low income adults without dental coverage are few. Medicaid does cover dental care but only as small number of dentists in Mecklenburg County is willing to accept Medicaid. Even fewer accept children five and under making accessing preventive appointments difficult. Medicaid reimbursement numbers suggested that a little less than a quarter of children five and under and eligible for Medicaid were seen locally in the year previous to September 2005. The Health Department pediatric dental clinic at Biddle Point provided 5,475 visits to 3,465 unduplicated clients, 35% (or 1,771) of whom were five years old or younger. On average, 68% of the children treated received Medicaid, and 12% had no dental insurance, (MCHD).

- MedAssist (community pharmacy) reports serving about 2,000 clients at any one time, and in 2006, dispensed over $6 million dollars of medication.

- For 2005-06, Mecklenburg County contributed $19.5 million towards indigent care, an increase of $1.5 million after many years of flat funding; The County also added 20 new school nurse positions.

## CHRONIC DISEASE PREVENTION THROUGH CHOOSING HEALTHY BEHAVIORS (TOBACCO, PHYSICAL ACTIVITY, AND NUTRITION)

- Nationally and locally, cancer, heart disease and stroke are the leading causes of mortality, accounting for almost half of all deaths; they are the leading causes of death for people ages 45 years and above. In Mecklenburg, nine of the ten leading causes of death are either chronic diseases or, as in the case of injury and HIV disease, have chronic components.

- Diabetes is a major contributor to cardiovascular disease as well as blindness, kidney disease, and amputations.

- Mortality rates for heart disease, cancer, diabetes, and stroke are declining in Mecklenburg County.

- While Mecklenburg mortality indicators compare favorably with the state and the nation, not all Mecklenburg residents experience these forms of mortality equally. African Americans have higher mortality rates than Whites for nearly every type of cancer. The reason why is not fully understand. Researchers say that while factors such as income, eduation, and health care access may account for much of the difference they do not explain all of the difference. People of Other Races also die at higher rates than Whites from cardiovascular disease, diabetes, and injury.
- During the 20$^{th}$ Century, Americans gained almost 30 years in life expectancy largely as a result of clean water, immunizations, and antibiotics. Chronic diseases replaced infectious diseases as the leading causes of death. Americans are now living longer with chronic conditions due to early diagnosis and treatment. However, the associated disability, medical costs, and dependence on medication may decrease quality of life.

- In 2005, 4% of Mecklenburg residents reported ever having a heart attack, 2% a stroke, and 6% diabetes.

- Screening tests can provide early detection and treatment for some types of cancer. Data from the BRFSS for residents 45 years and older show a doctor had recommended colorectal cancer screening to 70% (2005); 75% of men had had a PSA test (2005); and 80% of women had had a mammogram in the past two years (2004).

- **The choice of healthy behaviors can prevent or reduce the impact of many chronic conditions**. Such behaviors include: maintaining healthy weight, blood pressure, and cholesterol levels as well as engaging in physical activity, eating nutritious foods including a diet rich in fruits & vegetables, and avoiding tobacco use.

- In the 2005 BRFSS, Mecklenburg adults reported elevated cholesterol – 33%, high blood pressure – 27%, overweight or obesity – 56%, no physical exercise in the past month – 21%, current smoking – 16%, and eating less than five servings of fruits and vegetables per day – 76%.

- In the 2005 YRBS, 20% of Mecklenburg teens reported current smoking. White teens were two times more likely to report having recently smoked cigarettes than Black teens and 1.3 times more likely than Hispanic teens. Almost 90% of teens reported drinking a soft drink or sweetened beverage one or more times on a typical day. Approximately 40% reported watching three or more hours per day of TV on an average school day. Over half of teens attend physical education classes on one or more days in an average week when they are in school. Four percent of teens attend physical education classes daily in an average week when they are in school.Teens in North Carolina and the US were over eight times more likely than Mecklenburg teens to attend physical education classes daily in an average week when they are in school. Among teens who are enrolled in physical education classes, about 85% actually exercise or play sports more than 20 minutes during an average PE class.

## ENVIRONMENTAL HEALTH

Environmental Health affects us all. Traditionally, pollutant free air, water, land, homes, and workplaces come to mind when thinking about environmental health. More recently the discussion has broadened to include creating healthy places. If we are asking individuals to increase their levels of physical activity, eat nutritiously, and not use tobacco products, we must provide them with environments that support and encourage those choices.

Examples of Creating Health Places

- Worksite policies that 1) promote physical activity by allowing time and a conducive environment for exercise as well as an atmosphere that encourages actually using time for this purpose; 2) provide healthy food choices; 3) allow time and provide space for breast-feeding. Studies show that breastfed babies are healthier and less likely to be overweight than non-breast fed babies; and 4) are tobacco free.
- School policies that offer healthy food choices and required physical activity for all students;
- Family "policies" that provide opportunities for physical activity and healthy meals;
- Community planning policies that result in sidewalks, bike paths, pedestrian safe cross-walks, cleaner air, grocery stores accessible to all residents, green space for gardening and exercise, and safe neighborhoods that allow for exercise;
- Faith Community support for programming and policies that promote exercise and nutritious food choices among their members

Positive Progress

- In the past five years, Charlotte Mecklenburg Schools, Carolinas HealthCare System, and Gardiner Webb University have adopted tobacco free policies. Smoke Free Charlotte has gained momentum in working for tobacco-free public places;
- Twenty miles of greenway are under construction and there are plans for 185 miles over the next 20 years;
- Lunches in the Charlotte Mecklenburg Schools system offer more healthy choices;
- North Carolina has instituted required physical activity periods for schools;
- Community planners are considering the implication of the built environment (roads, sidewalks, transportation routes, etc.) on health; and
- Worksites are beginning to consider environments that support healthy choices for their employees; programs like Fit City Challenge are targeting this group and offering models and assistance.

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. The quality of outdoor air is measured using the Air Quality Index (AQI). This index is based on concentrations of ozone, particulates, carbon monoxide, nitrogen dioxide and sulfur dioxide. While the region has been successful in curbing most of these pollutants, ozone concentrations and particulate matter remain major concerns.

- Rising population and the increase of vehicle miles traveled are key factors affecting the ozone level in the Charlotte Metro area. Because ozone levels have consistently remained at approximately15% 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 . In 1998 there were 48 days where residents had to breathe unhealthful air in the form of elevated ozone concentrations. Recent data suggest some improvement with only four elevated ozone days recorded in both 2003 and 2004, some of the best years in measured air quality history. Ten elevated ozone days were detected in 2005. Although particularly impacting those with respiratory and cardiovascular diseases, poor air quality affects us all. Outdoor physical activity in bad air is not a healthy choice.

## INJURY PREVENTION

- Nationwide, total spending on trauma injuries, from such causes as automobile crashes and violence, doubled in the eight years between 1996 and 2003, reaching a cost level comparable to that of heart disease, according to federal estimates. Heart disease was the nation's highest-cost medical problem in 1996, with insurance companies, patients and government programs spending an estimated $58 billion for hospital care, doctor visits, home-health services and drugs. Trauma care, meanwhile, cost about $37.1 billion that year. But by 2003, trauma had become the costliest medical problem, consuming an estimated $71.6 billion in medical spending and topping the $67.8 billion spent on heart conditions (AQHR).

- Injury is all encompassing with at least 22 distinct injury areas when both intentional and unintentional issues are examined It affects every part of our day beginning with our morning shower and drive to work and ending only as we sleep safely through the night to begin another day. All ages from newborn to the elderly are at risk for injury.

- Unintentional Injuries are the leading cause of death and disability for people ages 1-44. Because injury strikes heaviest our younger population, it also results in the most potential years of life lost due to either death or disability. Yet, locally, statewide, and nationwide, there is very little funding and staff dedicated to injury prevention.

- Injury Prevention has a hard time gaining community momentum, because it is not something we see in front of us everyday like overweight children, poverty, or alcoholism. Injury gains attention for a few hours when an “incident” is covered and then loses appeal until the next incident, yet nationwide, two out of five teen deaths are from motor vehicle crashes and 82% of adolescents dying in violent activities are killed by firearms. Five deaths a day occur to children under 14 in motor vehicles, half of which are unrestrained. Nationwide, 906,000 cases of child maltreatment were confirmed by Social Services. Locally 82% of teens report not wearing a bike helmet and 25% had ridden in a car in the last 30 days with someone who had consumed alcohol. In 2003, 27,760 Mecklenburg motor vehicle crashes were reported, one every 0 .2 hours with a crash cost of $82,140 per hour.

- Injuries are not inevitable. Healthy choices-- seatbelts, helmets, child safety seats, not driving while or with someone impaired, secured firearms, non-slip surfaces, safe sleeping arrangements—(the list goes on and on) prevent injuries,

- In 2003, Mecklenburg County saw 69,979 visits to its hospitals emergency rooms due to injuries, for a total healthcare cost of $154,540,813 (residents and non residents). Mecklenburg County residents themselves made up 79% of those visits and 65% of the cost. In 2004, resident inpatient hospital utilization charges for injury and poison related injuries totaled $121,881,492. This does not include, cost of rehabilitation, disability, missed work days, loss of life, or other associated costs.

- In Mecklenburg County, unintentional injury is the leading cause of death for persons ages 1 – 44 years, the leading cause of death for Hispanics, and the 5th leading cause of death for the total popultaion. During 2004, 213 residents died from unintentional injury. People of Other Races die at higher rates from unintentional injury than Whites. Intentional injury is also an issue with 420 persons dying from homicde between 2000 and 2004.In general, homicide death rates for the county are usually higher than those for the state. During 2004, homicide was the third leading cause of death for children ages 1 to 14 years and the second leading cause of death for young people ages 15 – 24 years. Other Races are disproportionately affected by homicide. Based upon 2000 - 2004 age-adjusted death rates, males of Other Races are 4.1 times more likely to die than White males, and females of Other Races are 3.2 times more likely to die than White females.

## MATERNAL CHILD HEALTH

In 2004, there were 12,952 resident births: 8.3% were low birth weight, 11.6% were preterm, 82.2% received prenatal care in the first trimester, and 18.5% were delivered by Caesarean section; 8.5% were born to mothers under 20 and 2.6% to mothers over 40.

### Infant Mortality

The Mecklenburg infant mortality rate trended downward from 1990 to 1999 dropping 46% to a low of 6.1 deaths per 1000 live births, lower than the state and comparable with the nation. Beginning with 2000, the rate has moved up and down with a trend upwards. In 2004 it jumped 35% from 6.8 to 9.2 the highest rate since 1993. No particular change in a single cause of death was identified as contributing to this increase. In 2005 the infant mortality rate dropped again to 8.4, a decline of about 9%. Further data from 2006 will be needed to see if this downward direction continues. The five year rate for 2001-2005 is 8.0 compared to the state rate for the same period of 8.5. In 2004 there were 119 infant deaths and in 2005, 113. Of more concern than the overall rate is the considerable gap between rates for Whites and Other Races. The infant mortality rate for Other Races from 2001-2005 was 2.9 times greater than the White rate.

Birth defects, disorders related to short gestation (preterm birth) and low birth weight (LBW), sudden iInfant death syndrome (SIDS), and maternal complications are the four leading causes of infant death in Mecklenburg County. Birth defects are the leading cause locally and nationally.

### Prenatal Care

In 2004, 82.2% of women entered prenatal care in the 1$^{st}$ trimester in Mecklenburg County. Since 2000, entry into 1$^{st}$ trimester care has decreased by 6.8% and the percent of women receiving adequate care (as measured by the Kesner Index) has decreased by 8.3%. Less than 1.5% of all births receive no prenatal care. Hispanics have the lowest rate of entry into 1$^{st}$ trimester care but at this point some of the best birth oucomes. As a result of the large increase in Hispanic immigration over the past 10 years,  almost 20% of total births in Mecklenburg occur to Hispanic women. This rise, up from only about 1% a decade ago has hugely increased the demand for low income prenatal care.

### Low Birth Weight

The trend for low birth weight in Mecklenburg has remained rather flat over the past five years. In 2004 there were 12,952 births in Mecklenburg County and 8.3% of infants were born with Low birth weight. In 2004, the state and national rates were 9.1% and 8.1%, respectively. African Americans have the highest percent of low birthweight infants.

### Prematurity

Rates for preterm births have been declining overall although there are differences between races and ethnic groups. African American women have the highest rates of preterm birth but their rates have been falling as those for NonHispanic Whites and Hispanics are beginning to rise.

### Maternal Behavior

From 1998 to 2004, the percent of women in Mecklenburg County who reported smoking during pregnancy decreased by 38%. From 2000-2004, less than 1% of women reported using alcohol during pregnancy. Whether these data are accurate or are the result of greater public pressure not to drink and smoke during pregnancy cannot be determined without further research.

## MENTAL HEALTH

- Mind and body are inseparable. Mental health is fundamental to total health. The mind is a function of the brain and mental health conditions are real health problems.
- "It is easy to overlook the value of mental health until problems surface. Yet from early childhood until death, mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem. These are the ingredients of each individual's successful contribution to community and society." – Surgeon General's Report on Mental Illness
- Mental disorders, including major depression, bipolar disease, scizophrenia, and obsessive-compulsive disorder, are the leading cause of disability in the U.S. for those ages 15-44.
- A range of treatments exists for most mental disorders but nearly half of all Americans who have a severe mental illness do not seek treatment. Stigma and cost are two of the major barriers to care. Survey data, licensed from Porter Novelli by SAMHSA and CDC, found that only 25% of young adults believe that a person with a mental illness can eventually recover, and slightly more than one-half (54%) who know someone with a mental illness believe that treatment can help people with mental illnesses lead normal lives.
- People of Other Races have less access to, and availability of, quality mental health services than Whites, leading to a greater burden of disability.
- Alzheimer's Disease is the most common cause of dementia among people age 65 and older.
- Attention Deficit Hyperactivity Disorder (ADHD) is one of the most common mental disorders in children and adolescents, and also affects an estimated 4.1 percent of adults, ages 18-44, in a given year.
- Mood Disorders include major depressive disorder, disthymic disorder, and bipolar disorder. Approximately 9.5 % of the U.S. population age 18 and older in a given year, have a mood disorder. Depressive disorders often co-occur with anxiety disorders and substance abuse.

  ***Mecklenburg*** In the 2005 BRFSS, when asked about mental health--stress, depression, and problems with emotions—5.7% of adults said their mental health had not been good for 8-29 days in the past month and 3.5% in the past 30 days. In the 2005 YRBS, 27% of Mecklenburg 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. In the 2003 Community Needs Survey, 27,200 individuals reported not getting the counseling services they needed for nerves or depression. Other reported unmet need included counseling for serious illness or death of a family member - 19.200 individuals, stress of raising a family – 24,000 individuals, and care giving stress – 14,800 individuals.

- Suicide: More than 90 percent of people who kill themselves have a diagnosable mental disorder, most commonly a depressive disorder or a substance abuse disorder. Four times as many men as women die by suicide; however, women attempt suicide two to three times as often as men.

  ***Mecklenburg*** Suicide is not among the leading ten causes of death for adults. Nationally and locally, suicide is the 3rd leading cause of death for teens. In 2005, there were 59 deaths from suicide; two youth ages 15-19 committed suicide. In 2004, four youth—three (15-19 yrs) and one (10-14 yrs)—died by suicide. In the 2005 YRBS, over 13% of teens reported seriously considering attempting suicide; Approximately 12% of teens made a plan about how they would attempt suicide one or more times; and 12% of teens reported actually attempting suicide one or more times.

- Eating Disorders include anorexia nervosa, bulimia nervosa, and binge-eating disorder.

  ***Mecklenburg*** In the 2005 YRBS, white females were over ten times more likely to describe themselves as being overweight than to actually report being overweight. About 4.6% of teens reported taking diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight. More than 5% of teens reported they vomited or took laxatives to lose weight or to keep from gaining weight.

## RESPONSIBLE SEXUAL BEHAVIOR

- **Unplanned Pregnancy: Teen Pregnancy** While not all teen births may be unplanned, the working assumption is that many of them are. Since 1990, the pregnancy rate in Mecklenburg teens ages 15-19 has decreased by 49%. Almost two-thirds of these pregnancies are to girls 18-19. While this is excellent news, there are still more than 1,500 pregnancies a year in teens. In 2004 there were 1,541 pregnancies in girls 15-19 and 1,065 births. Of greater concern are pregnancies and births to girls 17 and under. In 2004, girls 15-17 gave birth to 372 babies and girls 10-14 to 30.
- **Adolescent Sexual Behavior** In the 2005 YRBS, over 50% of Mecklenburg teens reported ever having sex; more than 10% reported having sexual intercourse for the first time before age 13; approximately 38% reported having sexual intercourse with one or more people in the past three months; and among those who had sexual intercourse in the past three months, almost 20% reported drinking alcohol or using drugs before last sexual intercourse. Among those who had sexual intercourse in the past three months, about 70% reported using condoms.
- **Unplanned Pregnancy: Interpregnancy Interval Less Than or Equal to Six Months** There are approximately 13,000 resident births per year in Mecklenburg County. From 2001 to 2005, 12.2% of births (the same percent as the state) had an interpregnancy interval of six or fewer months, suggesting that the births were unplanned.
- **HIV Disease and Other Sexually Transmitted Diseases (STDs)** In 2004, **HIV disease** was the 9th leading cause of death in Mecklenburg County, and the 4th leading cause for people of Other Races. While the death rate continued a downward trend, after a decade of improvement, rates for new cases of HIV disease begann increasing in 2001 with a peak in 2003. The unusually large number of cases reported in 2003 was partially due to the identification of previously unreported cases on both the state and local level. However, annual case rates for 2004 and 2005 remain higher than case rates from five years prior pointing to an overall increase for the county. In 2005, 327 new HIV disease cases were reported for a rate of 41.6 per 100,000.
- Explanations for the recent rise in new cases include: lowered perception of risk, sub-optimal antiretroviral treatment response, failure to diagnose HIV infection until AIDS-related symptoms occur, and changes in the populations impacted by the epidemic. Today, people infected with HIV disease are more likely to be female, young, heterosexual and a racial minority in comparison to the past.
- Racial and ethnic minorities are disproportionately affected by HIV disease accounting for 78% of total cumulative reports since 1983, or 3,922 cases. While the number of Hispanics reported with HIV disease is relatively small, since 2000 increased case reporting has been noted. Research suggests that 25% of those infected with HIV may be unaware or their status. Prevention is focused on outreach and screening as well as safe sex practices.
- Although the rate of Mecklenburg primary & secondary (P&S) **syphilis** declined 94% between 1994 and 2003, it rebounded during 2004 and 2005 following a national trend. This increase has been linked with rising case reports among Men who have Sex with Men (MSM) and White males. More than half of the syphilis cases reported in 2005 were among MSM. Syphilis case reporting varies across racial and ethnic categories. Prior to 2003, over 90% of P&S cases reported in the county were among African Americans. However the gap between Whites and African Americans has decreased in recent years. In 2005, 53% of cases were Black, 42% were White and another 4% were Hispanic. In 2005, 142 cases of early syphilis were reported in Mecklenburg County. Syphilis, like gonorrhea and chlamydia is readily treated with antibiotics when detected early.
- **Chlamydia** is the most commonly reported infectious disease in the United States, accounting for 3 million cases each year. In recent years increased reporting of chlamydia cases have been documented for the county with 3,527 cases in 2005. The increases in reported cases and rates likely reflect the continued expansion of screenings and increased use of more sensitive diagnostic tests; however, this trend may also reflect an actual increase in infections. In general, chlamydia is more common in women than men. 80% of new cases reported in the county each year are among women and nearly half are in adolescents. **Gonorrhea** is the second most commonly reported STD in the nation. In Mecklenburg overall rates of gonorrhea infection have declined and, in recent years, appear to have plateaued with approximately 2,000 cases reported a year. Of concern is that more than a quarter of cases continue to be seen in adolescents. African Americans remain the group most heavily affected with approximately 90% of all new cases reported in the county between 2000 and 2005.

## SUBSTANCE ABUSE PREVENTION

Substance abuse crosses all race, economic, and gender groups. While we may not have a substance problem ourselves, most of us know someone who does. Intoxicated drivers put everyone on the highways at risk. Data are most readily available for alcohol consumption.

### Alcohol Consumption and Illicit Drug Use in Mecklenburg County

- **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 on one occasion.

#### *By Age*

- The proportion of adults reporting heavy drinking in the county has declined from 6.6% in 2003 to 3.5 % in 2005.
- Between 2001 and 2005, an estimated 13% of adults in Mecklenburg reported binge drinking.
- According to the 2005 Youth Risk Behavior Survey (YRBS), nearly 40% of Mecklenburg teens have had at least one drink of alcohol in the past thirty days.
- Nearly 20% of teens reported binge drinking in the month prior to being interviewed.
- While the proportion of teens admitting alcohol use remains high, rates have steadily declined in the county.
- According to the Substance Abuse Prevention Services, alcohol use among Mecklenburg teens declined by 43% between 1995 and 2004.
- The lifetime use of most drugs increases as a student moves from Grade 6 to Grade 11.
- In 2005, over 40% of Mecklenburg teens reported using marijuana one or more times during their life.
- About 14% of teens have taken prescription drugs such as OxyContin, Percocet, Demerol, Adoral, Ritalin, or Zanax without a doctor's prescription one or more times during their life.

#### *By Gender and Race/Ethnicity*

- In general men are more likely to report binge drinking. 20% of adult males surveyed between 2001 and 2005 reported binge drinking, compared to 7% of females.
- However, reports of heavy drinking are more similar for men and women in the county. (2001-2005 BRFSS data on Heavy Drinking: 5.4% for males and 4.6% for females)
- Reports of binge drinking and heavy drinking are highest among Whites in Mecklenburg.
- Among adults, 16% of Whites reported binge drinking in comparison to 12% of Hispanics and 8% of African Americans.
- Reports of binge drinking in the past 30 days among White teens were four times higher than those of Black teens and 1.6 times higher than Hispanic teens

### Alcohol Related Injuries and Fatalities

- The North Carolina Division of Motor Vehicles estimates that 27,288 crashes occur in Mecklenburg County per year. Approximately 4.4% of these crashes are alcohol-related. On average, 27% of fatal traffic crashes in the county are alcohol related.

# Community Data Overview

Population and Social Determinants of Health

Mortality

Maternal and Infant Health

Health Behaviors

Injury

Environmental Health

Communicable Diseases

Mental Health

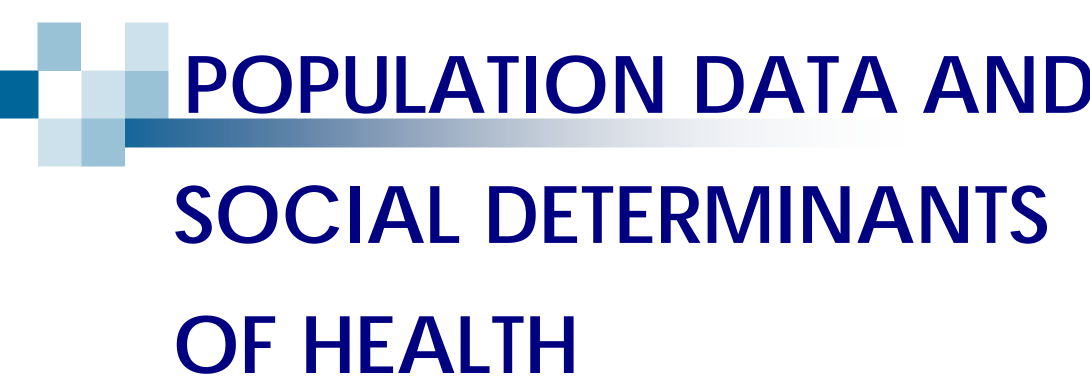
Substance Abuse

Access to Care

Chronic Diseases

Health Disparities

2006 Mecklenburg County Community Health Assessment
Prepared by: Mecklenburg County Health Department (MCHD), Epidemiology Program



# POPULATION DATA AND SOCIAL DETERMINANTS OF HEALTH

# MECKLENBURG DEMOGRAPHICS

## OVERVIEW

Mecklenburg County is the center of the country's fifth largest urban area with over seven million people living within a 100-mile radius. The county consists of a large urban center surrounded by smaller, more rural communities. Charlotte, with an estimated 2005 population of 610,949, is the largest city in the state and occupies 280 of the county's 527 square miles. Other municipalities include Cornelius, Davidson, Huntersville, Pineville, Matthews and Mint Hill.

## POPULATION TRENDS

The total estimated population for Mecklenburg County for 2005 is 780,216. This was an increase of 12.2% since the 2000 Census. Mecklenburg county population is expected to reach 836,280 by 2010.

### *Live Birth Rate vs. Death Rate*

- In 2005, 13,527 resident births and 4,781 deaths were recorded in Mecklenburg County.
- The total live birth rate of 17.0 births per 1,000 population is almost 3 times the total crude death rate of 6.0 deaths per 1,000 population.

## MECKLENBURG DEMOGRAPHIC QUICK FACTS

- The total estimated population for Mecklenburg County for 2005 is 780,216, an increase of 12.2% since the 2000 Census.
- The total live birth rate of 17.0 births per 1,000 population is almost 3 times the total crude death rate of 6.0 deaths per 1,000 population.
- The 2005 estimated Mecklenburg County population is 64% white and 36% Other Races compared to the estimated 2005 North Carolina population of 8,411,041 which is 71.4% white and 28.6% Other Races.
- The 2005 Mecklenburg population is fairly young with a median age of 34.4.
- Charlotte-Mecklenburg Schools (CMS) is the 22nd largest school system in the country and the largest in the Carolinas.
- Almost 40% of Mecklenburg county residents age 25 years and older have at least a bachelor's degree compared to 25% of North Carolina residents.
- Charlotte is the 2nd largest financial center in the nation with more than $1.8 trillion in assets.

**Mecklenburg County Population By Race and Ethnicity**

| 2000 | | | 2005 | | |
|---|---|---|---|---|---|
| ***Total Population*** | ***695,454*** | | ***Total Population*** | ***780,618*** | |
| **Race** | **Number** | **%** | **Race** | **Number** | **%** |
| *White* | 445,250 | 64.0% | *White* | 487,146 | 62.4% |
| *African-American* | 193,838 | 27.9% | *African-American* | 227,342 | 29.1% |
| *Asian/Pacific Islander* | 22,228 | 3.2% | *Asian/Pacific Islander* | 29,843 | 3.8% |
| *American Indian/Alaskan Native* | 2,439 | 0.4% | *American Indian/Alaskan Native* | 3,387 | 0.4% |
| *Other Race* | 20,954 | 3.0% | *Other Race* | 20,879 | 2.7% |
| *More than One Race* | 10,745 | 1.5% | *More than One Race* | 12,021 | 1.5% |
| **Ethnicity** | | | **Ethnicity** | | |
| *Hispanic (of any race)* | 44,871 | 6.5% | *Hispanic (of any race)* | 71,904 | 9.2% |

# MECKLENBURG DEMOGRAPHICS

## RACE/ETHNICITY

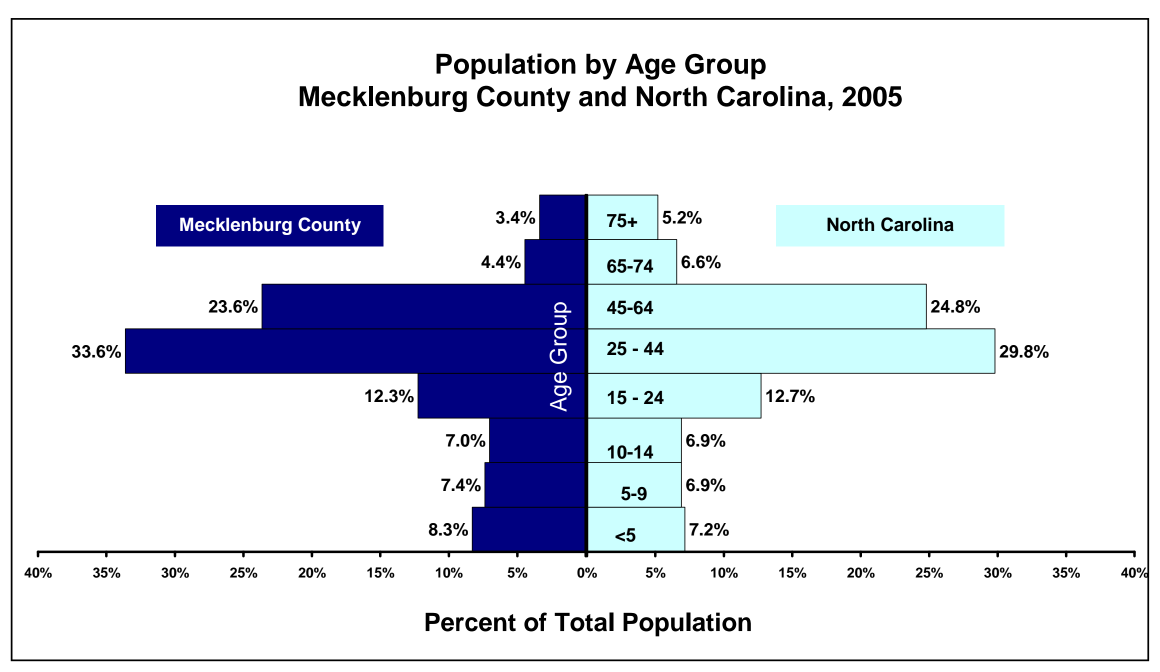
- The 2005 estimated Mecklenburg County population is 64% white and 36% Other Races compared to the estimated 2005 North Carolina population of 8,411,041 which is 71.4% white and 28.6% Other Races.
- Since 2000, the percentages of white residents has declined while the percentage of African-Americans, Asian/Pacific Islanders, and Hispanics have increased.
- Since 1990, Mecklenburg has experienced a large increase in Hispanic populations due to immigration. The percentage of Hispanics has increased from 1.3% of the total population to an estimated 9.2% of Mecklenburg county residents.

## AGE

- The 2005 Mecklenburg population is fairly young with a median age of 34.4.
- About 35% of Mecklenburg residents are under the age of 25 similar to 33% of state residents.
- Almost 8% of Mecklenburg's population is over the age of 65 compared to 11% of North Carolina's population.

## EDUCATION

- With a 2006-2007 enrollment of more than 129,000 students in grades K-12 attending 161 schools, Charlotte-Mecklenburg Schools (CMS) is the 22nd largest school system in the country and the largest in the Carolinas.
- In the Charlotte Mecklenburg School District the per pupil expenditure is $8,198.
- The dropout rate for the 2005 CMS Graduation class was 19.4%.
- More than 150,000 students are enrolled in degree or college-transfer programs at the 35 colleges, universities, community colleges and technical institutes located within the 13 county Charlotte Metro Region. Institutions located within the county are listed in the table below.
- Almost 40% of Mecklenburg county residents age 25 years and older have at least a bachelor's degree compared to 25% of North Carolina residents.



# MECKLENBURG DEMOGRAPHICS

## Mecklenburg County Demographics

### Education Data

| Educational Attainment[1] | % |
|---|---|
| *Less than 9th grade* | 4.0% |
| *9th to 12th grade, no diploma* | 7.1% |
| *High school graduate (includes equivalency)* | 21.6% |
| *Some college, no degree* | 19.7% |
| *Associate's degree* | 8.5% |
| *Bachelor's degree or higher* | 39.0% |

| Primary and Secondary Schools[3] | # of schools |
|---|---|
| *Elementary Schools* | 94 |
| *Middle Schools* | 32 |
| *High Schools* | 25 |
| *Alternative/Special* | 10 |
| *Private* | 25 |

**Institutions of Higher Education[2]**

*University of North Carolina-Charlotte*
*Queens University*
*Johnson & Wales University*
*Johnson C. Smith University*
*King's College*
*Montreat College*
*Pfeiffer University*
*Central Piedmont Community College*

| | |
|---|---|
| **Public school drop out rate[3]** | 19.4% |
| **Per Pupil Expenditure[3]** | $8,198 |

[1] *US Census*
[2] *Charlotte Chamber of Commerce*
[3] *Charlotte Mecklenburg Schools*

## ECONOMIC

Charlotte is the 2nd largest financial center in the nation with more than $1.8 trillion in assets. Manufacturing also contributes significantly to the regional economy with 1,870 manufacturers who employ more than 74, 542 workers. The five largest employers in Mecklenburg County are listed to the right.

### *Unemployment Rate*

- The unemployment rate in Mecklenburg County increased from 4.1% in 2000 to 4.9% in 2005.

### *Income and Poverty Status*

- The 2005 median family income for Mecklenburg County was $62,627 compared to $49, 399 for North Carolina.
- In 2005, 9.2% of all persons in Mecklenburg lived in poverty compared to 12.3% across the state (see Social Determinants of Health for more information).

| Mecklenburg Demographics | |
|---|---|
| Economic Data 2005 | |
| **Unemployment Rate[1]** | 4.9% |
| **Median Family Income[1]** | $62,267 |
| **% of All Persons Living In Poverty[1]** | 11.3% |
| *persons 18 years or older* | 9.6% |
| *persons 65 years and older* | 8.5% |
| **Five Largest Employers in Mecklenburg County[2]** | |
| *Wachovia* | |
| *Carolinas HealthCare System* | |
| *Charlotte Mecklenburg Schools* | |
| *Bank of America* | |
| *State of North Carolina* | |

[1] *US Census, American Community Survey*
[2] *Charlotte Chamber of Commerce*

**Sources**

United States Census Bureau, American Community Survey.: www.census.gov

Charlotte Chamber of Commerce: www.charlottechamber.com

Charlotte Mecklenburg School District: www.cms.k12.nc.us

# SOCIAL DETERMINANTS OF HEALTH

## OVERVIEW

Individual health as well as community health is greatly influenced by social and economic conditions such as poverty, social exclusion, unemployment, and poor housing. These factors, often called social determinants of health, contribute to inequities in health, explaining why people living in poverty die sooner and get sick more often than those living in more privileged conditions.

Research from the World Health Organization suggest that social and economic status maybe the most important determinants of health and appear to have a greater influence on health than health care access and service utilizations. In fact, health status improves at each step up the income and social hierarchy. 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, all factors which may contribute to continued poverty and the development of poor health outcomes.

**Determinants of Health Status**

Policies and Intervention

Behavior

Physical Environment

INDIVIDUAL

Social Environment

Biology

Access to Quality Health Care

**Source: Healthy People 2010**

### QUICK FACTS ON SOCIAL DETERMINANTS OF HEALTH

- Social determinants of health (SDOH) refer to the social and economic factors believed to affect health outcomes.
- Examples of SDOH include:
  - Income and Social Status
  - Education
  - Physical Environment
  - Genetics
  - Health Services
  - Employment
  - Gender
- Current research indicates two factors, social and economic status appear to be the most important determinant of health.

### SUMMARY OF SDOH TRENDS FOR MECKLENBURG COUNTY

**Positive Trends**

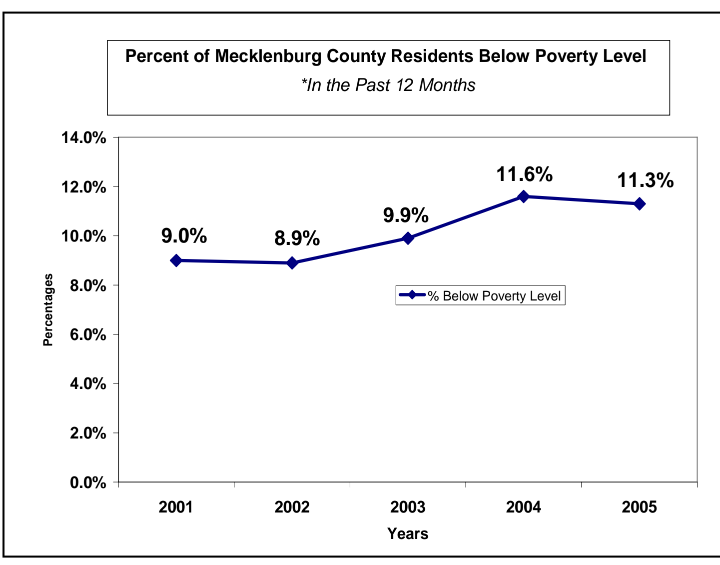
- The median family income in the county has increased over time.
- On average, 89% of persons 25 years and over in the county have received a high-school diploma.

**Areas for Improvement**

- While Mecklenburg rates are lower than the state and the nation, poverty rates have steadily increased in the county.
- The number of children under the age of 18 living in poverty has increased.
- Other Races and persons with less than a high-school education are more likely to live in poverty than Whites or persons with higher education levels.

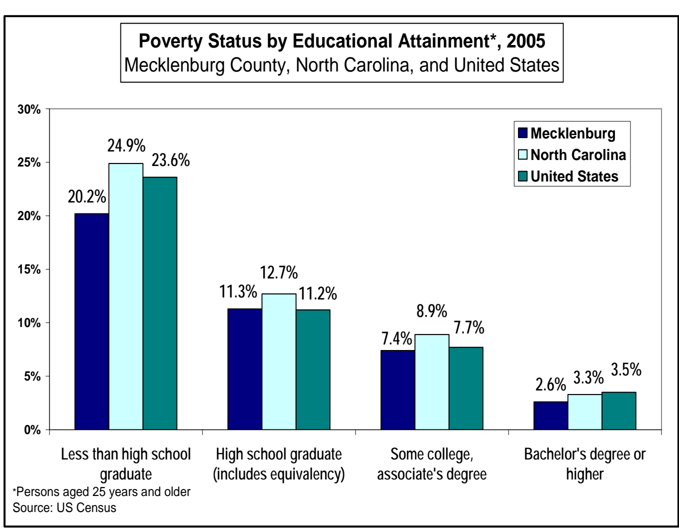
## POVERTY IN MECKLENBURG COUNTY

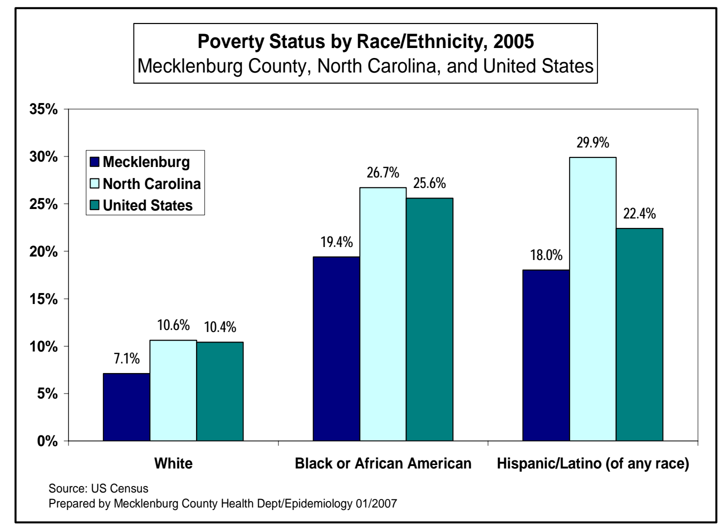
- The relationship between poverty and health is complex and influenced by mulitple, interrelated factors including: poor environmental conditions, low education attainment, financial barriers in accessing health services, and a lack of resources necessary to maintain good health status.
- Persons living in poverty are more likely to experience adverse health outcomes such as: elevated blood pressure, obesity, infant mortality and increased deaths from chronic diseases.
- The percent of Mecklenburg County residents living in poverty has increased in recent years.
- In 2001, there were 63,104 persons living below the poverty level, about 9% of the population. By 2005, 11% of the population was in poverty.
- While povery levels remain high for the county, the mean family income has also increased.
- Between 2003 and 2005, the mean family income increased by nearly 7% from $58,449 to $62,267.




### *Poverty by Educational Attainment*

- Multiple studies have established a link between high poverty rates and low levels of educational attainment.
- On average*, 89% of Mecklenburg residents over the age of 24 have received at least a high school diploma.
- When examining 2005 poverty rates among persons 25 and over, approximately 20% of Mecklenburg residents with less than a high-school diploma lived in poverty compared to only 3% of residents with a bachelor's degree of higher.



### *Poverty by Age and Race/Ethnicity*

- Poverty in related children under 18** has increased over time in the county.
- In 2001, there were 20,637 children under the age of 18 living below poverty, accounting for 8% of the population. In 2005 the percent of children living below povery increased to 16%.
- In general People of Other Races experience poverty more often than Whites.
- In Mecklenburg, African Americans and Hispanics are nearly three times more likely to live in poverty in comparison to Whites (based upon 2005 US Census data).

**Sources:**

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*Average number based upon 2001 -2005 Educational Attainment Data for Mecklenburg County.

**Related children includes any child under 18 years old who is related to the householder by birth, marriage, or adoption. Related children of the householder include ever-married as well as never-married children. Children, by definition, exclude persons under 18 years who maintain households or are spouses of householders.

# Municipalities

## Mecklenburg County, North Carolina

Davidson
Cornelius
Huntersville
Charlotte
Unincorporated Mecklenburg
Unincorporated Mecklenburg
Mint Hill
Matthews
Pineville

N

0 1 2 4 6 8
Miles

North Carolina
Mecklenburg County

Planning & Evaluation

Prepared by the Office of Planning and Evaluation
Mecklenburg County Health and Human Services
Updated December 2002

# Median Income for all Households

## Mecklenburg County, North Carolina

N

**Median Household Income**

- Very Low ($24,000 or less)
- Low ($24,001 - $36,000)
- Moderate ($36,001 - $62,700)
- High ($62,701 - $80,200)
- Very High ($80,201 or more)
- interstate
- Target Area ZIP Codes
- ZIP Code Areas

Median Income for all Households in Mecklenburg County is $50,579 (2000 U.S. Census).

The income categories above are based on the distribution of median income for all households by Census tract (10%, 20%, 40%, 20%, and 10%).

A similar distribution based at the household level would produce different break points.

77
85
28216
28206
85
74
277
28208
28205
485
28212
485
28217
77
74

0 1 2 4 6 Miles

North Carolina

Mecklenburg County

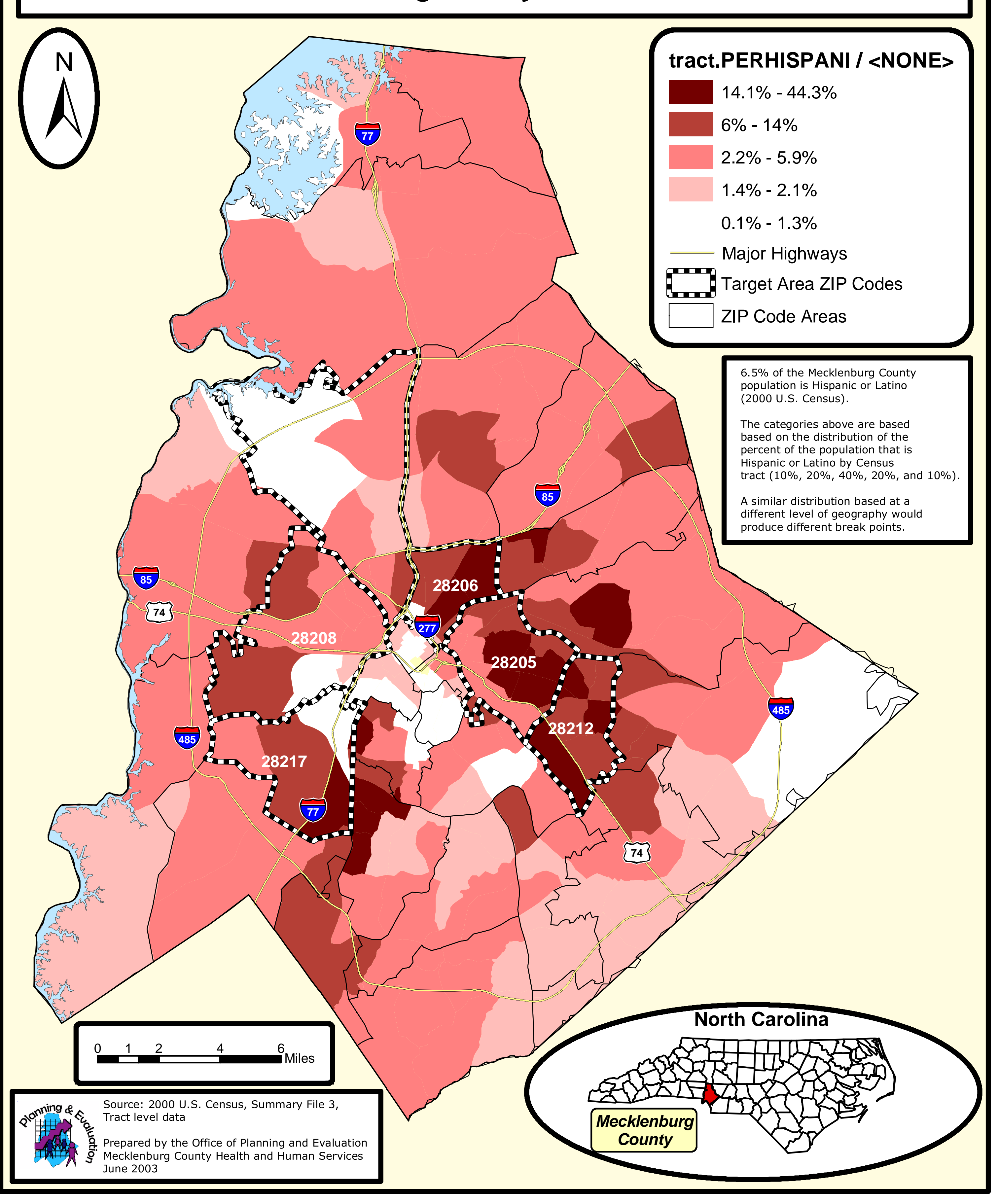
Planning & Evaluation

Source: 2000 U.S. Census, Summary File 3, Tract level data

Prepared by the Office of Planning and Evaluation
Mecklenburg County Health and Human Services
June 2003

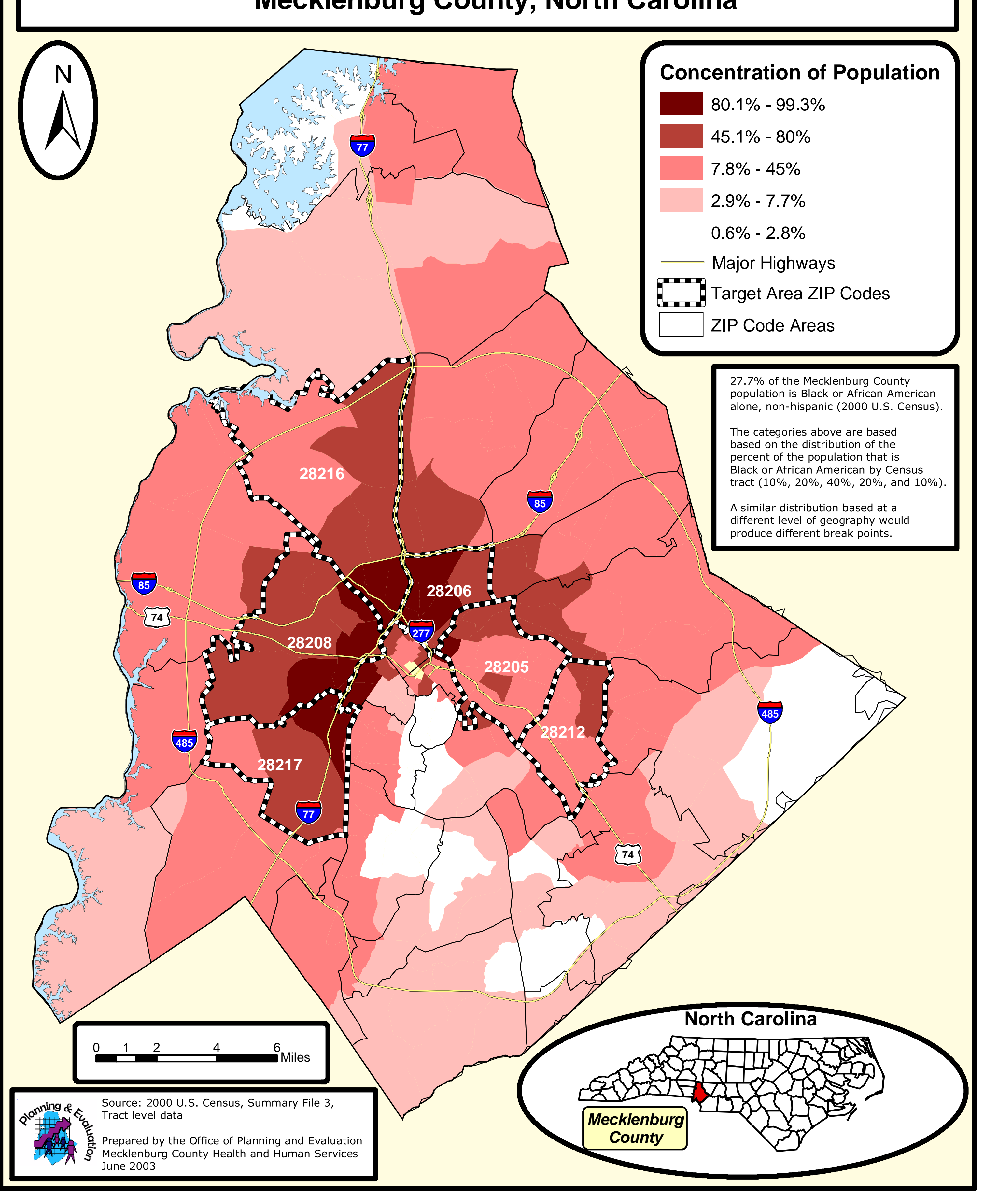
# Concentrations of Hispanic or Latino Population

## Mecklenburg County, North Carolina



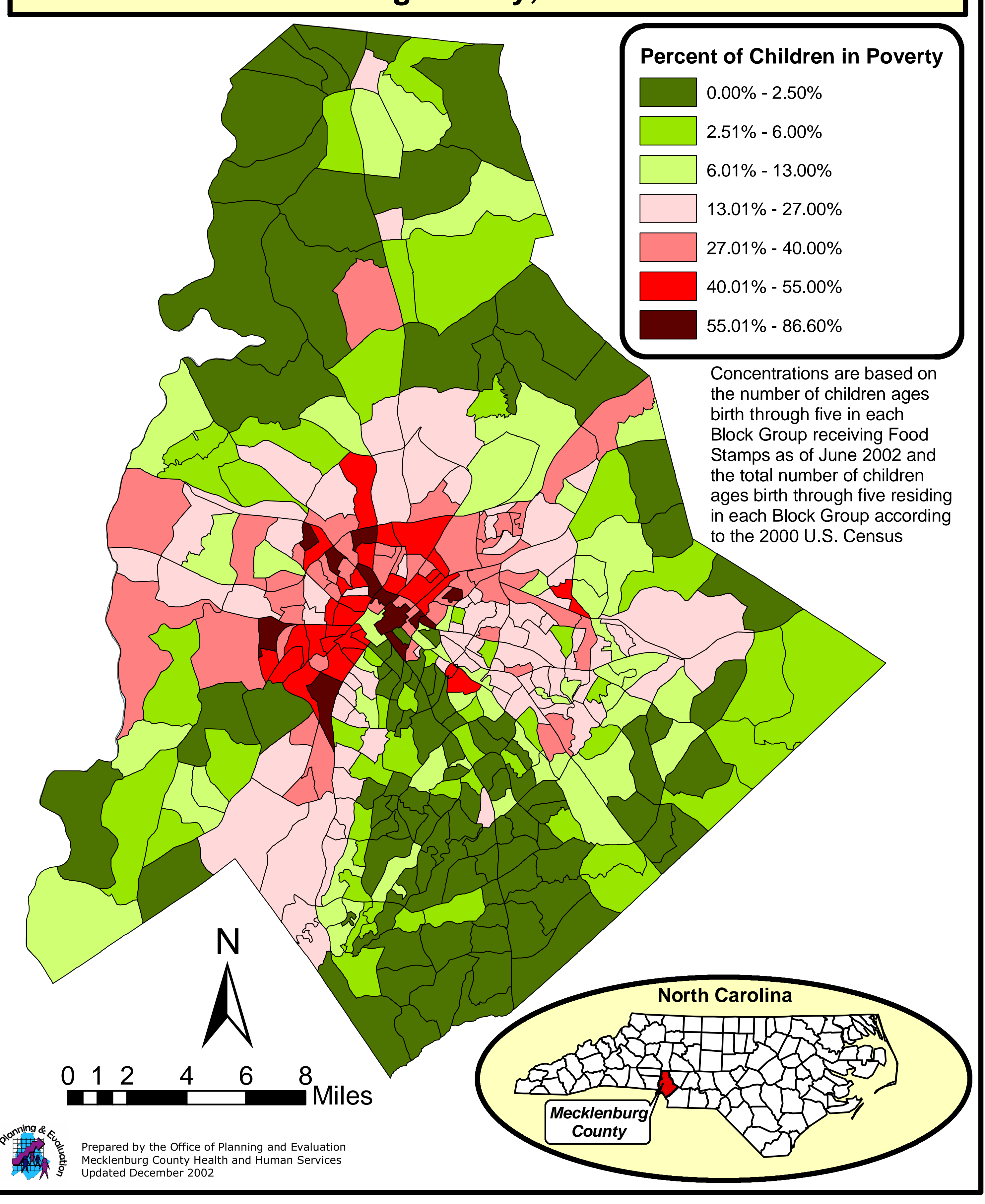
# Concentrations of Black or African American Population

## Mecklenburg County, North Carolina



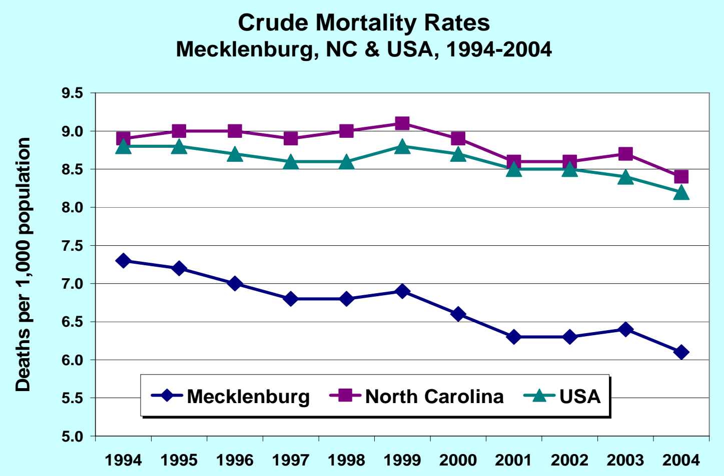
# Concentrations of Child Poverty

## Mecklenburg County, North Carolina



# MORTALITY

# MORTALITY




Source: NC State Center for Health Statistics, CDC NCHS

## OVERVIEW

The Mecklenburg mortality rate of 6.1 per 1,000 popualtion in 2004 is almost 1/3 the birth rate. The death rate is lower than that of the state and the nation, even after adjusting for age. In Mecklenburg, the mortality rate has been declining for the past ten years. This decrease holds true for all race and gender groups, but people of Other Races continue to die at younger ages and higher rates than whites from some causes. Please see the section on Health Disparities for additional information about disparate mortality outcomes.

In 2004, there were 4,676 deaths in Mecklenburg County. Cancer, heart disease, and stroke accounted for almost half of these deaths.

## LEADING CAUSES OF DEATH

In 2004, the ten leading casues of death for Mecklenburg remain the same as 2003 with the exception that pneumonia & influenza moved from 8th place to out of the top ten and was replaced by septicemia at 10th place. The rank order of the leading ten causes did shift with cancer replacing coronary heart disease as the leading cause of death. Cerebrovascular disease (stroke), Alzheimer's disease, unintentional injuries, and chronic lower respiratory diseases remained 3rd through 6th. Renal (kidney) disease moved from 9th to 7th, diabetes from 7th to 8th, and HIV disease from 10 to 9th place.

## QUICK FACTS ON MORTALITY

- Cancer, heart disease and stroke are the leading causes of mortality for Mecklenburg residents, accounting for almost half of all deaths; they are the leading causes of death for people ages 45 years and above.
- Alzheimer's disease is the 4th leading cause of death; white women who as a group live longest are most likely to die from Alzheimer's disease.
- Unintentional injury is the 3rd leading cause of death for men, the 6th leading cause for women, and the leading cause of death for those one through 44 years.
- In 2004, American life expectancy at birth rose to a record high of 77.9 years.

## SUMMARY OF MORTALITY TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- Falling mortality rates from cardiovascular disease, cancer, diabetes, influenza & pneumonia.

**Areas for Improvement or Concern**

- HIV disease remains a leading cause of death in this community, 9th for the total population and 4th for the African American population.
- Motor vehicle crashes and homicide are the leading causes of death for the Hispanic/Latino community.
- Motor vehicle crashes are the leading cause of death for adolescents.
- Unintentional injury is the leading cause of death for those one through 44 years of age.
- Disparate outcomes. While the total mortality rate is falling for all groups, people of color are still more likely to die at younger ages and higher rates than whites.

| Top Ten Leading Causes of Death Mecklenburg, North Carolina, and The United States, 2004* | | | |
|---|---|---|---|
| | Meck | NC | USA |
| Cancer | 1 | 2 | 2 |
| Heart Disease | 2 | 1 | 1 |
| Stroke | 3 | 3 | 3 |
| Alzheimer's Disease | 4 | 7 | 7 |
| Unintentional Injury | 5 | 4 | 5 |
| COPD** | 6 | 5 | 4 |
| Kidney Disease | 7 | 9 | 9 |
| Diabetes | 8 | 6 | 6 |
| HIV Disease | 9 | * | * |
| Septicemia | 10 | 10 | 10 |

* Not a top ten cause for NC or the US
** Chronic Obstructive Pulmonary Disease
Source: NC State Center for Health Statistics; CDC NCHS

| Leading Causes of Death by Gender 2004 Mecklenburg County | |
|---|---|
| **Males** | **Females** |
| 1) Heart Disease | 1) Cancer |
| 2) Cancer | 2) Heart Disease |
| 3) Unintentional Injury | 3) Alzheimer's Disease |
| 4) Stroke | 4) Stroke |
| 5) COPD | 5) COPD |
| 6) Kidney Disease | 6) Unintentional Injury |

| Leading Causes of Death by Race 2004 Mecklenburg County | |
|---|---|
| **Whites** | **Other Races** |
| 1) Cancer | 1) Cancer |
| 2) Heart Disease | 2) Heart Disease |
| 3) Stroke | 3) Stroke |
| 4) Alzheimer's Disease | 4) HIV Disease |
| 5) COPD | 5) Unintentional Injury |
| 6) Unintentional Injury | 6) Kidney Disease |

## LEADING CAUSES OF DEATH (CONTINUED)

The ten leading causes of death for Mecklenburg, although different in rank order, are the same as for North Carolina and the US with the exception that HIV disease is not in the leading ten causes for either the state or the country.

### *Gender*

- In 2004, cancer was the leading cause and heart disease the 2nd leading cause of death for women. Heart Disease was the leading cause and cancer the 2nd leading cause of death for men.
- From 2003 to 2004, cancer deaths increased 1.7% for women and decreased 6.0% for men.
- Stroke and Chronic lower respiratory diseases ranked 4th and 5th for both men and women.
- Women tend to live longer and so die in greater numbers than men from Alzheimer's disease. While Alzheimer's disease is ranked as the number three cause of death for women it is not in the six leading causes of death for men.
- Men die in higher numbers from unintentional injury than women. Injury ranked as the 3rd leading cause of death for men and the 6th for women.

### *Race/Ethnicity*

- Cancer, heart disease, and stroke, in that order, were the three leading causes of death for whites and people of Other Races.
- Injury—motor vehicle crashes and homicide—was the leading cause of death for Hispanics. This may be explained by the fact that because the Hispanic population is largely composed of young, healthy workers, the diseases of older age are not as common as in the population as a whole. As the Hispanic population matures and comes to resemble more the age-structure of the non-Hispanic population, the rates of death from chronic diseases will be expected to rise.

# MORTALITY

***Race/Ethnicity (continued)***

- Unintentional injury ranked 6th for whites and 5th for people of Other Races.
- Alzheimer's disease and chronic lower respiratory diseases were 4th and 5th for whites but not in the six leading causes of death for people of Other Races.
- HIV disease and kidney disease were 4th and 6th for people of Other races but not in the six leading cuases of death for whites.

***Age groups***

- Congenital birth defects and conditions related to prematurity and immaturity such as low birth weight remain the top two causes of infant death.
- Homicide and motor vehicle crashes remain the leading killers of adolescents and young adults ages 15-24.
- Unintentional Injury remains the leading cause of death for children over the age of 1 year, young adults, and people ages 25-44; many of these deaths are due to motor vehicle crashes.
- Cancer, heart disease, and stroke are the leading causes of death in the population 45 years and above.

## CHRONIC DISEASES

Seven of the top ten leading causes of death are chronic diseases, and two—HIV disease and injury—have chronic components. Please see the section on Chronic Diseases for additional information on many of the ten leading causes of death.

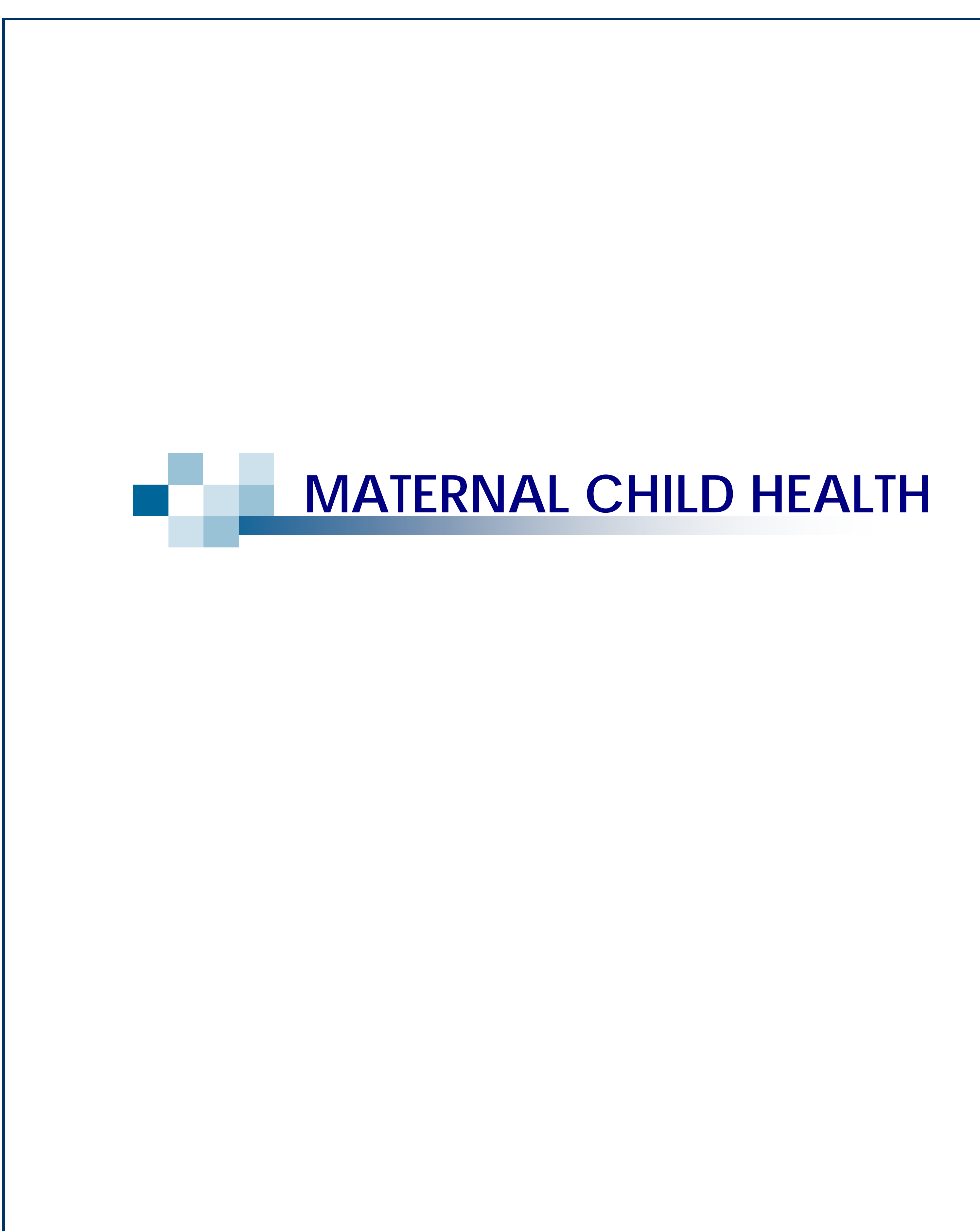
**Leading Causes of Death by Age Group 2004 Mecklenburg County**

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

## SOURCES

North Carolina Department of Health and Human Services, State Center for Health Statistics, Vital Records

National Vital Statistics Reports, CDC, Deaths: Preliminary Data for 2004; Vol. 54 (19), June 28, 2006.



# MATERNAL CHILD HEALTH

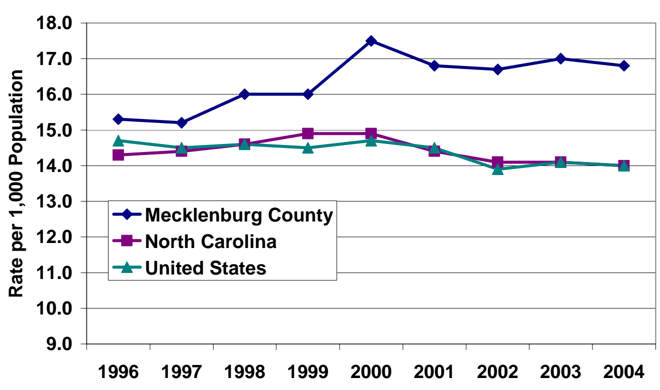
2006 Mecklenburg County Community Health Assessment
Prepared by: Mecklenburg County Health Department (MCHD), Epidemiology Program

# PREGNANCIES & BIRTHS

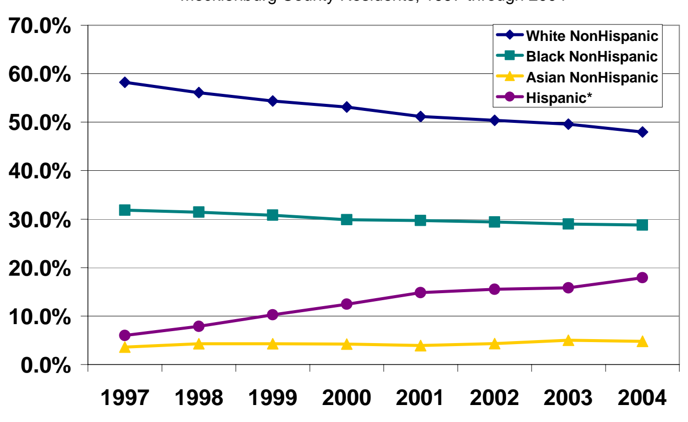
## OVERVIEW

In 2004, the Live Birth Rate for Mecklenburg County was 16.8 per 1,000 population, higher than North Carolina and the nation. This rate has been trending upward since 1995 with a peak at 17.5 in 2000. While births to non-Hispanic Whites and African Americans remain relatively stable, births to non-Hispanic Asian and American Indian women, and Hispanic women are increasing. Hispanic births have been increasing an average of two percentage points each year and are continuing to increase. Preliminary data for 2005 shows 1 in 5 babies (20%) born are Hispanic/Latino. In 2004, 65.8% of births were White, 29.0% African American, 4.8% Asian, 0.2% American Indian, and 0.2% Other. Hispanic births of any race accounted for 18% of total births.

**Live Birth Rate per 1,000 Population**
Mecklenburg County Residents, 1996-2004
Based on Smooth Population Estimates




**Precentage of All Births by Race and Ethnicity**
Mecklenburg County Residents, 1997 through 2004




## MECKLENBURG QUICK FACTS

- In 2004, there were 12,952 resident births: 8.3% were of low birthweight, 11.6% were preterm, 82.2% received parental care in the first trimester, and 18.5% were delivered by Caesarean section; 8.5% were born to mothers under 20 and 2.6% to mothers over 40.
- Similar to the US, from 2000 to 2004, the birth rate for women in their twenties declined while that for women 30+ increased.
- The pregnancy rate in teens 15-19 continues to decline, having decreased by 49% since 1990.
- One in five births is to a Hispanic mother.

## SUMMARY OF TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- Teen pregnancy continues to decline in Mecklenburg County and NC.
- From 1998-2004, the number of women reporting smoking during pregnancy decreased by 38%.

**Areas for Improvement or Attention**

- Declining numbers of women are entering prenatal care in the first trimester.
- While teen pregnancy rates are declining, there were still 372 births to girls 15-17 and 30 births to girls 10-14 in 2004.
- In the 2005 YRBS, more than 10% of teens reported having sexual intercourse for the first time before age 13.
- The percent of primary cesarean deliveries is increasing.
- From 2001 to 2005, 12.2% of births (the same percent as the state) had an interpregnancy interval of six or fewer months, suggesting that these births were unplanned.

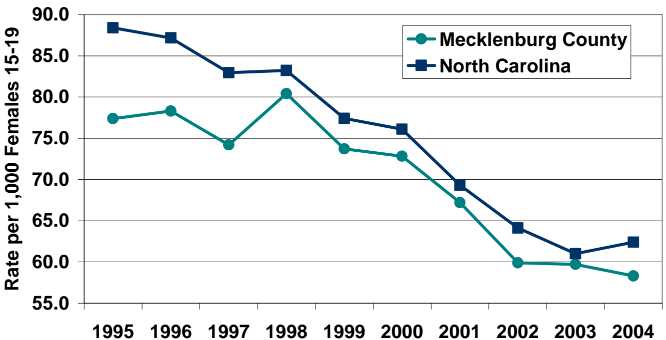
# Birth Highlights
# Mecklenburg County Residents, 2000-2004

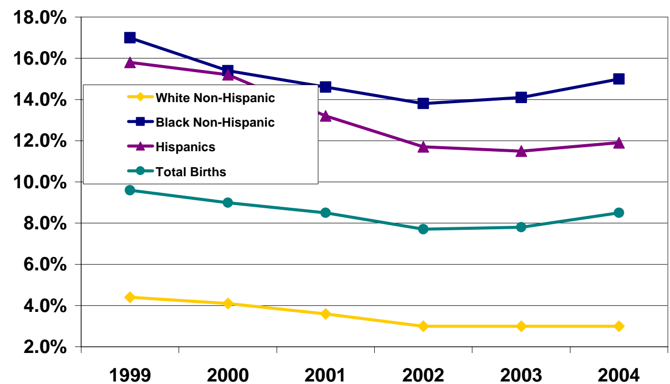
| 2000 | | | 2004 | | |
|---|---|---|---|---|---|
| **Total Births = 12,176**<br>**Live Birth Rate = 17.4 per 1,000** | | | **Total Births = 12952**<br>**Live Birth Rate =16.8 per 1,000** | | |
| **Racial Categories** | | | **Racial Categories** | | |
| **White** | **7,971** | **65.5%** | **White** | **8,519** | **65.8%** |
| **Other Races** | **4,205** | **34.5%** | **Other Races** | **4,433** | **34.2%** |
| *Black or African American* | *3,659* | **30.1%** | *Black or African American* | *3,760* | **29.0%** |
| *Asian or Pacific Islander* | *512* | **4.2%** | *Asian or Pacific Islander* | *617* | **4.8%** |
| *American Indian* | *29* | **0.2%** | *American Indian* | *32* | **0.2%** |
| *Other Non-White* | *5* | **0.0%** | *Other Non-White* | *24* | **0.2%** |
| **Hispanic/Latino and Country of Origin** | | | **Hispanic/Latino and Country of Origin** | | |
| **Non-Hispanic** | **10,654** | **87.5%** | **Non-Hispanic** | **10,616** | **82.0%** |
| **Hispanic** | **1,514** | **12.4%** | **Hispanic** | **2,321** | **17.9%** |
| *Mexican* | *943* | *62.3%* | *Mexican* | *1,422* | *61.3%* |
| *Central or South American* | *485* | *32.0%* | *Central or South American* | *789* | *34.0%* |
| *Puerto Rican* | *64* | *4.2%* | *Puerto Rican* | *68* | *2.9%* |
| *Cuban* | *15* | *1.0%* | *Cuban* | *26* | *1.1%* |
| *Other /Unknown Hispanic* | *7* | *0.5%* | *Other /Unknown Hispanic* | *16* | *0.7%* |
| **Unknown** | 8 | **0.1%** | **Unknown** | 15 | **0.1%** |
| **Age of Mother** | | | **Age of Mother** | | |
| **40 plus** | **255** | **2.1%** | **40 plus** | **336** | **2.6%** |
| **30 - 39 years** | **5,077** | **41.7%** | **30 - 39 years** | **5,595** | **43.2%** |
| **20 - 29 years** | **5,711** | **46.9%** | **20 - 29 years** | **5,926** | **45.8%** |
| **Teens Under the Age of 20** | **1,133** | **9.3%** | **Teens Under the Age of 20** | **1,095** | **8.5%** |
| *Teens 10-14* | *36* | *3.2%* | *Teens 10-14* | *30* | *2.7%* |
| *Teens 15-17* | *374* | *33.0%* | *Teens 15-17* | *372* | *34.0%* |
| *Teens 18-19* | *723* | *63.8%* | *Teens 18-19* | *693* | *63.3%* |
| **Birth Outcomes** | | | **Birth Outcomes** | | |
| Premature (<37 weeks) | 1,366 | **11.2%** | Premature (<37 weeks) | 1,502 | **11.6%** |
| Very Premature (<32 weeks) | 247 | **2.0%** | Very Premature (<32 weeks) | 248 | **1.9%** |
| Low Birth Weight (<=2500g) | 1,069 | **8.8%** | Low Birth Weight (<=2500g) | 1,079 | **8.3%** |
| Very Low Birth Weight (<=1500g) | 230 | **1.9%** | Very Low Birth Weight (<=1500g) | 232 | **1.8%** |
| **First Trimester Prenatal Care** | 10,743 | **88.2%** | **First Trimester Prenatal Care** | 10,642 | **82.2%** |
| **Cesarian Births (Primary C-section)** | 1972 | **16.2%** | **Cesarian Births (Primary C-section)** | 2397 | **18.5%** |

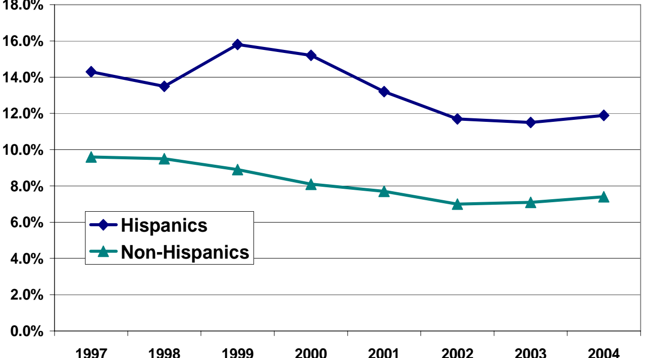
## Adolescents

Similar to North Carolina and the nation, adolescent pregnancy rates in Mecklenburg County have been trending downward since the early 1990's. Teens 18-19 years account for the largest percentage of pregnancies in females under the age of 20.

- In 2004, the pregnancy rate for the youngest teens was 1.8 per 1,000 females ages 10-14.The rate for teens ages 15-17 was 32.9 and the rate for teens ages 18-19 was 95.8.
- From 1990-2004, the pregnancy rate in teens ages 15-19 decreased by 49%. While the decline in teen pregnancy is strongly positive, in 2004 there were still 1,541 pregnancies, resulting in 1,065 births and 465 abortions.
- In 2004, the birth rate for teens was 1.1 per 1,000 females ages 10-14 (30 births), 23.5 for females ages 15-17 (372 births), and 64.9 for females ages 18-19 (693 births).
- Pregnancy rates for girls 10-14 have fluctuated with a general downward trend although they moved upward from 2001 to 2002 with a doubling in the number of minority pregnancies. Birth rates have decreased from 2000 to 2004. Because the numbers are small, the rates may not be reliable but any pregnancies in this age group are disturbing. In 2004, the youngest mother was 12; in 2005 the youngest was 10. In 2004, a 14 year old mother gave birth to her second child; in 2005, three 14 year old mothers gave birth to second babies. In the 2005 YRBS, more than 10% of teens reported having sexual intercourse for the first time before age 13.
- In the 2005 YRBS, over 50% of teens reported ever having sex; almost 38% reported having sexual intercourse with one or more people in the past three months; and among those who had sexual intercourse in the past three months, almost 20% reported drinking alcohol or using drugs before last sexual intercourse and approximately 70% reported using condoms.




*Hispanics can be of any race. Individuals whose Hispanic Ethnicity was unknown were not included.

NC DHHS/State Center for Health Statistics. 2004 Mecklenburg County Data.

Prepared by the Mecklenburg County Health Department, Epidemiology Program, January 2007.

# RISK FACTORS FOR INFANT MORTALITY

## OVERVIEW

The infant mortality rate is an indicator of the risk of dying during the first year of life.

The four leading causes of death for infants in Mecklenburg County, North Carolina, and the US are:

- Congenital malformations (birth defects),
- Disorders related to short gestation (premature birth) and low birth weight,
- Sudden Infant Death Syndrome (SIDS),
- Maternal complications.

Birth defects are a leading cause of infant death locally and nationally, affecting about one in 33 babies born each year and accounting for more than 20% of all infant deaths. In 2005, 18% (19) of Mecklenburg infant deaths resulted from birth defects. For 2001-2005, 20% of infant deaths were due to birth defects.

The weight and gestational age of a newborn infant are also important predictors for future morbidity and mortality. Infants born at lower weights and shorter gestational ages have a much greater risk of dying before the age of one year. In 2003, nearly one-half of all infant deaths in the US occurred among infants whose birth weight was less than 1,000 grams (<3lbs.) Infants born at less than 28 weeks gestation accounted for 46% of all infant deaths.

Pregnancies with higher plurality or multiple births (e.g. twins, triplets) have a higher risk of being low birth weight and/or preterm than singletons. Assisted reproduction technology is increasing the incidence of higher plurality births.

While low birth weight and preterm births are two very strong indicators of an infant's future survival and health, there are other risk factors associated with infant mortality including entry into prenatal care and maternal characteristics such as age, education, and lifestyle behaviors (appropriate nutrition, smoking, or drinking during pregnancy).

### QUICK FACTS ON INFANT MORTALITY

- Infant mortality refers to deaths of children less than 1 year of age. In 2005, 113 Mecklenburg infants died resulting in a mortality rate of 8.5 deaths per 1,000 live births.
- Birth defects are a leading cause of infant mortality affecting about one in 33 babies born each year and accounting for more than 20% of all infant deaths. In 2005, 18% (19) of Mecklenburg infant deaths resulted from birth defects. For 2001-2005, 20% of infant deaths were due to birth defects.
- Low birth weight and premature birth are also leading risk factors for infant death.
- Other factors that may affect infant death include entry into prenatal care and maternal characteristics such as age, education, and lifestyle factors like smoking, or drinking, and appropriate nutrition during pregnancy.
- Safe sleeping arrangements help prevent infant deaths from SIDS and suffocation.

### SUMMARY OF INFANT MORTALITY TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- While not improving, the percent of low birth weight births and premature births have not increased but remained fairly steady from 1997-2004. African American preterm rates, the highest of all race/ethnic groups, appear to have been decreasing since 2001.

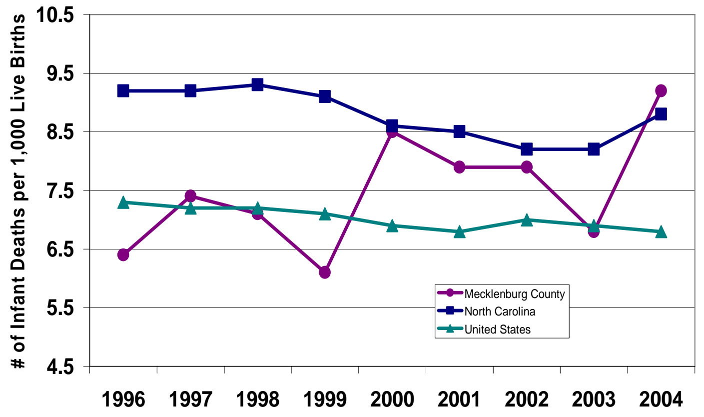
**Areas for Improvement**

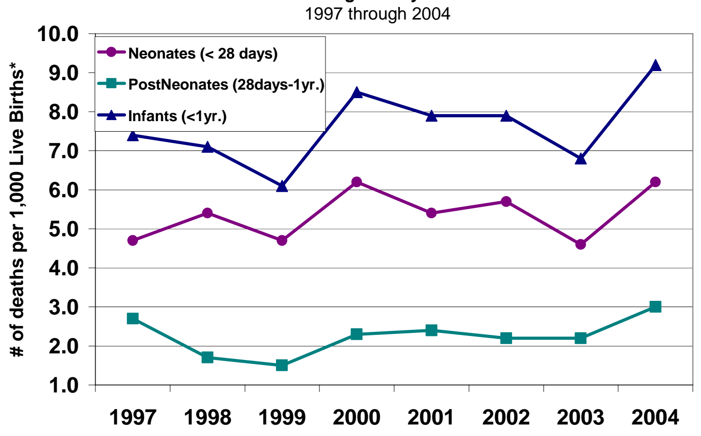
- Fluctuating infant mortality rate with an upward trend from1999 after a steady decline from 1990.
- Disparate outcomes: For 2001-2005, the infant mortality rate for Black non-Hispanic births was almost three times that of White non-Hispanic births.

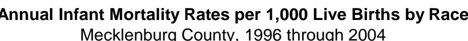
# RISK FACTORS FOR INFANT MORTATLIY

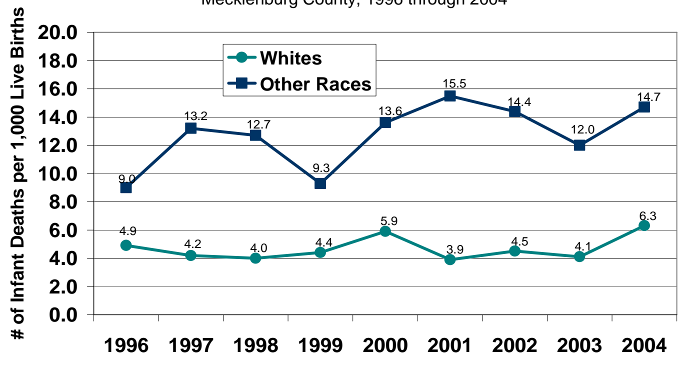
## MECKLENBURG INFANT MORTALITY RATES

- The Mecklenburg infant mortality rate trended downward from 1990 to 1999 dropping 46% to a low of 6.1 deaths per 1000 live births, lower than the state and the nation.
- Beginning with 2000, the rate has moved up and down with a trend upwards. In 2004 it jumped 35% from 6.8 to 9.2 the highest rate since 1993. No particular change in a single leading cause of death was identified as contributing to this increase. In 2005 the infant mortality rate dropped again to 8.4, a decline of about 9%. Further data from 2006 will be needed to see if this downward direction continues.
- In 2004, there were 119 infant deaths and in 2005, 113 deaths.
- The increase in 2004 was concentrated among neonates following a national trend. Of the 119 infant deaths in 2004, 67% were neonates and 33% were post neonatal.
- 83% of the neonatal deaths in 2004 were due to conditions originating in the prenatal period which includes disorders related to short gestation and low birthweight.
- Since the early 1990s, the Mecklenburg rate has been lower than the state with the exception of 2003 when it reached 9.2 compared to 8.8 for NC.
- The five year rate for 2001-2005 is 8.0 deaths per 1000 live births compared to the state rate for the same period of 8.5.
- Of more concern than the overall rate is the considerable gap between rates for Whites and Other Races. The infant mortality rate for Other Races from 2001-2005 was 2.9 times greater than the White rate.





*The post neonatal rate is the number of post neonatal deaths per 1,000 live births minus the neonatal deaths.



# RISK FACTORS FOR INFANT MORTALTIY

## LOW BIRTH WEIGHT

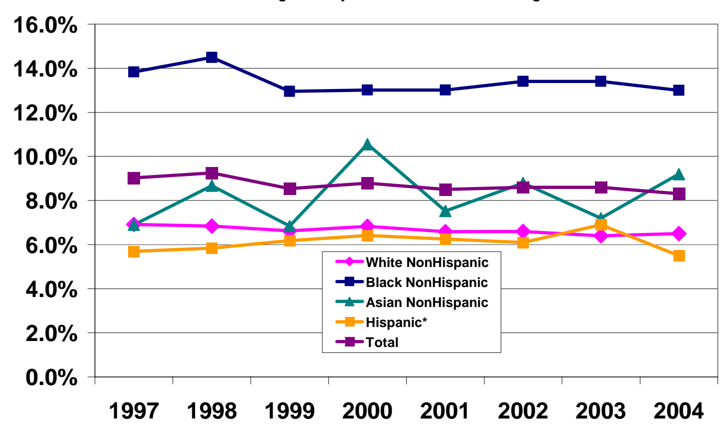
### *Definitions*

**Very Low Birth Weight (VLBW)** is defined as an infant born weighing less than 1500g or 3lb 4oz.

**Low birth weight (LBW)** is defined as an infant born weighing less than 2,500g or 5lb 8oz.

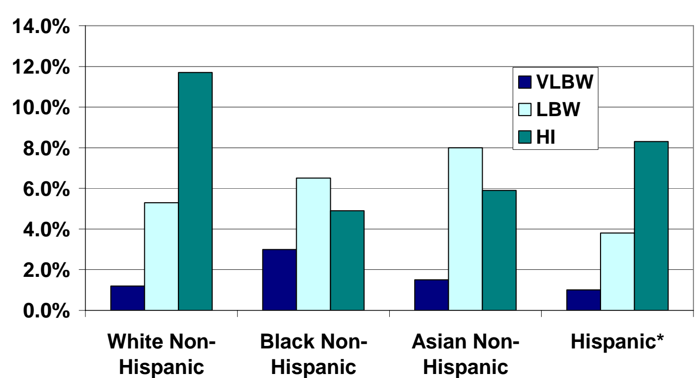
**Normal Weight** is defined as an infant born weighing between 2501g-4000g or between 5lb 9oz and 8lb 13oz.

**HI Birth Weight** is defined as an infant born weighing greater than or equal to 4001g or 8lb 14oz.




### *Mecklenburg*

- Since 1997, the percent of infants born with low birth weight has remained fairly steady for Mecklenburg County with a 2.4% decrease from 1999 to 2004.
- In 2004 there were 12,952 births in Mecklenburg County and 8.3% of infants were born with low birth weight.
- In 2004 the percent of infants born with low birth weight was 9.1% for the state of NC and 8.1% for the US.




### *By Race/Ethnicity*

- African American Non-Hispanic Women have the highest percentage of LBW infants compared to White Non-Hispanic, Asian Non-Hispanic, and Hispanic* women.
- Hispanic women have the lowest percentage of LBW infants.
- Percentage of African American Non-Hispanic women giving birth to LBW infants is double that of White Non-Hispanic women.
- African American Non-Hispanic and Asian Non-Hispanic women have a higher percentage of VLBW and LBW infants.
- White Non-Hispanic women have a higher percentage of HI birth weight infants.

### *Notes and Sources*

*Hispanics can be of any race.

NC DHHS/State Center for Health Statistics

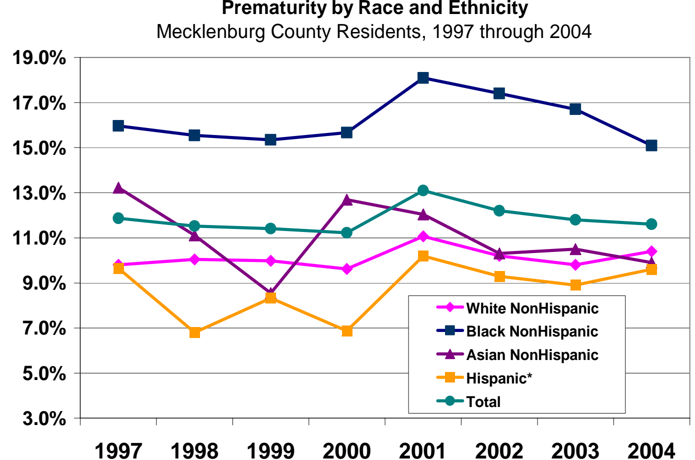
National Vital Statistics Reports, Volume 55, Number 1, September 29, 2006.

National Vital Statistics reports, Volume 54, Number 16, May 3, 2006.

# RISK FACTORS FOR INFANT MORTALITY

## PREMATURITY

- From 1997 to 2004 the total percent of premature births in Mecklenburg County has remained between 11% and 3% similar to the state rate. However differences between racial groups are evident with non-Hispanic African Americans having the highest rates and Hispanics the lowest.
- In the US the percentage of preterm infants has risen 18% since 1990 and 33% since 1981. In 2004 more than one-half million babies were born premature in the US and this is the highest number reported since 1981.
- Unlike full-term low birth weight babies which can be associated with factors such a smoking, maternal weight gain, and maternal weight at birth, the causes of premature deliveries are not as well understood, making prevention frustrating. Higher plurality births, maternal age, and cocaine use can increase the chance of prematurity but many early births are to women with adequate prenatal care and no readily identifiable risk factors.

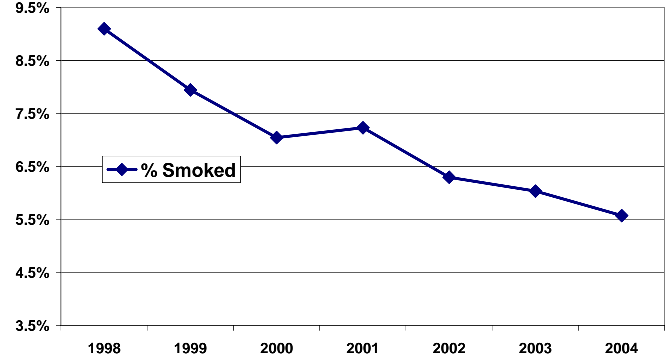



## SMOKING

The concern about smoking during pregnancy has a long standing history and has been linked to several adverse birth outcomes such as low birthweight (LBW) and intrauterine growth retardation, miscarriage, and infant mortality as well as long-term morbidity for child health development.

Maternal smoking during pregnancy can be reviewed because it is self reported on birth certificates. Since this is a self reported variable, whether the growing stigma attached to smoking outside of or during pregnancy affects self reports cannot be readily determined. However, declining reports of smoking during pregnancy are accompanied by declining smoking rates in the general population.

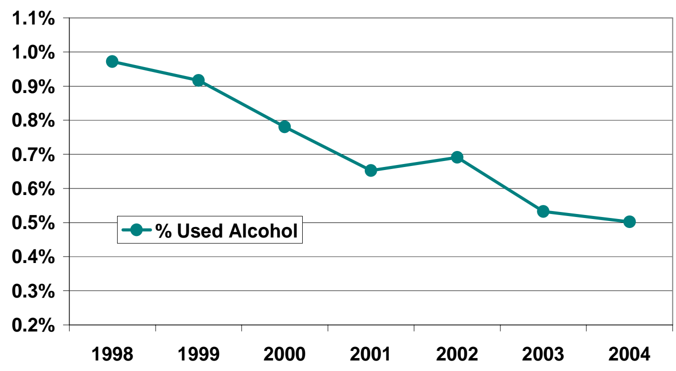
- In 2004, smoking during pregnancy declined slightly in the US. It was the highest among American Indian women followed by white and African American non-Hispanic women. Rates were lowest for Asian and Hispanic women.
- From 1998 to 2004, the percent of women who reported smoking during pregnancy in Mecklenburg County has fallen steadily from almost 9.1% to 5.6%, a decrease of 38%. In contrast, the reported maternal smoking percent for NC in 2004 was 12.5%.
- Highest smoking rates were reported by White mothers.

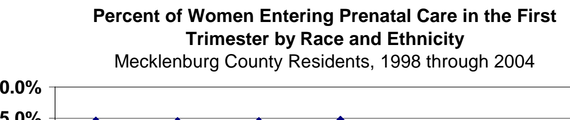


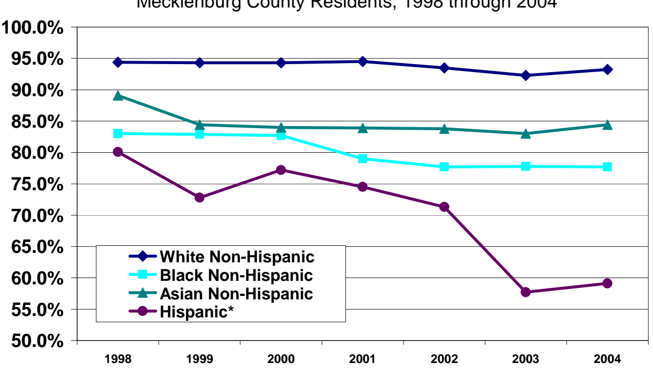
## ALCOHOL USE

- As with smoking, the use of alcohol during pregnancy is associated with adverse birth outcomes, most notably Fetal Alcohol Syndrome (FAS). FAS is characterized by impaired mental development as well as some physical features (i.e. eyes close together) and has different levels of severity. FAS is associated with long-term morbidity for child development as well.
- Like smoking, alcohol use during pregnancy is self reported on the birth certificate, and, as such, is subject to the limitations of self reporting negatively perceived information.
- The percent of women who report using alcohol during pregnancy is very small, less than 1%, and appears to be declining.
- From 2000 to 2004 there were 9 cases of Fetal Alcohol Syndrome (FAS) reported at the time of birth. However, it should be noted that FAS is frequently not diagnosed until indicated by behaviors and development at a later age. Of the 62,154 births during this time period 391 (.63%) of women reported using alcohol during their pregnancy.
- The majority of women who reported using alcohol during pregnancy from 2000 to 2004 received adequate prenatal care and were White Non-Hispanic between the ages of 30 and 39, with less than or equal to 12 years of primary/secondary education.

**Women Who Reported Using Alcohol During Pregnancy As A Percent of Total Births**
Mecklenburg County Residents, 1998 through 2004



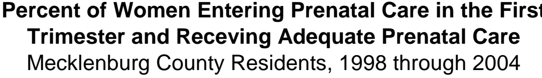



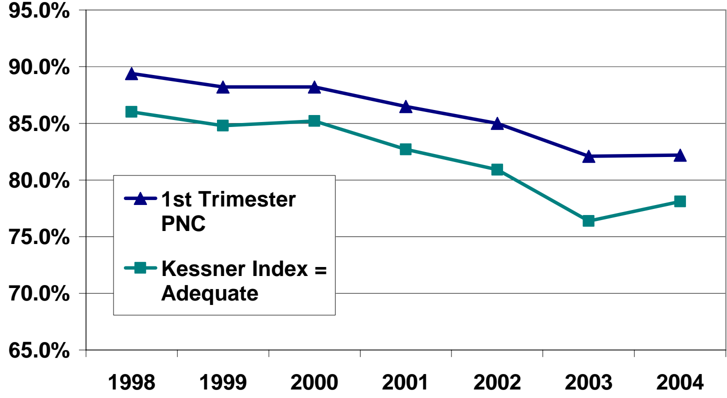

## PRENATAL CARE

- Entry into prenatal care in the first three months of pregnancy (1st trimester) and the completion of the recommended visits based on the gestational age of the fetus may help reduce adverse birth outcomes through risk assessment, providing healthcare advice, and managing chronic and pregnancy-related heath conditions.
- The Healthy People 2010 goal for entry into prenatal care in the 1st trimester is 90%. This rate has been declining in Mecklenburg County from a high in 1997 of 89% to 82.2% in 2004. The state rate in 2004 was 83.3%.
- Entry into prenatal care is highest among White non-Hispanic women and lowest among Hispanic and African American non-Hispanic women.
- Although Hispanic women have the lowest percentage of women entering prenatal care in the first trimester, they also have the lowest percentage of preterm and low birth weight babies.

## PRENATAL CARE (CONTINUED)

- The number of women receiving adequate care as measured by the Kessner Index* has also been trending downward. Since 2000, entry into 1st trimester prenatal care has decreased by 6.8% and the percent of women receiving adequate care has decreased by 8.3%, suggesting that women not only are entering care late but may be entering care in the first trimester without completing the recommended number of visits.




*The Kessner Index-provides a measure of the adequacy of prenatal care received during pregnancy by assessing the timeliness (month PNC began), the frequency (number of prenatal visits) of PNC based on the gestational of the baby at different times throughout the pregnancy.
Adequate care means PNC began in the first trimester and the minimum number of visits for each gestational age period of the baby's growth at different points during the pregnancy was met or exceeded.

### *Notes and Sources*

*Hispanics can be of any race.

NC DHHS/State Center for Health Statistics

National Vital Statistics Reports, Volume 55, Number 1, September 29, 2006.

National Vital Statistics reports, Volume 54, Number 16, May 3, 2006.

# HEALTH BEHAVIORS

## Tobacco Use
## Overweight/Obesity
## Physical Activity
## Fruit and Vegetable Consumption
## High Blood Pressure
## High Cholesterol
## Seat Belt Use
## Firearms

# HEALTH BEHAVIORS

## OVERVIEW

Health behavior choices play a part in disease, injury, and premature mortality. Behaviors and risk factors affecting disease and injury include but are not limited to smoking, obesity, nutrition, physical activity, seat belt use and unsafe firearm storage. The Behavioral Risk Factor Surveillance System is instrumental in collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. Data are weighted and projected to 571,000 Mecklenburg County residents 18 years of age or older. The Youth Risk Behavior Survey also collects information on health behaviors but in middle and high school aged students. Data for the YRBS are also weighted to reflect the demographic composition of Charlotte Mecklenburg High Schools.

## TOBACCO USE

According to the Office on Smoking and Health within the CDC, tobacco use is the leading preventable cause of death in the United States, causing nearly 440,000 deaths each year and resulting in an annual cost of more than $75 billion in direct medical costs. In 2005, it is estimated that over 90,000 adults in Mecklenburg County are current smokers.

### *By Geographic Area*

- In 2005 the prevalence of current smoking is lower in Mecklenburg (16%) than in North Carolina (23%) and the US (21%).

### *By Race/Ethnicity and Gender (2001-2005)*

- The 2001-2005 five year prevalence for smoking was similar for whites and African-Americans (18.9% and 18.7% respectively).
- The five year prevalence for Hispanic current smokers was 17.3%.

## QUICK FACTS ON HEALTHY CHOICES TO PREVENT DISEASE AND INJURY

- Healthy behavior choices play a part in disease, injury, and premature mortality.
- The Behavioral Risk Factor Surveillance System and Youth Risk Behavior Survey are instrumental in collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury.

## SUMMARY OF HEALTH BEHAVIOR TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- The percent of Mecklenburg adults reporting smoking has fallen from almost 20% in 2003 to 16% in 2005.
- In 2005, more than three fourths of adults reported some physical activity in the past month.
- In 2005, almost 90% of Mecklenburg adults reported always using a seat belt, and over 90% of Mecklenburg teens reported frequently or always using a seatbelt.

**Areas for Improvement**

- Over half of Mecklenburg County adults are overweight or obese.
- Only about 39% of teens report getting the recommended 60 minutes of physical activity at least five days a week.
- Three fourths of the loaded firearms located in Mecklenburg homes are unlocked.
- Almost 20% of Mecklenburg teens surveyed reported carrying a weapon such as a gun, knife, or club on one or more days in the past 30 days.

| Behavioral Risk Factor Prevalence (%) Among Adults Mecklenburg, North Carolina and United States 2005 | | | |
|---|---|---|---|
| | Mecklenburg | North Carolina | United States |
| Smoking | 16% | 23% | 21% |
| Overweight/Obesity (BMI>25.0)[1] | 56% | 63% | 61% |
| No Physical Activity[2] | 21% | 26% | 24% |
| Fruit & Veg (More than 5 servings/day) | 24% | 23% | 23% |
| High Blood Pressure | 27% | 29% | 26% |
| High Cholesterol | 33% | 36% | 36% |
| Firearms Present in Household | 25% | 41% | N/A |
| Seat Belt Use | 89% | 87% | 81% |

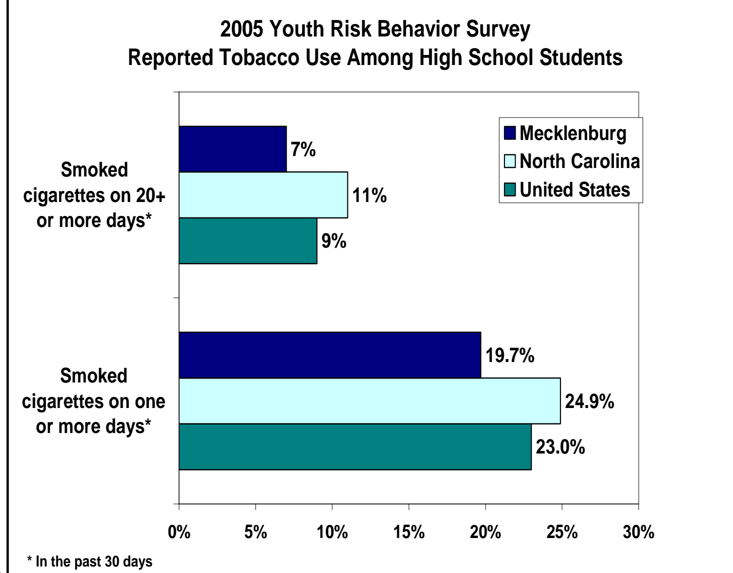
[1] Body Mass Index (BMI) is a ratio of weight to height (weight in kg/height in $m^2$).
2In the past 30 days

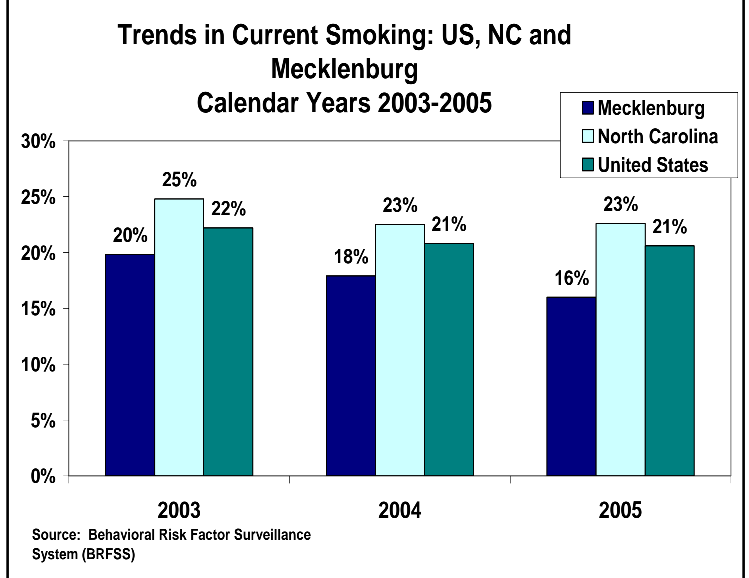
## TOBACCO USE CON'T

- Males (22.2%) are more likely to report smoking than females (15.1%).

### *By Education and Income Level*

- College graduates (16%) were less likely to report smoking than those residents who were not college graduates (25%).
- Mecklenburg county residents who made less than $50,000 a year were more likely to report currently smoking than those who made $50,000 or more (23.2% vs. 15.1% respectively).




### *Tobacco Use among Youth*

In 2005, approximately one fifth of Mecklenburg teens surveyed reported having smoked cigarettes on one or more days in the past 30 days, lower than the state prevalence (23%). Almost 17% of Mecklenburg teens reported smoking a whole cigarette before age 13.

- White teens were two times more likely to report having recently smoked cigarettes than Black teens and 1.3 times more likely than Hispanic teens.
- Over 7% of teens reported smoking cigarettes on 20 or more days in the previous month.

## TOBACCO USE CON'T

- Among the teens who reported smoking, over half had tried to quit smoking in the last 12 months.

## OVERWEIGHT/OBESITY

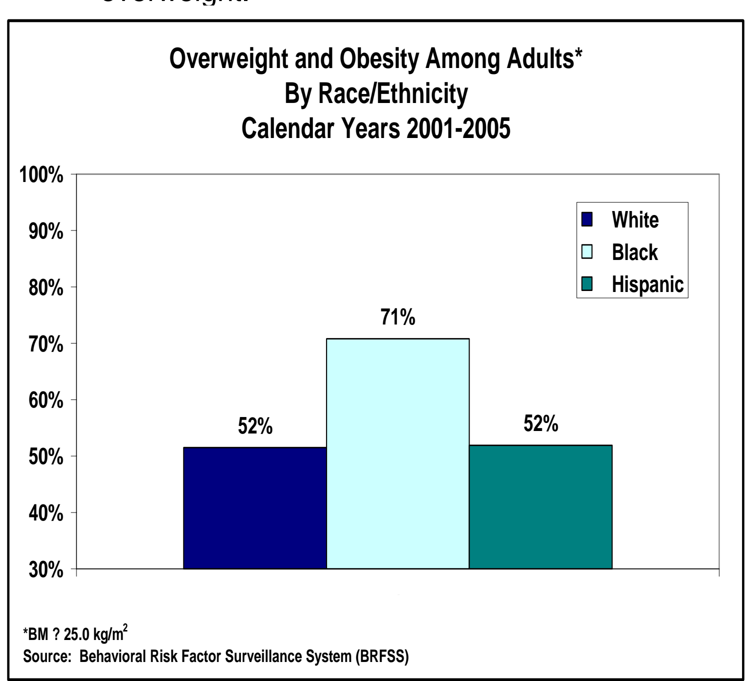
National Center for Health Statistics show that 60 million U.S. adults 20 years of age and older are obese. The percentage of young people who are overweight has more than tripled since 1980. Among children and teens aged 6–19 years, over 9 million young people are considered overweight. An estimated 317,000 adults in Mecklenburg County are overweight or obese.

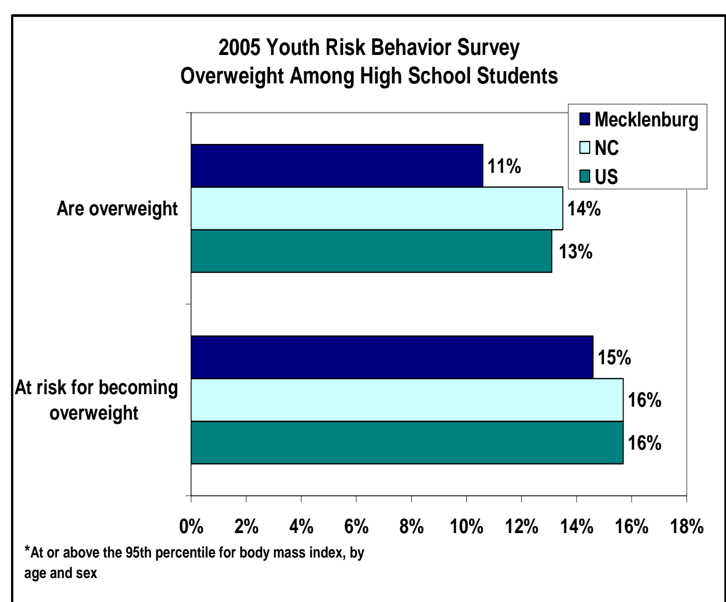
### *By Geographic Area (2005)*

- Over 50% of Mecklenburg adult residents are overweight or obese compared to over 60% of North Carolina and US adults.

### *By Race/Ethnicity and Gender (2001-2005)*

- In 2001-2005, African-American adults were more likely to be overweight than White and Hispanic adults.
- Adult male Mecklenburg residents (60%) were more likely than females (52%) to be overweight.



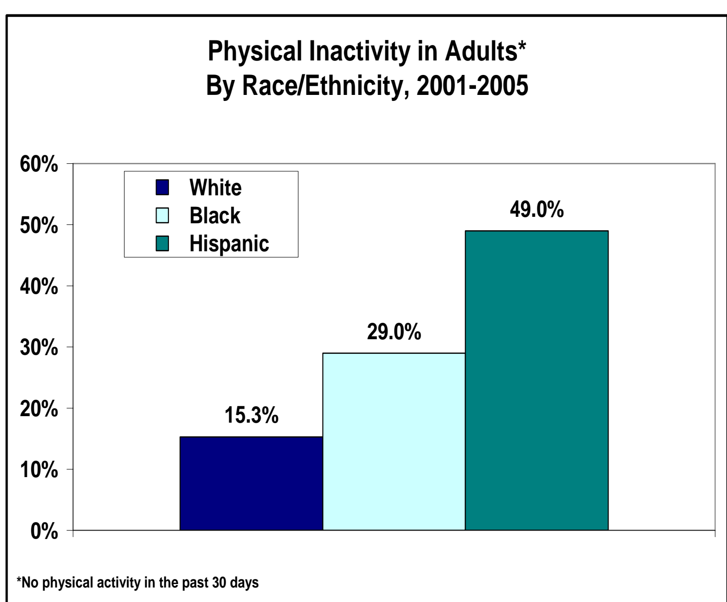

### *Overweight/Obesity among Youth*

About 15% of Mecklenburg teens surveyed are at risk for becoming overweight (at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex) and over 10% are overweight (at or above the 95th percentile for body mass index, by age and sex).

- Black teens are two times more likely to be at risk for becoming overweight and almost three times more likely to be overweight than White teens.
- Over 25% of teens describe themselves as overweight while only 10% actually are.

## PHYSICAL ACTIVITY

Despite the proven benefits of physical activity, more than 50% of American adults do not get enough physical activity to provide health benefits. Twenty-five percent of adults are not active at all in their leisure time. Activity decreases with age and is less common among women than men and among those with lower income and less education.




## PHYSICAL ACTIVITY CON'T

### *By Geographic Area (2005)*

- In 2005, over 20% of Mecklenburg County adults reported not exercising in the past 30 days.

### *By Level of Physical Activity (2005)*

- Approximately 40% of Mecklenburg adults reported moderate physical activity (brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate for 30 or more minutes per day, five or more days per week).
- Twenty-seven percent of Mecklenburg adults reported vigorous physical activity (running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate for 20 or more minutes per day, three or more days per week).

### *By Race/Ethnicity (2001-2005)*

- From 2001-2005, minorities in Mecklenburg are more likely to report not exercising in the past 30 days outside of normal work activity than Whites.
- Twenty-nine percent of African Americans reported not exercising in the past 30 days outside of normal work activity compared to 15.3% of Whites.
- Almost half of Hispanic residents reported not exercising in the past 30 days outside of normal work activity. **However when asked about type of work activity, more than one fourth of Hispanics reported mostly heavy labor.**
- Whites (43.3%) were more likely than African-Americans and Hispanics to report moderate physical activity (31.8% and 17.2%, respectively).
- Whites were also more likely to report vigorous physical activity.

### *By Gender (2001-2005)*

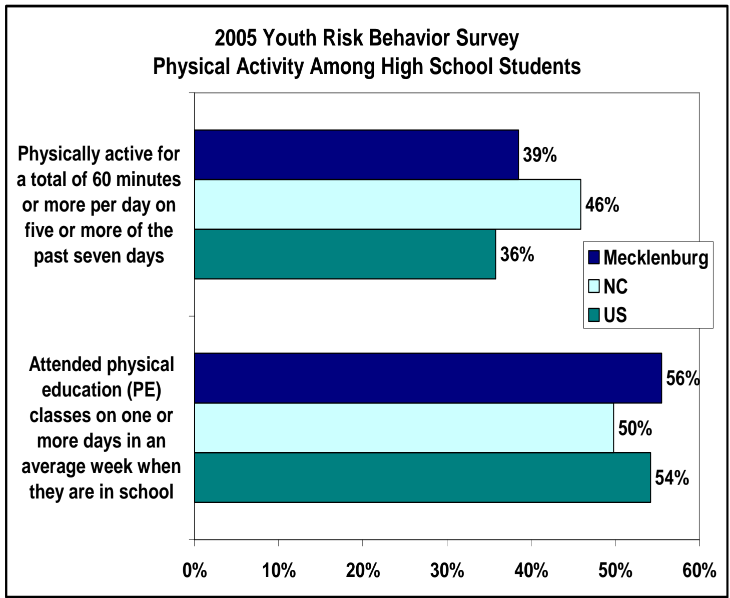
- Female adults are more likely to report not exercising than male adults.
- Females are more likely than males to report not exercising in the past 30 days outside of normal work activity (12.5% vs. 9.7%, respectively).

### *By Education and Income (2001-2005)*

- Over 50% of Mecklenburg County adults with less than a high school education reported not exercising in the past 30 days, higher than those adults with a college degree (10.2%).
- Mecklenburg adults with an income of less than $50,000 were more likely to report not exercising in the past 30 days than those adult residents who earn more than $50,000 per year (29.2% vs. 10.2%, respectively).

### *Physical Activity among Youth (2005)*

- National guidelines call for being physically active at least 60 minutes a day on five or more days a week. Over 38% of Mecklenburg teens reported being physically active for a total of 60 minutes or more per day on five or more of the past seven days, lower then the percentage of North Carolina teens (46%).
- Over half of teens attend physical education classes on one or more days in an average week when they are in school. Four percent of teens attend physical education classes daily in an average week when they are in school.




## FRUITS AND VEGETABLES

Diets that include a variety of fruits and vegetables may help to reduce the risk of cancer, heart disease, stroke, diabetes, and osteoporosis. In 2005, almost 140,000 Mecklenburg County adults (24%) consumed five or more servings of fruits and vegetables a day.

### *By Geographic Area (2005)*

- The percentage of adults who reported consuming five of more servings of fruits and vegetables a day was similar for Mecklenburg, North Carolina and the US.

### *By Race/Ethnicity and Gender (2001-2005)*

- In 2001-2005, approximately one fourth of White adults in Mecklenburg County reported consuming five or more servings of fruits and vegetables a day, compared to 16% of African American adults and 13% of Hispanic adults.
- Female adults (28%) were more likely to report consuming five or more servings of fruits and vegetables a day than male adults (21%).

### *By Education and Income (2001-2005)*

- Twenty-six percent of adults who have an education level of some college and above reported consuming five or more servings of fruits and vegetables a day, more than those residents who have a high school diploma or, less.

### *Fruit and Vegetable Consumption among Youth (2005)*

- Approximately 90% of Mecklenburg teens reported eating fruits and vegetables one or more times on a typical day.

## HIGH BLOOD PRESSURE

High blood pressure (hypertension) is called the silent killer because it usually has no symptoms. High blood pressure increases the risk for developing heart disease, stroke, and other serious conditions. It is estimated that 1 out of 3 American adults has high blood pressure and of those with high blood pressure, almost one third are undiagnosed.

### *By Geographic Area (2005)*

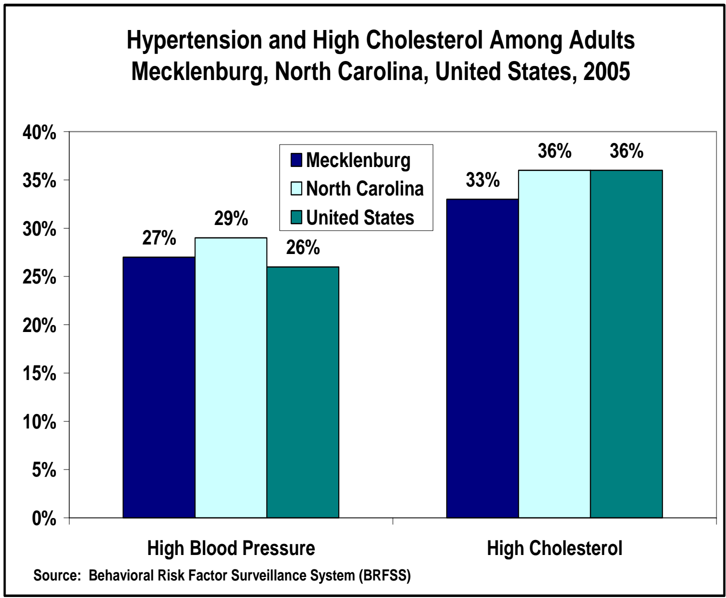
- In 2005, over 150,000 Mecklenburg County adults (27%) reported to a doctor, nurse, or other health professional that they have high blood pressure.

### *By Race/Ethnicity and Gender (2003 & 2005)*

- In combined years 2003 and 2005, nearly one third of African-American adults (32%) in Mecklenburg County reported being diagnosed with high blood pressure, compared to 22% of Whites.
- Twenty-seven percent of female adults reported being diagnosed with high blood pressure, compared to 21% of male adults.

### *By Education and Income (2003 & 2005)*

- Twenty-three percent of adults with a high school education or less reported being diagnosed with high blood pressure, compared to 19% of adults with an education level of some college and above.
- Adults with an income level less than $50,000 were more likely to report being diagnosed with high blood pressure than those adults with a higher income level (26% and 19%, respectively).




## HIGH CHOLESTEROL

High cholesterol is a major risk factor for heart disease, one of the leading causes of death in the United States. Cholesterol levels are affected by age, sex, heredity, and diet. High cholesterol, like hypertension, produces no symptoms and can go undiagnosed.

### *By Geographic Area (2005)*

- In 2005, over one third of Mecklenburg county adults reported being told by a doctor, nurse, or other health professional that they have high cholesterol (240 mg/dL or more total cholesterol).

### *By Race/Ethnicity and Gender (2001-2005)*

- A third of White adults reported being diagnosed with high cholesterol, compared to one fourth of African American and one fourth of Hispanic adults.
- The 2001-2005 combined year prevalence was similar for males (15%) and females (16%).

### *By Income (2001-2005)*

- Mecklenburg adults with an income level less than $50,000 (33%) were more likely to report being diagnosed with high blood cholesterol than those adults at a higher income level (29%).

## SEAT BELT USE

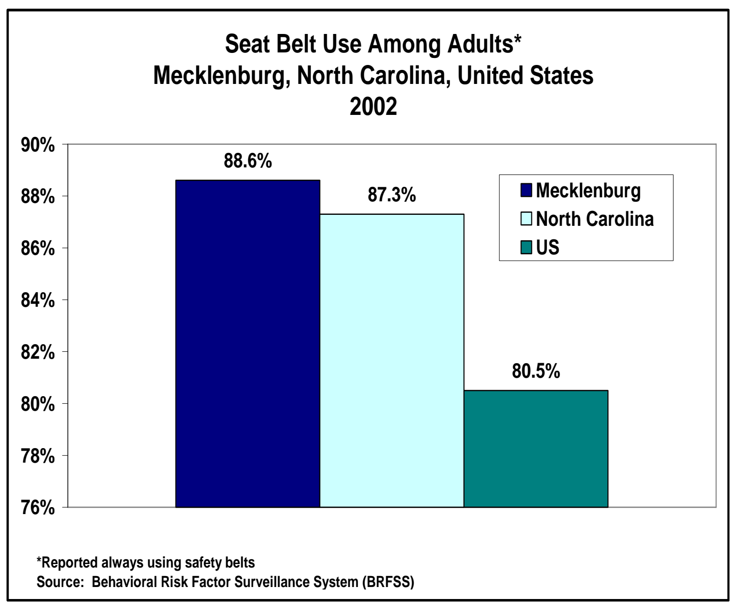
Seat belt use in motor vehicles has been proven to save lives in accidents. The National Highway Traffic Safety Administration (NHTSA) reports that in 2001 of the 31,910 vehicle occupants killed in crashes in 2001, 60% were not wearing a safety belt.

### *By Geographic Area (2002)*

- Almost 90% of Mecklenburg adults report always wearing a seat belt when either driving or riding in a car, compared to 87% of North Carolina adults and 81% of US adults.

### *By Race and Gender (2002)*

- The prevalence of seat belt use was for Whites and African-Americans (88% and 90% respectively).
- Females (94%) were more likely to report always wearing a seat belt than males (84%).



## SEAT BELT USE CON'T

### *By Education and Income Level (2002)*

- The prevalence of seat belt use for adults with a high school education or less (89%) was similar to those adults with some college or greater (88%).
- Ninety-one percent of Mecklenburg adults with a higher income level were more likely to report using seat belts than those adults at a lower income level (85%).

### *Seat Belt Use Among Youth (2005)*

- Almost 7% of Mecklenburg teens surveyed never or rarely wore a seat belt when riding in a car driven by someone else.
- Black teens were approximately two times more likely to report never or rarely wearing a seat belt when riding in a car driven by someone else than White teens.

## FIREARMS

An estimated 28% of violent crimes (murder, aggravated assault, rape, and robbery) committed in the United States in 2005 were committed with a firearm. According to the National Survey of the Private Ownership of Firearms (NSPOF), American adults owned approximately 192 million working firearms.

### *By Geographic Area (2004)*

- Over one fourth of Mecklenburg adults reported having a firearm in their home, compared to 41% of North Carolina adults.
- Of the Mecklenburg adults that have a firearm in their home, 31% reported that they are currently loaded. Seventy-nine percent reported that the loaded firearms are unlocked.

### *By Race/Ethnicity and Gender (2001-2004)*

- Twenty-eight percent of White adults reported having a firearm in their home compared to 21% of African-American adults.

### *By Race/Ethnicity and Gender con't*

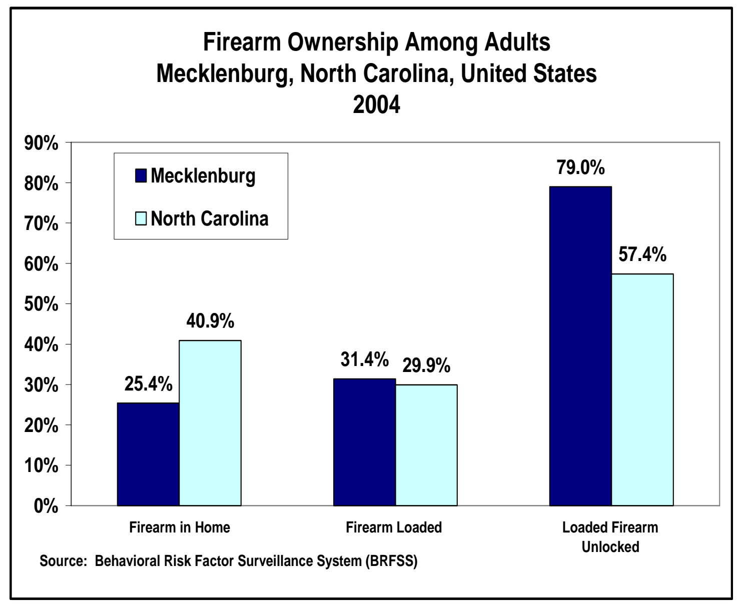
- Male adults (28%) were more likely to report having a firearm in their home than female adults (19%).

### *By Education and Income Level (2001-2004)*

- The prevalence of having a firearm in their home for adults with a high school education or less (24%) was similar to those adults with some college or greater (24%).
- Adults with an income of $50,000 or more (27%) were more likely to report having a firearm in their home than those adults who had an income of $50,000 or less (21%).

### *Firearms among Youth (2005)*

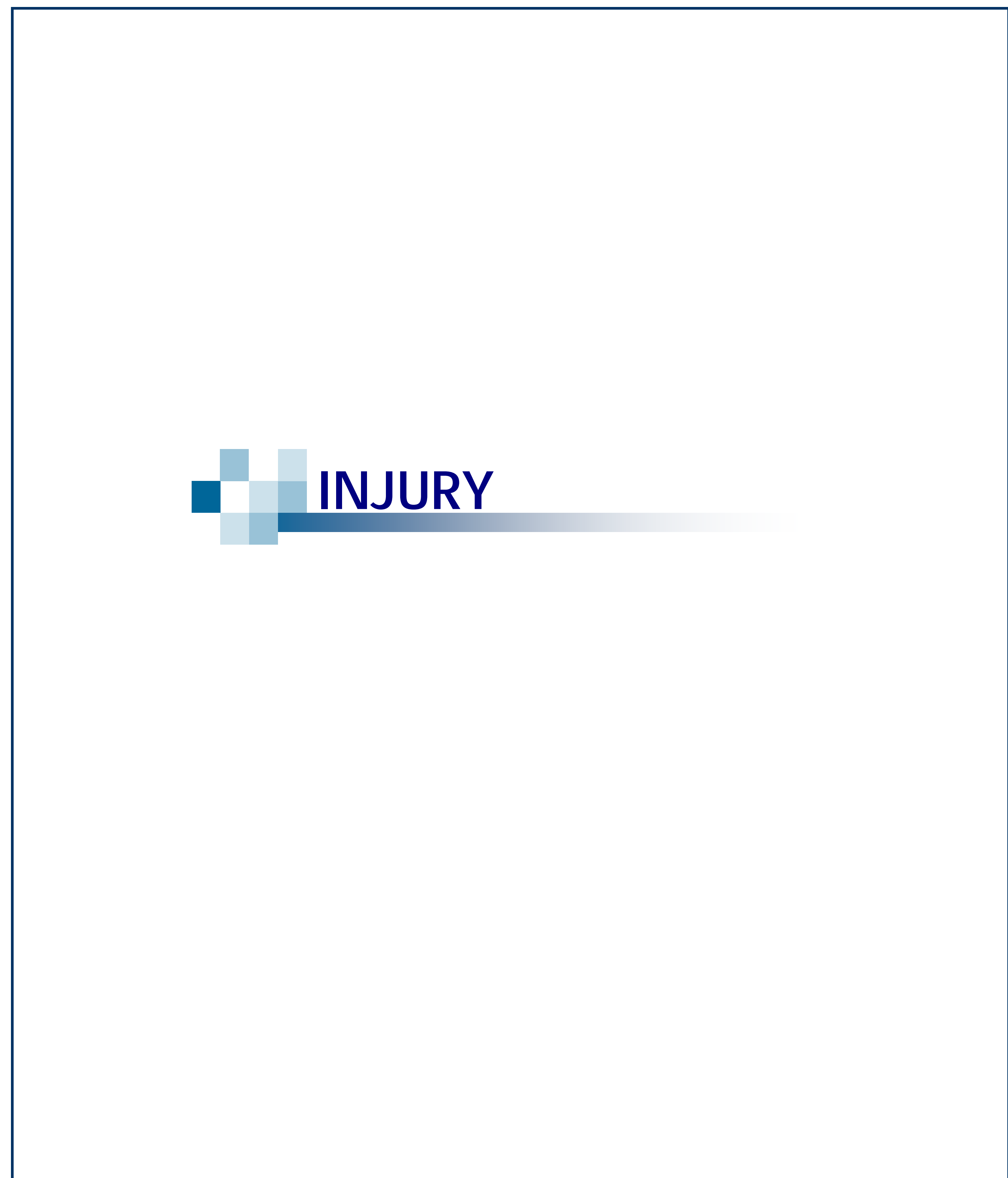
- Almost 20% of Mecklenburg teens surveyed reported carrying a weapon such as a gun, knife, or club on one or more days in the past 30 days. About 5% reported carrying a weapon on school property.
- Approximately 7% of teens reported having been threatened or injured with a weapon such as a gun, knife, or club on one or more days in the past 12 months.



**Sources**
Centers For Disease Control and Prevention

- Behavioral Risk Factor Surveillance System (BRFSS)
- Youth Risk Behavior Survey (YRBS)
- Office on Smoking and Health
- National Center for Health Statistics (NCHS)
- Division of Nutrition and Physical Activity
- Division for Heart Disease and Stroke Prevention
- National Center for Injury and Prevention Control

National Highway Safety and Traffic Administration



# INJURY

2006 Mecklenburg County Community Health Assessment
Prepared by: Mecklenburg County Health Department (MCHD), Epidemiology Program

# INJURY

## OVERVIEW

According to the Centers for Disease Control, injuries are a leading cause of death for all Americans, regardless of age, gender, race or economic-status. Over 100,000 Americans lost their lives in 2004 to unintentional injuries, making it the fifth leading cause of death for the nation. Injuries resulting from violence also have a great impact on health. Suicide and homicide are the 11th and 15th leading causes of death in the nation, respectively. While deaths due to injuries cover a multitude of causes, the three leading causes of injury death in the United States are: motor-vehicle traffic, firearm and poisonings (including drug overdose).

Examining deaths only reveals a portion of injury's impact on the health of Americans. Each year millions of Americans survive their injuries, but are left with chronic and sometimes severe health problems. In addition the economic costs of injuries can be felt, not only in dollars, but in loss of productivity and increased hospital stays and emergency department (ED) visits. According to the National Center for Health Statistics, in 2004 injuries accounted for:

- Over 31 million doctor's visits
- Over 29 million emergency department (ED) visits, and
- Nearly 2 million hospital discharges.

One study estimated that in 2000 alone, the 50 million injuries that required medical treatment will ultimately cost $406 billion. This includes estimates of $80.2 billion in medical care costs and $326 billion in productivity losses.

Most injuries can be prevented. In Mecklenburg County Injury is the fifth leading cause of death for all residents. Increased awareness of how and where injuries most often occur can help individuals, parents and caregivers prevent accidents and decrease injury-related deaths.

### QUICK FACTS ON INJURY AND VIOLENCE

- Motor vehicle traffic, firearms and poisonings are the three leading causes of injury-related deaths in the nation.
- In Mecklenburg, unintentional Injury is the leading cause of death for persons ages 1 – 44 years.
- Motor vehicle crashes are leading cause of death among children.
- Suicide is the third leading cause of death for adolescents and young adults ages 15 to 24.

### SUMMARY OF INJURY TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- In recent years the number of persons dying from motor vehicle injuries has gradually declined
- In 2004, there were no unintentional injury deaths due to firearms in children.
- Between 2003 and 2004 the number of Homicide deaths in children decreased.

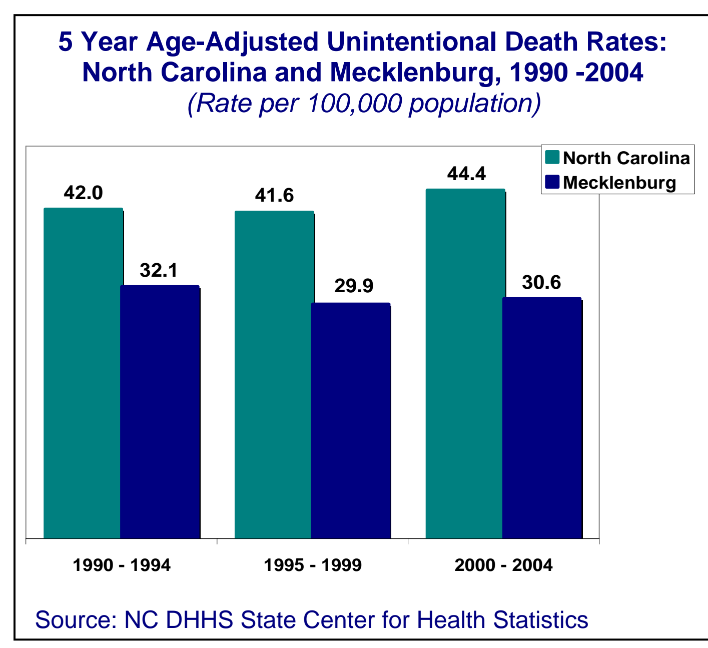
**Areas for Improvement**

- Deaths due to Sudden Infant Death Syndrome (SIDS) increased from 2003 to 2004.
- While motor vehicle-related deaths have decreased in the county, motor vehicle injury is still the leading cause of emergency department visits for unintentional injury
- Hospital charges for unintentional injuries totaled over $121 million dollars in 2004.

# INJURY

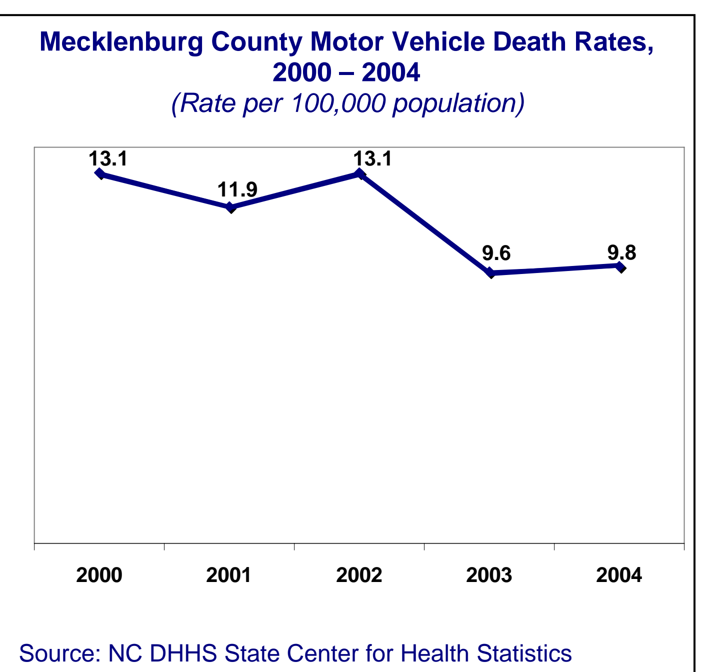
## UNINTENTIONAL INJURIES AND VIOLENCE IN MECKLENBURG

- In 2004, inpatient hospital utilization charges for injury and poison related injuries totaled $121,881,492. This does not include, cost of rehabilitation, disability, missed work days, loss of life, or other associated costs.
- During 2004, 213 residents died of unintentional injuries, making it the fifth leading cause of death for all ages in the county. However, unintentional injury is the leading cause of death for residents ages 1 – 44 years in the county.
- In the past fifteen years, unintentional deaths have slightly declined for the county. During 2000 - 2004, the age-adjusted death rate was 30.6 deaths per 100,000 residents, nearly 5% lower than the age-adjusted death rate during 1990-1994 (32.1 deaths per 100,000 residents).



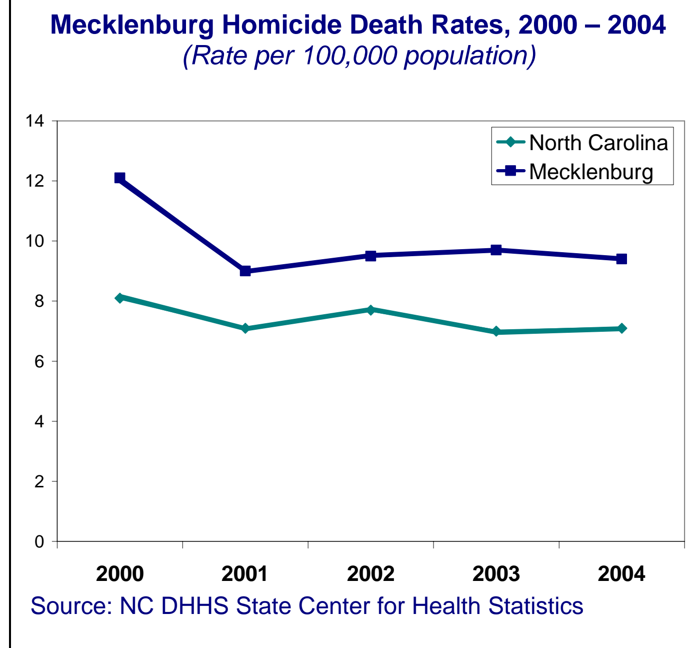

### *Motor Vehicle Injuries*

- Between 2000 and 2004 there were 420 deaths attributed to motor vehicle injuries resulting in a rate of 11.4 deaths per 100,000 residents.
- In recent years the number of persons dying from motor vehicle injuries has gradually declined. In 2004, there were 75 deaths as a result of motor vehicle injury, 18% lower than deaths for 2000 (92 motor vehicle deaths).
- While deaths have decreased, motor vehicle-related injury is still the leading cause of ED visits for unintentional injury.
- Based upon 2000 - 2004 age-adjusted death rates for motor vehicle injuries:
  - Males are 2.8 times more likely to die than females.
  - Other Races are 1.3 times more likely to die than Whites



### Homicide

- Homicide is the serious public health threat in Mecklenburg. Between 2000 and 2004, 420 persons died from homicide.
- In general, homicide death rates for the county are usually higher than those for the state.
- During 2004, homicide was the third leading cause of death for children ages 1 to 14 years and the second leading cause of death for young people ages 15 – 24 years.
- Other Races are disproportionately affected by homicide. Based upon 2000 - 2004 age-adjusted death rates:
    - Males of Other Races are 4.1 times more likely to die than White males,
    - Females of Other Races are 3.2 times more likely to die than White females.




## INJURY AND VIOLENCE IN CHILDREN, ADOLESCENTS AND YOUNG ADULTS IN MECKLENBURG COUNTY

Preventable deaths among infant and children are of growing concern in the US and here in Mecklenburg County. Based upon 2004 data from the Centers for Disease Control, 1,638 children ages 14 years and younger died as occupants in motor vehicle crashes, and approximately 214,000 were injured. In Mecklenburg, unintentional injury is the leading cause of death for children ages 1 – 17 years.

Although the county strives to reduce the number of preventable deaths occurring among infants and children, motor vehicle crashes and unsafe sleeping arrangements remain a top priority.

### *The Community Child Fatality Prevention and Protection Team*

The Community Child Fatality Prevention and Protection Team was established in North Carolina during 1993 and locally in Mecklenburg County in 1994. This team is comprised of professionals from multiple disciplines that meets on a monthly basis to review all infant and child deaths in the county.

Based upon these reviews pertinent issues are highlighted to determine public awareness campaigns, develop prevention and education materials, and make recommendations to the state and local government for improving processes to help prevent infant and child deaths.

Each year this team compiles a report on all infant and child deaths and presents it to the Board of County Commissioners, BOCC (also the Board of Health). The primary objectives of the report and presentation are to:

- Increase awareness of preventable deaths among infants and children in Mecklenburg County and
- Identify community-based programs working to prevent these types of deaths and advocate for their support.

The following statements from the 2003/2004 annual report to the BOCC summarizes trends in unintentional injuries, violence, and death among children ages 1 – 17 years in Mecklenburg County.

**Number and Percentage of Infants and Children who Died of Natural Causes Compared with Other Causes of Death by Sex, Age, Race, and Ethnicity**

*Mecklenburg County 2004*

| Demographics | Total Number of Deaths (N=157) | | Natural Deaths (N=134) | | Preventable Deaths Unintentional & Intentional (N=23) | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Total** | **157** | **100%** | **134** | **100%** | **23** | **100%** |
| **Sex** | | | | | | |
| Male | 85 | 54% | 66 | 49% | 19 | 83% |
| Female | 72 | 46% | 68 | 51% | 4 | 17% |
| **Age** | | | | | | |
| **Infants (< 1 year)** | **119** | **76%** | **115** | **86%** | **4** | **17%** |
| | | | | | | |
| **Children Ages 1 to 17** | **38** | **24%** | **19** | **14%** | **19** | **83%** |
| 1 to 5 years | 16 | 10% | 8 | 6% | 8 | 35% |
| 6 to 10 years | 7 | 4% | 5 | 4% | 2 | 9% |
| 11 to 17 years | 15 | 10% | 6 | 4% | 9 | 39% |
| **Race and Ethnicity** | | | | | | |
| Whites | 76 | 48% | 61 | 46% | 15 | 65% |
| African Americans | 77 | 49% | 69 | 51% | 8 | 35% |
| Other races | 4 | 3% | 4 | 3% | 0 | 0% |
| Hispanics* | 21 | 13% | 17 | 13% | 4 | 17% |

## Deaths in Infants and Children Ages 1 -17 years

Natural deaths are defined as deaths that result from the natural aging process, a natural disease process or are not apparent given medical history or circumstances, and no trauma or signs of intentional self harm are present. Although SIDS is a natural death it is also a preventable death addressed through safe sleeping campaigns.

Preventable deaths include deaths as a result of intentional (i.e. homicide and suicide) and unintentional injuries (i.e., falls and motor vehicle injuries) that are largely preventable.

### *North Carolina*

- In North Carolina deaths increased among infants, children ages 5 – 9 years and 15 – 17 years from 2003 to 2004.
- In North Carolina deaths among infants increased 9%, children ages 5 - 9 increased 6%, and adolescents ages 15 -17 increased 12%.
- In North Carolina, deaths due to birth defects increased 5%, other birth related conditions 11%, and SIDS 3% in 2004.

### *Mecklenburg County*

- In 2004, there were 157 deaths among infants and children.
- Of the 157 deaths in 2004, 119 occurred among infants and 38 occurred among children ages 1 to 17.
- The number of infant and child deaths increased 28%, from 123 in 2003 to 157 in 2004.
- Deaths among infants accounted for the largest portion of the increase. The number of infant deaths increased 36.8% from 87 in 2003 to 119 in 2004.
- Natural deaths increased 29% from 2003 to 2004 with the primary increase occurring among infants.

# INJURY

**Number of Deaths and Rank for the Leading Causes of Childhood Death for Mecklenburg County and North Carolina, 2004**

| Leading Causes of Childhood (1 to 17) Death | Mecklenburg Rank | Mecklenburg N | North Carolina Rank | North Carolina N |
|---|---|---|---|---|
| *All Causes* | --- | *38* | --- | *557* |
| **Unintentional Injury** | 1 | 15 | 1 | 270 |
| *Motor Vehicle Injuries* | | *9* | | *194* |
| *All Other Unintentional Injuries* | | *6* | | *76* |
| **Cancer** | 2 | 5 | 2 | 56 |
| **Homicide** | 3 | 3 | 3 | 41 |
| **Certain Conditions Originating in the Perinatal** | 4 | 2 | 9 | 6 |

Source for Mecklenburg County and North Carolina: NC DHHS/State Center for Health Statistics.
Prepared by the Mecklenburg County Health Department, Epidemiology Program, March 2006.

## Unintentional and Intentional Injury Deaths in Infants and Children

- In 2004, Unintentional Injuries were the leading cause of death among children and adolescents and include drowning, fire, motor vehicle, accidental suffocation/strangulation, poisoning, dog bites, electrocution, and other unspecified threats to breathing.
- The number of Injury-related deaths among children doubled from 9 in 2003 to 18 in 2004.
- Deaths due to suicide decreased from 4 in 2003 to 1 in 2004.
- In 2004, there was one suicide death involving a firearm.
- Deaths due to homicide decreased from 6 in 2003 to 4 in 2004 in Mecklenburg County. In North Carolina, however, homicide deaths increased 11% from 46 in 2003 to 51 in 2004 among infants and children.
- Deaths due to motor vehicle crashes tripled from 3 in 2003 to 9 in 2004.
- A majority of the deaths due to motor vehicle crashes occurred among adolescent ages 11 to 17. There were none among infants in 2003 or 2004.

**Sources**


Centers for Disease Control, National Center for Injury Prevention andControl.

- The Economic Costs of Injuries  Among Adults, Chidren and Adolescents.
- Web-based Injury Statistics Query and Reporting System (WISQARS) online www.cdc.gov/ncipc/wisqars

Centers for Disease Control. Morbidity and Mortality Report.  QuickStats: Age-Adjusted Death Rates for Leading Causes of Injury Death, by Year. United States, 1979-2004.

Centers for Disease Control. National Center for Health Statistics.  2006 NCHS Data on Injuries. Available at www.cdc.gov/nchs Accessed January 18, 2006.

NC DHHS/State Center for Health Statistics 2004, Mecklenburg County Data.

NC DHHS/State Center for Health Statistics.  2004 Child Deaths in NC.

The Community Child Fatality  Prevention and Protection Team 2003 and 2004 database, Mecklenburg County


*Hispanics can be of any race

**Note:** Some numbers and percentages may not add up to totals due to inclusion of Hispanics in the denominator for each race and missing or unknown values for race and ethnicity which were excluded. The total number of natural deaths in table 2 differs from the totals in table 4 due to the separate classification of undetermined natural deaths. In 2004 there were 2 (infants) deaths classified as undetermined natural deaths.

# ENVIRONMENTAL HEALTH

2006 Mecklenburg County Community Health Assessment
Prepared by: Mecklenburg County Health Department (MCHD), Epidemiology Program

# ENVIRONMENTAL HEALTH

## OVERVIEW

Environmental health comprises those aspects of human health, including quality of life, that are determined by physical, chemical, biological, social, and psychosocial factors in the natural environment. Some important aspects of environmental health are air quality, safe drinking water, and the built environment.

## 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. The quality of outdoor air is measured using the Air Quality Index (AQI). This index is based on concentrations of ozone, particulates, carbon monoxide, nitrogen dioxide and sulfur dioxide. While the region has been successful in curbing most of these pollutants, ozone concentrations and particulate matter remain major concerns. Ozone has been found to contribute to asthma, lung infections, cell inflammation, and shortness of breath. Rising population and the increase of vehicle miles traveled are key factors affecting the ozone level in the Charlotte Metro area. 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.

- In 1998 there were 48 days where residents had to breathe unhealthful air in the form of elevated ozone concentrations.
- Recent data suggest some improvement with only four elevated ozone days recorded in both 2003 and 2004, some of the best years in measured air quality history.
- Ten elevated ozone days were detected in 2005.

### QUICK FACTS ON ENVIRONMENTAL HEALTH

- Environmental health comprises those aspects of human health, including quality of life, that are determined by physical, chemical, biological, social, and psychosocial factors in the natural environment.
- Ozone has been found to contribute to asthma, lung infections, cell inflammation, and shortness of breath. In 2005 there were 10 elevated ozone days in the Charlotte Metro Area.
- Several initiatives have been formed to address the air quality in Mecklenburg County. These include the Mecklenburg Air Quality Program, the Carolinas Clean Air Coalition and the Sustainable Environment for Quality of Life.
- Ground water and surface water in Mecklenburg are both held to stringent requirements to ensure the safety of the county's drinking water supply.
- Carolinas HealthCare Systems and the Charlotte Mecklenburg School Systems are both tobacco free.
- Tobacco initiatives in Mecklenburg include Smoke Free Charlotte, Go For Atmosphere, and Project ASSIST.
- Prescription Pad Project, Fit City Challenge, and Fit Together are all programs to address physical activity for adults and youth. Greenways in Mecklenburg are an example of the built environment—manmade surroundings that provide the setting for human activity—influencing public health.
- In 2004, a carbon monoxide ordinance was passed requiring all homes in Mecklenburg County to have a carbon monoxide detector.

## *Air Quality Initiatives in Mecklenburg County*

- The Mecklenburg County Air Quality (MCAQ) program is responsible for assuring good air quality for the community through a combination of regulatory and non-regulatory programs. Two public awareness air quality programs "Spare the Air" and "Smokin and Chokin", better inform the community on air quality issues and actions. "Spare the Air" program seeks to educate individuals about the sources of air pollution, the health effects of air pollution, and how these effects can be mitigated by modification of outdoor activities on ozone action days such as carpooling, vehicle maintenance, and energy conservation. "Smokin and Chokin" program allows residents to report cars with smoking tailpipes to MCAQ.
- The Carolinas Clean Air Coalition (CCAC) is one of the community collaborations serving a 15 county region in North and South Carolina. CCAC works to restore clean and safe air to the Charlotte region through coalition building, public policy advocacy and community outreach.
- The Sustainable Environment for Quality of Life (SEQL) project is also a collaboration serving the 15 county area in the Charlotte Region and is funded by the Environmental Protection Agency. SEQL involves elected officials, local government staffs, business and industry groups, economic development groups, and environmental stakeholders working together to address environmental issues.

## *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 made 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.

## *Ground Water Quality con't*

- There have been 213 contaminated wells identified in Mecklenburg County through the Mecklenburg Priority List (MPL).
- In FY05, 171 wells were tested for coliform bacteria. Of the 171 wells, 24% were found to be positive.
- Since July 2005, 242 wells were tested and 23% were found to be positive. The long term goal is to have less than 5% of the wells tested positive for bacteria.

## *Surface Water Quality*

An estimated 1.5 million people in the Charlotte area rely on the Catawba River and its lakes for their water needs. On an average day, 105 million gallons of clean safe drinking water are pumped from Lake Norman and Mountain Island Lake to one of three water treatment plants in Charlotte and distributed throughout the county.

In 2005, over 150,000 analyses were conducted for approximately 150 substances, both before and after the treatment process, to ensure safe drinking water. Substances that are tested for include microbial and inorganic contaminants, pesticides and herbicides, organic chemicals and radioactive materials. The highest level of substances found were well below the limits that are required.

# TOBACCO INITIATIVES IN MECKLENBURG COUNTY

## *Go For Atmosphere*

"Go-For-Atmosphere" is a program to educate the community about options for smoke-free dining. The goal is to reduce citizen exposure to environmental tobacco smoke, also known as secondhand smoke, which is a known cause of cancer. There is no cost to restaurants to participate in this voluntary program. Currently in Mecklenburg County over 600 restaurants (about a third of all restaurants) are smoke-free.

## TOBACCO INITIATIVES IN MECKLENBURG COUNTY CON'T

### *Smoke Free Mecklenburg*

Smoke-Free Mecklenburg is a local grassroots coalition of health care professionals, advocacy groups, and individuals committed to bringing smoke-free restaurants, bars and workplaces to Mecklenburg County. This initiative is not anti-smoking or against the tobacco industry; it was developed to promote health, to protect children and workers, and to help businesses stay productive and competitive in the current economy.

### *Carolinas HealthCare Systems*

As of November 16, 2006 Carolinas HealthCare Systems (CHS), the largest health care system in the Carolinas, prohibits the use of all tobacco products on its campuses and in its facilities. All patients, employees, volunteers, students, vendors, contractors, physicians, and any and all visitors may not smoke or use tobacco products on any CHS property. This includes CHS campuses, facilities, or worksites whether owned or leased property, including building stairways and outside areas adjacent to the grounds, building entrances, and exits. Tobacco use is also discouraged on properties neighboring CHS.

### *100% Tobacco Free Schools*

Charlotte Mecklenburg School District went tobacco free in May 2003. Currently there are 350 signs stating the 100% Tobacco Free Schools policy on school grounds.

### *Project Assist*

Project ASSIST stands for the American Stop Smoking Intervention Study. The purpose of Project ASSIST is to prevent deaths and health problems attributable to tobacco use. In North Carolina, Project ASSIST is focusing on helping those who want to quit. Mecklenburg County Project ASSIST is a partnership of the American Cancer Society, the Department of Environment, Health, and Natural Resources, the National Cancer Institute, Mecklenburg County Health Department, and voluntary organizations.

## PHYSCIAL ACTIVITY INITIATIVES IN MECKLENBURG COUNTY

### *Prescription Pad Project*

In 2001, the Mecklenburg Council on Health and Fitness developed an educational program and accompanying materials for health care professionals on the importance of physical activity and health. Members of the Council modeled a prescription pad with the "get active – your health depends on it" message after the prescription pad Dr. David Satcher uses to "prescribe" healthy life-style. On the back of the prescription pad are simple suggestions on how to increase daily activity. In addition, a resource list with inexpensive, accessible places to exercise, a poster showing people of all shapes and sizes engaging in everyday physical activities and an educational packet were developed. Currently Carolinas Medial Center Ambulatory sites and a few medical practices participate in this project.

### *Fit City Challenge*

The Fit City Challenge is a community level initiative to encourage and empower program participants to increase their level of physical activity and fruit and vegetable consumption. Beyond promotional and awareness campaigns, the Fit City Challenge aims to provide the tools, the motivation and the mentoring for both the individual and the community to succeed in addressing the epidemic of overweight and obesity. At the core of the Fit City Challenge are the parallel goals of walking 5 miles per week and eating 5 fruits and vegetables each day, then recording progress in these areas through this dynamic and interactive web site.

The Fit City Challenge is the result of the work of the Mecklenburg County Health Department in conjunction with the NC Healthy Weight Task Force charge to identify best practices and galvanize the community in overcoming the factors that contribute to overweight and obesity, particularly in children and youth.

### *Fit Together*

The ***Fit Together*** Initiative is a comprehensive statewide obesity prevention campaign funded by the North Carolina Health and Wellness Trust Fund and Blue Cross Blue Shield of North Carolina. It is unique in its emphasis on both individual and community action to prevent obesity and connects individuals to local resources through the website www.FitTogetherNC.org. Grantees funded through the Initiative are working to: reduce barriers in children's homes / communities to healthy eating and physical activity, significantly increase the number of school and child care settings that promote healthy eating and physical activity, increase the number of neighborhoods that are designed to support safe play and healthy eating, and increase the number of healthcare settings that participate in the prevention and treatment of overweight an obese children. This is accomplished in partnership with their communities to create integrated, comprehensive systems of care.

The Mecklenburg County Health Department is one of 21 grantees participating in the ***Fit Together*** obesity initiative. MCHD has partnered with four local programs to address access to healthy foods and promote healthy eating and physical activity in the school and childcare setting; the After-School Enrichment Program (ASEP) with the Council for Health and Fitness and the Winner's Circle Program targeting children in grades K-5 in the school system, the Body Works and Total Body Program targeting teens in the school system, and the YMCA targeting children in grades K-5 in the community.

## OTHER ENVIRONMENTAL PROGRAMS IN MECKLENBURG COUNTY

### *Carbon Monoxide*

Cold weather in Mecklenburg County increases the likelihood of some residents taking extraordinary measures to keep warm. Fuel-burning appliances such as furnaces, gas ranges/stoves, gas clothes dryers and water heaters are all sources of carbon monoxide (CO).

### *Carbon Monoxide con't*

Fireplaces, charcoal grills, wood-burning stoves, kerosene heaters and vehicles, generators and other combustion engines running in an attached garage -- even when an outside door is open -- also produce CO. 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 unit, and regardless of whether the dwelling unit has an attached garage to contain at least one operable Carbon Monoxide Alarm.

### *Lead Screening*

The Childhood Lead Poisoning Prevention Program in the county is administered by both the Public Health Pest Management & Environmental Services (PHPM) and Community-Based Services program of the Health Department. The purpose of the program is to promote childhood lead poisoning prevention, provide medical case management to children under 6 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 at their pediatrician or other health care provider. The initial check is usually done with a simple finger-stick test. If there is an elevated blood lead level then a second test (venous) will be done. Confirmed blood lead levels of 10ug/dl or greater will trigger medical, nutritional, and environmental follow up from health professionals. Below are the lead testing results for Mecklenburg County for 2004.

| Year | Screened < 6 years | Confirmed ≥10 ug/dL | Confirmed ≥20 ug/dL |
|---|---|---|---|
| 2004 | 8,186 | 14 | 1 |

### *Food Inspections*

The Mecklenburg County Food and Facilities Sanitation Program (F&FS) is a component of the Environmental Health Division of the Mecklenburg County Health Department. The F&FS Program is a mandated program administered by the local Health Department pursuant to Chapter 130A of the General Statutes of North Carolina.

### *Food Inspections con't*

Program employees are responsible for enforcing state statutes and rules, and local ordinances governing a number of different types of facilities. In FY05 half of the required food inspections were completed. The goal for 2015 is to have 100% of required inspections completed.

## 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. Healthy places assist individuals in making healthy choices.

### *Built environment in Mecklenburg County*

The Mecklenburg County greenway system is quickly becoming one of the finest in the country. Greenway trails provide recreation, transportation, fitness, and economic benefits for all to enjoy. There are 23 miles of developed and 158 miles of undeveloped greenways in Mecklenburg County.

**Sources**

2006 Mecklenburg County State of the Environment Report

Mecklenburg County Land Use and Environmental Services Agency

Charlotte Mecklenburg Utilities

Smoke Free Mecklenburg

Carolinas Health Care Systems

Project Assist, Mecklenburg County Health Department

Charlotte Mecklenburg School District

Health Promotion, Wellness and Lifestyle, Mecklenburg County Health Department

Fit City Challenge, Mecklenburg County Health Department

COMMUNICABLE
DISEASES

# SEXUALLY TRANSMITTED DISEASES (STDs)

## OVERVIEW

Sexually Transmitted Diseases (STDs) are diseases that are spread primarily through sexual contact. STDs are extremely widespread and, without treatment, can result in severe and sometimes deadly consequences. Nearly $14.1 billion annually is spent in direct medical cost for the treatment of STDs. The Centers for Disease Control estimates that 19 million new infections occur each year, almost half of them among young people ages 15 to 24. However the true magnitude of the STD epidemic is unknown because many cases of reportable STDs are undiagnosed, and in some cases such as human papillomavirus and genital herpes, are not reported at all.

**Estimated New STD Cases in the U.S.**
*(for selected STDs per year)*

| STD | INCIDENCE (Estimated number of new cases every year) |
|---|---|
| Chlamydia | 3 million |
| Gonorrhea | 650,000 |
| Syphilis | 70,000 |
| Herpes | 1 million |
| Human Papillomavirus (HPV) | 5.5 million |
| Hepatitis B | 120,000 |
| Trichomoniasis | 5 million |

Source: Cates, 1999

## QUICK FACTS ON SEXUALLY TRANSMITTED DISEASES

- An estimated19 million new sexually transmitted infections occur each year, almost half of them among young people ages 15 to 24.
- Women account for approximately 80% of new Chlamydia cases reported in Mecklenburg.
- Over the past few years, Syphilis case rates have increased in Mecklenburg. Primary and Secondary Syphilis case rates for 2005 were more than twice that of the 2004 case rate *(2005 case rate =10.8 per 100,000 vs. 2004 rate=5.3 per 100,000).*

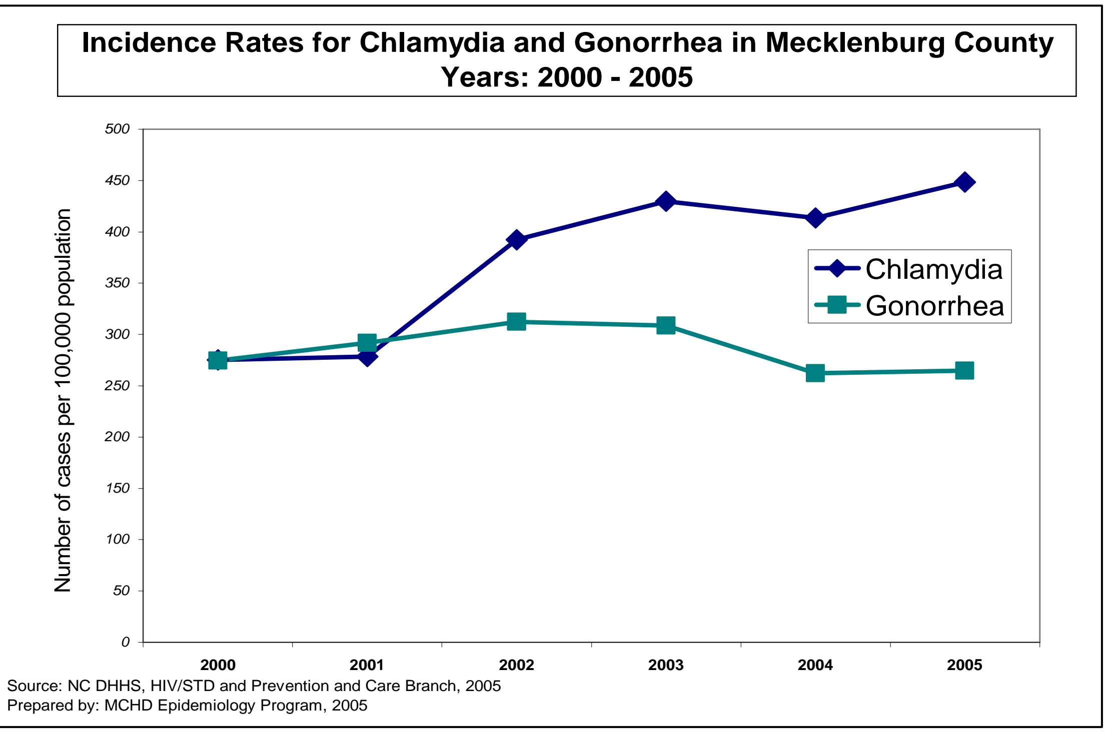
## SUMMARY OF STD TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- Overall rates of gonorrhea infection have declined in the county.
- Increased screening and use of more sensitive diagnostic tests have led to better diagnosis of Chlamydia infections.

**Areas for Improvement**

- While case reports dramatically declined between 1994 and 2003, Syphilis case reports have notably increased for the county.
- Adolescents remain at increased risk for STD infections.
- Increased reports of drug-resistance among STDs in the nation are a growing public health concern.

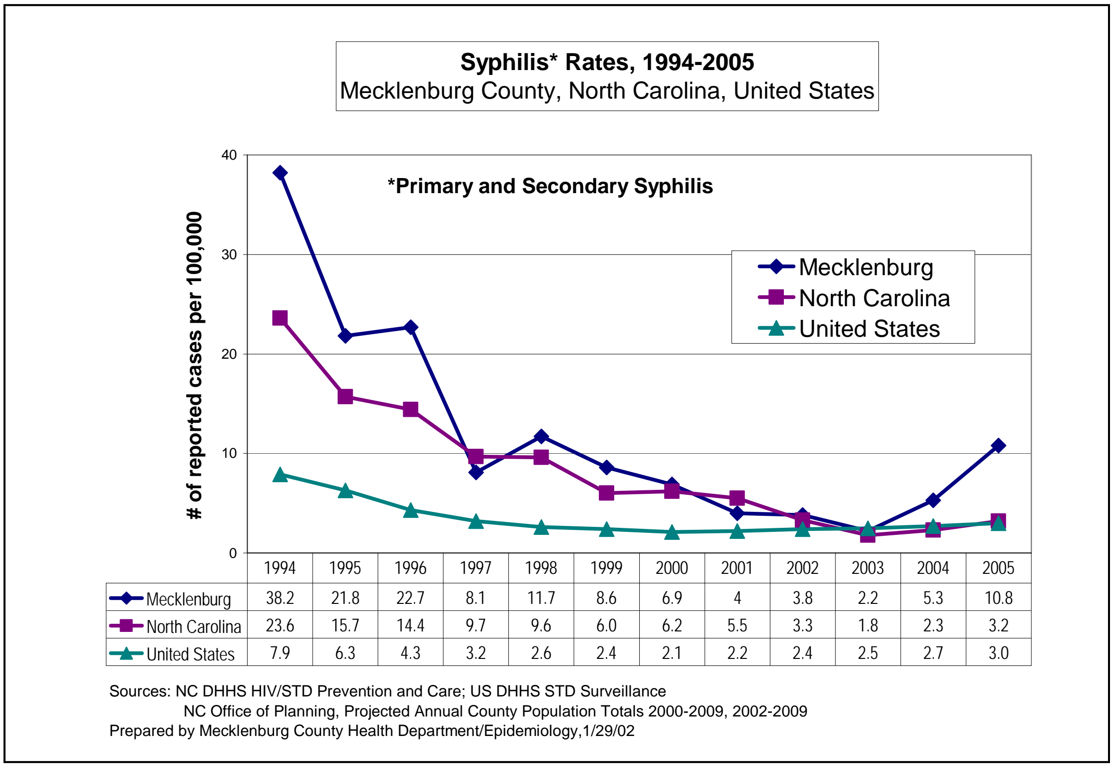



## CHLAMYDIA

- Chlamydia is a curable STD caused by the bacterium Chlamydia trachomatis. It is the most frequently reported sexually transmitted infection in the United States. However, chlamydia is often under-reported because most infected persons do not experience symptoms and are not tested.
- In recent years increased reporting of chlamydia cases have been documented for the county. In 2001, there were 1,999 cases reported for a rate of 278.3 cases per 100,000 population. The number of Chlamydia cases increased to 3,527 in 2005, for a rate of 448.4 per 100,000 population.
- The increases in reported cases and rates likely reflect the continued expansion of screenings and increased use of more sensitive diagnostic tests; however, this trend may also reflect an actual increase in infections.
- In general, chlamydia is more common in women than men. 80% of new cases reported in the county each year are among women.

## GONORRHEA

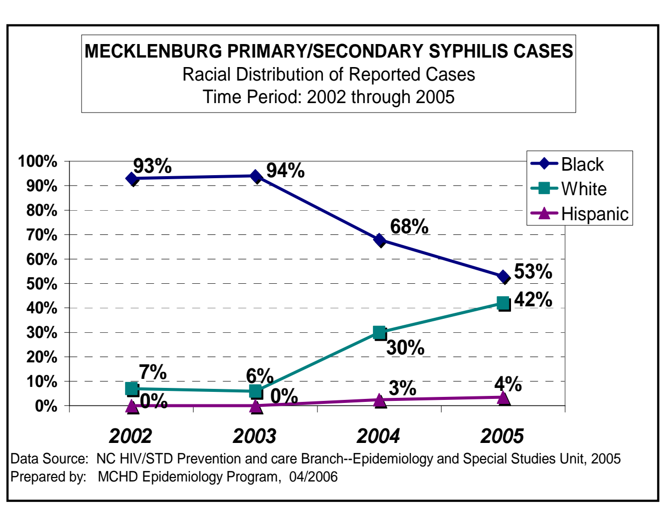
- Gonorrhea is caused by the bacterium Neisseria gonorrhea. Gonorrhea is a very common infectious disease that infects the genital tract, the mouth and the rectum and if left untreated can cause serious and permanent health problems in both women and men.
- While gonorrhea is easily cured with antibiotics, increased reports of drug-resistance strains in the nation are a growing public health concern.
- In Mecklenburg overall rates of infection have declined and in recent years, appeared to have plateau. The rate of reported gonorrhea in 2005 was 264.7 cases per 100,000 population, a decline of 9.3 percent from 2001 (291.8).
- African Americans remain the group most heavily affected by gonorrhea. Between 2000 and 2005, approximately 90% of all new cases reported in the county were African American.




| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mecklenburg | 38.2 | 21.8 | 22.7 | 8.1 | 11.7 | 8.6 | 6.9 | 4 | 3.8 | 2.2 | 5.3 | 10.8 |
| North Carolina | 23.6 | 15.7 | 14.4 | 9.7 | 9.6 | 6.0 | 6.2 | 5.5 | 3.3 | 1.8 | 2.3 | 3.2 |
| United States | 7.9 | 6.3 | 4.3 | 3.2 | 2.6 | 2.4 | 2.1 | 2.2 | 2.4 | 2.5 | 2.7 | 3.0 |

## SYPHILIS

- Syphilis is a genital ulcerative disease caused by a bacterium Treponema pallidum. Syphilis also facilitates the spread of HIV disease, by as much as two- to five-fold.
- Syphilis cases are infectious to their sexual partners throughout the primary, secondary, and early latent stages known as Early Syphilis. In 2005, 142 cases of early syphilis were reported in Mecklenburg County
- The rate of primary and secondary (P&S) syphilis, the most infectious stages of the disease, decreased during the 1990s dropping to an all time low of 2.2 cases per 100,000 population in 2003.
- Although the rate of P&S syphilis declined 94% between 1994 and 2003, the rate of P&S syphilis increased in the county during 2004 and 2005.
- The recent increase in Syphilis has been linked with increasing case reports among Men who have Sex with Men (MSMs) and White males. More than half of the Syphilis cases reported in 2005 were among MSMs.
- Syphilis case reporting varies across racial and ethnic categories. Prior to 2003, over 90% of P&S cases reported in the county were among African Americans.
- However the gap between Whites and African Americans has decreased in recent years. In 2005, 53% of cases were Black, 42% were White and another 4% were Hispanic.



**SOURCES:**

Cates et al., Sexually Transmitted Diseases, 1999. Estimates of the Incidence and Prevalence of Sexually Transmitted Diseases in the United States.

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Centers for Disease Control and Prevention. Tracking the Hidden Epidemic: Trends in STDS in the United States, 2000. Available online at: http://www.cdc.gov/nchstp/dstd/Stats_Trends/Trends2000.pdf Accessed: December 17, 2006

North Carolina Department of Health and Human Services, HIV/STD Prevention and Care Branch

- 2006 Epidemiologic Profile for HIV/STD Prevention and Care Planning.
- 2005 HIV/STD Surveillance Report

# HIV DISEASE

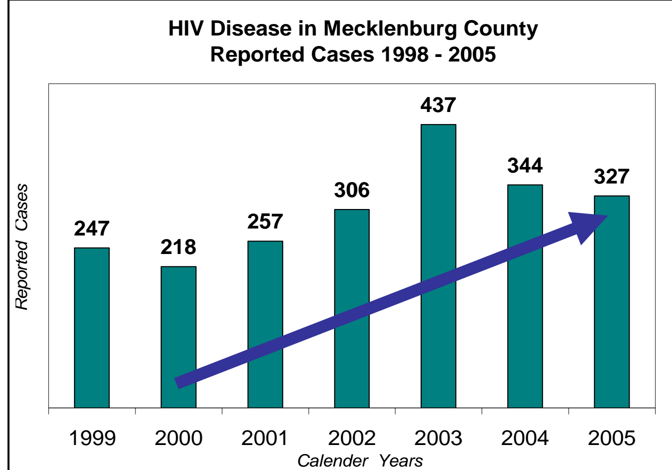
## DEFINITION

HIV disease refers to the entire spectrum of disease, from initial infection of the virus to the deterioration of the immune system and presentation of opportunistic infections (full-blown AIDS). This term includes:

- Persons with a diagnosis of HIV infection (not AIDS),
- Persons previously reported with an HIV infection who have progressed to AIDS, or
- Persons with concurrent diagnoses of HIV infection and AIDS.

## THE HIV DISEASE EPIDEMIC

During the mid-to-late 1990s, advances in treatment slowed the progression of HIV infection to AIDS and led to dramatic decreases in AIDS deaths. In recent years increased HIV reporting has been documented in large metropolitan areas creating a concern that HIV incidence might be increasing. Historically, the HIV/AIDS epidemic has affected more men than women, but women are being increasingly affected. In fact, if new HIV infections continue at their current rate worldwide, women with HIV may soon outnumber men with HIV.




*Source: NC DHHS, HIV/STD Prevention and Care*
*Note: Case reports for 2003 were unusually high. This unusual increase was partially due to previously unreported cases that were identified through ongoing surveillance efforts on both the state and local level.*

## QUICK FACTS ON HIV DISEASE

- At the end of 2005, a cumulative number of 5,018 HIV disease cases were reported in Mecklenburg County..
- However, after accounting for deaths and persons with an unknown vital status, 3,292 persons are reported to be living with HIV disease in the county.
- One-half of all new HIV infections in this country occur among people under the age of 25.
- On average, 6 new cases of HIV disease were reported per week in Mecklenburg County during 2005

## SUMMARY OF HIV DISEASE TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- In recent years the number of AIDS-related deaths has declined for the county.
- Despite dramatic increases between 2000 and 2003, the rate of HIV disease increase in the county has slowed in recent years.

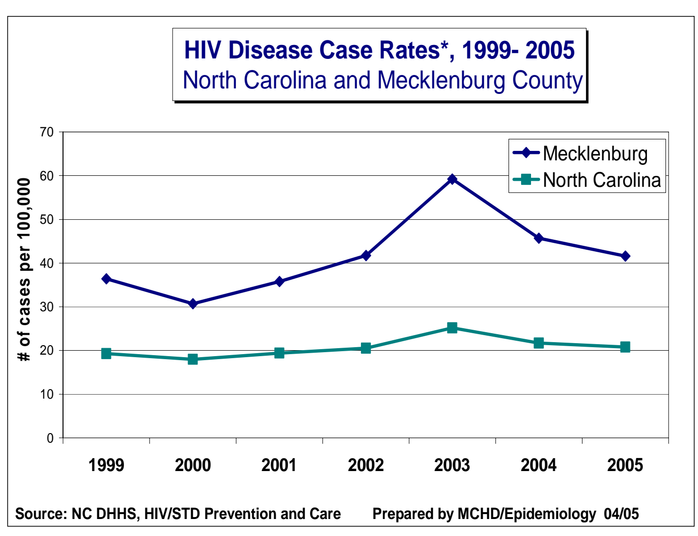
**Areas for Improvement**

- Other Races remain disproportionately impacted by HIV disease.
- Increased reports of HIV disease have been noted among young college-age males.
- An increasing number of women are becoming infected with HIV.

# HIV DISEASE

Explanations for the recent rise in new cases include:

- Lowered perception of risk,
- Sub-optimal antiretroviral treatment response,
- Failure to diagnose HIV infection until AIDS-related symptoms occurs, and
- Changes in the populations impacted by the epidemic: *Today, people infected with HIV disease are more likely to be female, young, heterosexual and a racial minority in comparison to the past.*



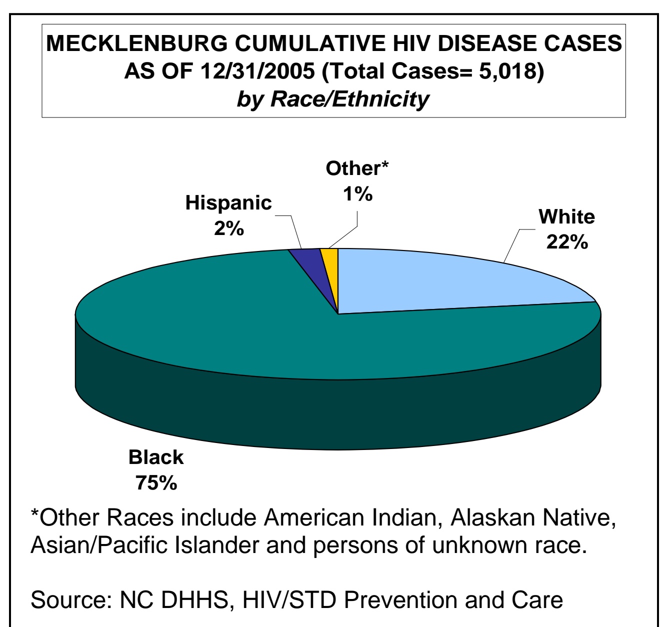
## HIV DISEASE IN MECKLENBURG COUNTY

The recent growth in newly diagnosed infections coupled with a rising number of persons living longer with HIV disease place an increased burden on the public health infrastructure for the county.

- Over the past decade the rate of new HIV infections decreased for the county. The HIV disease case rate decreased from 59.8 per 100,000 in 1995 to 30.7 per 100,000 in 2000. However at the end of 2000, HIV cases began to increase.
- The recent increase in HIV disease case rates peaked in 2003 at 59.2 per 100,000. The unusually large number of cases reported in 2003 was partially due to the identification of previously unreported cases on both the state and local level.
- Annual case rates for 2004 and 2005 remain higher than case rates from five years prior pointing to an overall increase for the county.
- In 2005, 327 new HIV disease cases were reported in Mecklenburg County, for a rate of 41.6 per 100,000.
- Mecklenburg had the fifth highest case rate in North Carolina during 2005. *(The four counties with higher rates were smaller and, with the exception of Durham, reported twenty-six or less cases. Durham County reported 111 HIV cases.)*

### *By Age and Race/Ethnicity*

- Racial and ethnic minorities remain disproportionately impacted by HIV disease.
- As of December 2005, there have been 5,018 cases of HIV Disease reported in Mecklenburg. Racial and ethnic minorities account for 78% of total reports, or 3,922 cases.




*Other Races include American Indian, Alaskan Native, Asian/Pacific Islander and persons of unknown race.

Source: NC DHHS, HIV/STD Prevention and Care

### *By Age and Race/Ethnicity, cont.*

- While the number of Hispanics reported with HIV disease is relatively small, increased case reporting has been noted for this population. In 2001, one percent of newly reported HIV cases were Hispanic (n= 14 HIV cases). In 2005, six percent of newly reported HIV cases were Hispanic (n=20 HIV cases).

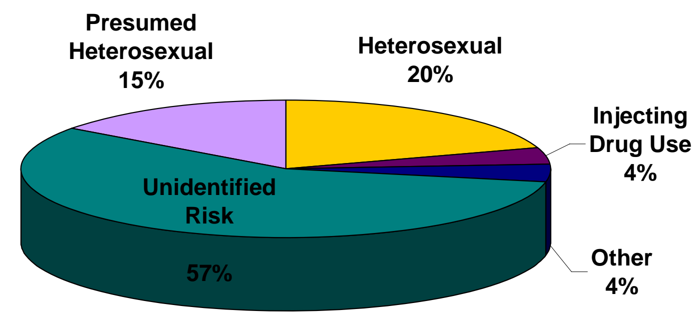
### *By Gender and Transmission Category**

- Each year approximately 40% of HIV cases in Mecklenburg are reported without a CDC-defined risk category. These cases represent HIV infected persons who are currently being followed by the health department, patients who have died before an interview was conducted or persons who have declined interviews or have been lost to follow-up
- Although 70% of new HIV infections each year occur among men, women are greatly impacted by HIV disease.
- In 2005, 24% of reported cases were among women, with African American women accounting for the largest proportion of new infections.
- Heterosexual contact is the primary mode of transmission for women, followed by injecting drug use.
- Among HIV infected men, the largest proportion of new infections occur among MSM, followed by men infected through heterosexual contact and injection drug use.
- In 2005, 50% of new infections in males were MSM. Only 37% of HIV infected males were MSM in 2000.
- Increased case reports among MSM have been linked with the growing number of infections among college-age males and White men.

*For a more detailed discussion HIV disease and transmission or risk categories please see the HIV Disease Technical Notes section in the Appendix.

**2005 HIV Disease Cases for WOMEN**
**By TRANSMISSION CATEGORY**

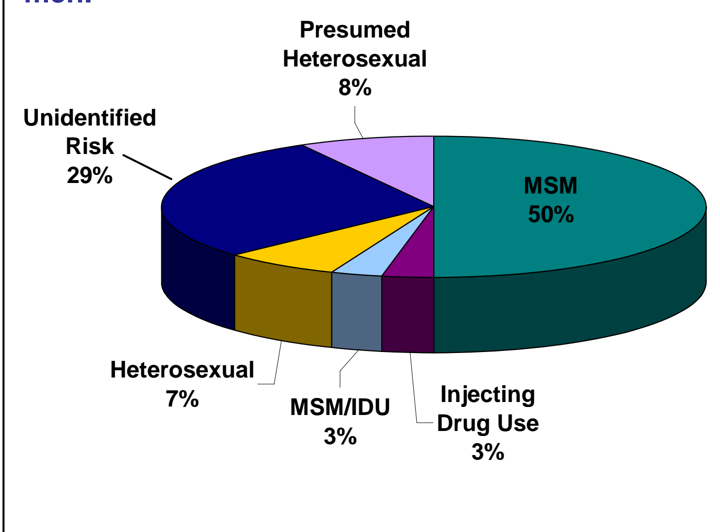
**In 2005, 79 women were reported with HIV. A transmission category was identified for 34 women.**




**Note:** OTHER category includes infections due to pediatrics, hemophilia, receipt of blood products/organ transplants or other blood-to-blood risk.

**2005 HIV Disease Cases for MEN**
**By TRANSMISSION CATEGORY**

**In 2005, 248 men were reported with HIV. A transmission category was identified for 177 men.**



2006 Mecklenburg County Community Health Assessment
Prepared by: Mecklenburg County Health Department (MCHD), Epidemiology Program

# MENTAL HEALTH

## OVERVIEW

Mental health and mental illness are points on a continuum, although much more is known through research about mental illness than about mental health.

### *A Public Health Perspective*

In the United States, mental health programs are rooted in a population-based public health model. Broader in focus than medical models that concentrate on diagnosis and treatment, public health attends to the health of a population in its entirety: The community is the patient. A public health approach encompasses a focus on epidemiologic surveillance, health promotion, disease prevention, and access to services.

Public health practices seek to identify risk factors for mental health problems; to introduce preventive interventions that may block the emergence of severe illnesses; and to actively promote good mental health.

### *From the Surgeon General's Report on Mental Health*

- **Mental Health**—the successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity.
- **Mental Illness**—the term that refers collectively to all mental disorders. Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning.
- "It is easy to overlook the value of mental health until problems surface. Yet from early childhood until death, mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem. These are the ingredients of each individual's successful contribution to community and society."

## QUICK FACTS ON MENTAL HEALTH

- Mind and body are inseparable. Mental health is fundamental to total health. The mind is a function of the brain and mental health conditions are real health problems.
- Mental disorders are the leading cause of disability in the U.S. for ages 15-44.
- A range of treatments exists for most mental disorders but nearly half of all Americans who have a severe mental illness do not seek treatment. Stigma and cost are two of the major barriers to care.
- More than 90 percent of people who kill themselves have a diagnosable mental disorder, most commonly a depressive disorder or a substance abuse disorder.
- Alzheimer's disease is the most common cause of dementia among people age 65 and older.

## SUMMARY OF MENTAL HEALTH TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- The rate of suicide in teens has not increased over the past five years.

**Areas for Improvement or Attention**

- In the 2005 YRBS, 27% of Mecklenburg teens surveyed reported feeling sad or hopeless.
- More than 5% of teens reported they vomited or took laxatives to lose weight or to keep from gaining weight.
- Aging of the population will result in greater treatment needs for Alzheimer's Disease
- Stigma
- Access to treatment for those without mental health coverage.

### Surgeon General's Report (continued)

- Mind and body are inseparable. Mental health is fundamental to total health. The mind is a function of the brain and mental health conditions are real health problems.
- A range of treatments exists for most mental disorders.
- Reccomended actions:
  - Continue to Build the Science Base
  - Overcome Stigma
  - Improve Public Awareness of Effective Treatment:
  - Ensure the Supply of Mental Health Services and Providers:
  - Ensure Delivery of State-of-the-Art Treatments:
  - Tailor Treatment to Age, Gender, Race, and Culture:
  - Facilitate Entry Into Treatment:
  - Reduce Financial Barriers to Treatment

### Barriers to Treatment - Stigma

Despite the efficacy of treatment options and the many possible ways of obtaining a treatment of choice, nearly half of all Americans who have a severe mental illness do not seek treatment. Financial barriers are one very real obstacle in seeking treatment, but often, reluctance to seek care may be in response to the stigma that many in our society attach to mental illness and to people who have a mental illness.

Survey data, licensed from Porter Novelli by SAMHSA and CDC, found that only 25% of young adults believe that a person with a mental illness can eventually recover, and slightly more than one-half (54 percent) who know someone with a mental illness believe that treatment can help people with mental illnesses lead normal lives.

## MENTAL ILLNESS IS DISABLING: THE BURDEN OF DISEASE

The National Institute of Mental Health (NIMH) reports that mental disorders are common in the United States and internationally. An estimated 26.2% of Americans ages 18 and older, about one in four adults, suffer from a diagnosable mental disorder in a given year. When applied to the 2004 U.S. Census residential population estimate for ages 18 and older, this figure translates to 57.7 million people.

- Even though mental disorders are widespread in the population, the main burden of illness is concentrated in a much smaller proportion — about 6 %, or 1 in 17, suffer from a serious mental illness.
- Mental disorders are the leading cause of disability in the U.S. and Canada for ages 15-44.
- Many people suffer from more than one mental disorder at a given time. Nearly half (45 %) of those with any mental disorder meet criteria for two or more disorders, with severity strongly related to comorbidity.

In the U.S., mental disorders are diagnosed based on the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV). The following are examples of disorders commonly seen. National statistics are from NIMH.

### Mood Disorders

Includes major depressive disorder, disthymic disorder, and bipolar disorder.

- Approximately 20.9 million American adults, or about 9.5 percent of the U.S. population age 18 and older in a given year, have a mood disorder.
- The median age of onset for mood disorders is 30 years.
- Depressive disorders often co-occur with anxiety disorders and substance abuse.

# MENTAL HEALTH

**Mecklenburg**

- In the 2005 BRFSS, when asked about mental health--stress, depression, and problems with emotions—5.7% of adults said their mental health had not been good for 8-29 days in the past month and 3.5% in the past 30 days.
- In the 2005 YRBS, 27% of Mecklenburg 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.
- In the 2003 Community Needs Survey, 27,200 individuals reported not getting the counseling services they needed for nerves or depression. Other reported unmet need included counseling for serious illness or death of a family member - 19.200 individuals, stress of raising a family – 24,000 individuals, and care giving stress – 14,800 individuals.

### Suicide

- In 2004, 32,439 (approximately 11 per 100,000) people died by suicide in the U.S.
- More than 90 percent of people who kill themselves have a diagnosable mental disorder, most commonly a depressive disorder or a substance abuse disorder.
- Four times as many men as women die by suicide; however, women attempt suicide two to three times as often as men.

**Mecklenburg**

- Suicide is not among the leading ten causes of death for adults.
- Nationally and locally, suicide is the 3rd leading cause of death for teens.
- In 2005, there were 59 deaths from suicide; two youth ages 15-19 committed suicide. In 2004, four youth—three (15-19 yrs) and one (10-14 yrs)—died by suicide.
- In the 2005 YRBS, over 13% of teens reported seriously considering attempting suicide. Approximately 12% of teens made a plan about how they would attempt suicide one or more times, and twelve percent of teens reported actually attempting suicide one or more times.

### Anxiety Disorders

- Includes panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, generalized anxiety disorder, and phobias (social phobia, agoraphobia, and specific phobia).
- Approximately 40 million American adults ages 18 and older, or about 18.1 percent of people in this age group in a given year, have an anxiety disorder.
- Anxiety disorders frequently co-occur with depressive disorders or substance abuse.
- Most people with one anxiety disorder also have another anxiety disorder. Nearly 3/4 of those with an anxiety disorder will have their first episode by age 21.

### Schizophrenia

- Approximately 2.4 million American adults, or about 1.1 % of the population age 18 and older in a given year, have schizophrenia.
- Schizophrenia affects men and women with equal frequency.
- Schizophrenia often first appears in men in their late teens or early twenties. In contrast, women are generally affected in their twenties or early thirties.

### Eating Disorders

- The three main types of eating disorders are anorexia nervosa, bulimia nervosa, and binge-eating disorder.
- Females are much more likely than males to develop an eating disorder. Only an estimated 5% to 15% of people with anorexia or bulimia and an estimated 35% of those with binge-eating disorder are male.
- In their lifetime, an estimated 0.5 % to 3.7% of females suffer from anorexia, and an estimated 1.1% to 4.2 % suffer from bulimia.

### *Eating Disorders (continued)*

- Community surveys have estimated that between 2% and 5 % of Americans experience binge-eating disorder in a 6-month period (NIMH).
- The mortality rate among people with anorexia has been estimated at 0.56 % per year, or approximately 5.6 % per decade, which is about 12 times higher than the annual death rate due to all causes of death among females ages 15-24 in the general population (NIMH).

**Mecklenburg**

- In the 2005 YRBS, white females were over ten times more likely to describe themselves as being overweight than to actually report being overweight.
- About 4.6% of teens reported taking diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight.
- More than 5% of teens reported they vomited or took laxatives to lose weight or to keep from gaining weight.

### *Attention Deficit Hyperactivity Disorder(ADHA)*

- ADHD, one of the most common mental disorders in children and adolescents, and also affects an estimated 4.1 percent of adults, ages 18-44, in a given year.
- ADHD usually becomes evident in preschool or early elementary years. The median age of onset of ADHD is seven years, although the disorder can persist into adolescence and occasionally into adulthood.

### *Autism*

Autism is part of a group of disorders called autism spectrum disorders (ASDs), also known as pervasive developmental disorders. ASDs range in severity, with autism being the most debilitating form while other disorders, such as Asperger syndrome, produce milder symptoms.

- Estimating the prevalence of autism is difficult and controversial due to differences in the ways that cases are identified and defined, differences in study methods, and changes in diagnostic criteria. A recent study reported the prevalence of autism in 3 to10 year-olds to be about 3.4 cases per 1000 children (NIMH).
- Autism and other ASDs develop in childhood and generally are diagnosed by age three.
- Autism is about four times more common in boys than girls. Girls with the disorder, however, tend to have more severe symptoms and greater cognitive impairment.

### *Alzheimer's Disease (AD)*

- AD affects an estimated 4.5 million Americans. The number of Americans with AD has more than doubled since 1980 (NIMH).
- AD is the most common cause of dementia among people age 65 and older.
- Increasing age is the greatest risk factor for Alzheimer's. In most people with AD, symptoms first appear after age 65. One in 10 individuals over 65 and nearly half of those over 85 are affected. Rare, inherited forms of Alzheimer's disease can strike individuals as early as their 30s and 40s.
- From the time of diagnosis, people with AD survive about half as long as those of similar age without dementia (NIMH).

**Mecklenburg**

- Alzheimer's Disease is the 4th leading cause of death.
- White females who live longer than any other race-gender groups are most likely to die from AD.

### SOURCES

National Institute for Mental Health, The Numbers Count: Mental Disorders in America, 2006, found at http://www.nimh.nih.gov/publicat/numbers.cfm

CDC Behavioral Risk Factor Surveillance System, 2005 Mecklenburg Data

CDC Youth Risk Behavior Survey, 2005 Mecklenburg Data

NC DHHS, State Center for Health Statistics, 2005 Mecklenburg Mortality Data

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DHHS, Mental Health: A Report of the Surgeon General, 1999 found at http://www.surgeongeneral.gov/library/mentalhealth/home.html

CDC Mental Health Work Group found at http://www.cdc.gov/mentalhealth/

Charlotte-Mecklenburg 2003 Community Needs Survey found on DSS website http://www.charmeck.org/Departments/DSS/Data+and+Research/Publications/home.htm

SUBSTANCE ABUSE

# SUBSTANCE ABUSE

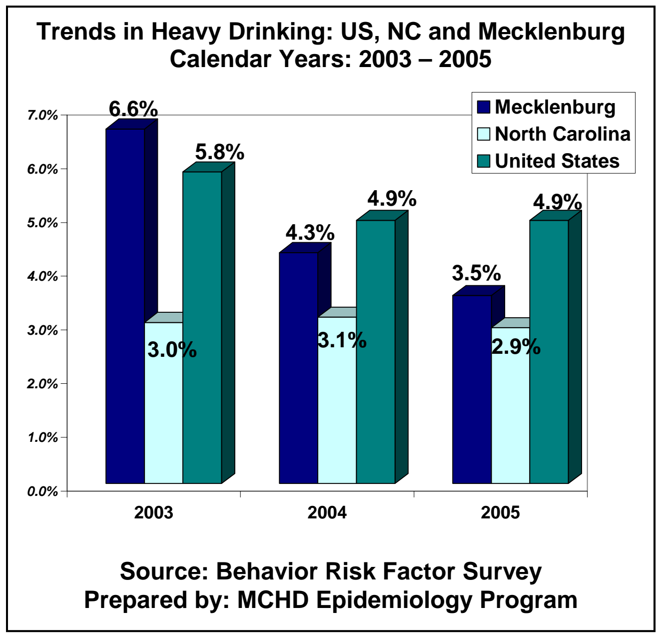
## OVERVIEW

Substance abuse and its related problems continue to be a major public health concern for the nation. According to the Centers for Disease and Control (CDC), excessive alcohol consumption is the third leading preventable cause of death in the United States. In a 2005 survey sponsored by the Substance Abuse and Mental Health Services Administration, 19.7 million Americans aged 12 or older used an illicit drug during the month prior to being interviewed. 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 and Illicit Drug Use in Mecklenburg County

- 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 on one occasion.

**Trends in Heavy Drinking: US, NC and Mecklenburg**
**Calendar Years: 2003 – 2005**




**Source: Behavior Risk Factor Survey**
**Prepared by: MCHD Epidemiology Program**

### QUICK FACTS ON SUBSTANCE ABUSE

- Substance abuse refers to the use of illegal drugs or the use of prescription or over-the-counter drugs or alcohol for purposes other than those for which they are meant to be used, or in excessive amounts.
- Excessive alcohol consumption is the 3rd leading cause of preventable death in the nation.
- Marijuana is the most widely used illicit drug in the Mecklenburg County.
- Approximately 27% of fatal traffic crashes in Mecklenburg County are alcohol related.
- In 2005 nearly 20% of Mecklenburg teens reported binge drinking (five or more drinks of alcohol in one occasion) in the past 30 days.

### SUMMARY OF SUBSTANCE ABUSE TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- While reports of alcohol use among teens remain high, rates have steadily declined in the county.
- Slight declines have been noted among adults reporting heavy drinking and binge drinking.

**Areas for Improvement**

- The lifetime use of most drugs increases as a student moves from Grade 6 to Grade 11.
- The number of fatal car crashes attributed to alcohol use remains a public health concern for the county.
- National trends point to an increasing number of teens using prescription drugs without the proper authorization.

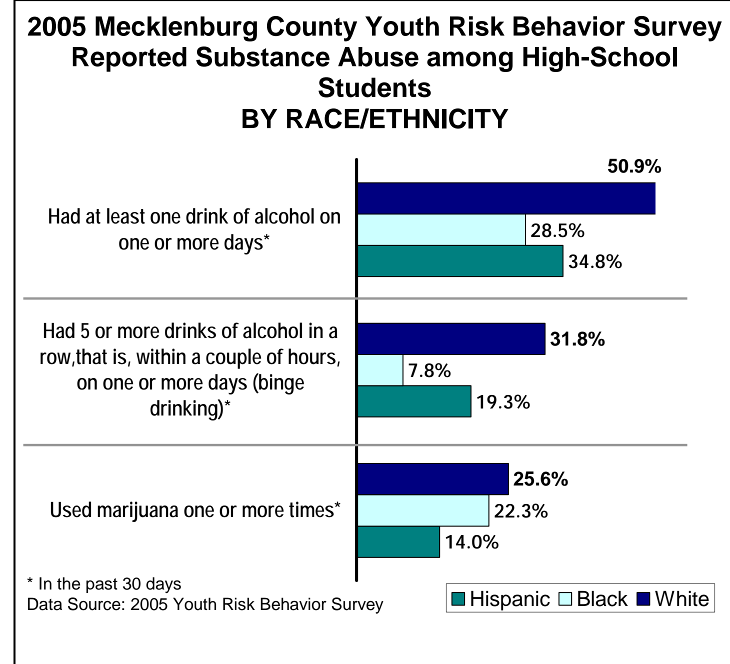
# SUBSTANCE ABUSE

### *By Age*

- The proportion of adults reporting heavy drinking in the county has declined from 6.6% in 2003 to 3.5 % in 2005.
- Between 2001 and 2005, an estimated 13% of adults in Mecklenburg reported binge drinking.
- According to the 2005 Youth Risk Behavior Survey (YRBS), nearly 40% of Mecklenburg teens have had at least one drink of alcohol in the past thirty days.
- Nearly 20% of teens reported binge drinking in the month prior to being interviewed.
- While the proportion of teens admitting alcohol use remains high, rates have steadily declined in the county.
- According to the Substance Abuse Prevention Services, alcohol use among Mecklenburg teens declined by 43% between 1995 and 2004.
- The lifetime use of most drugs increases as a student moves from Grade 6 to Grade 11.
- In 2005, over 40% of Mecklenburg teens reported using marijuana one or more times during their life.
- About 14% of teens have taken prescription drugs such as OxyContin, Percocet, Demerol, Adoral, Ritalin, or Zanax without a doctor's prescription one or more times during their life.

### *By Gender and Race/Ethnicity*

- In general men are more likely to report binge drinking. 20% of adult males surveyed between 2001 and 2005 reported binge drinking, compared to 7% of females.
- However, reports of heavy drinking are nearly equivalent for men and women in the county. (2001-2005 BRFSS data on Heavy Drinking: 5.4% for males and 4.6% for females)
- Reports of binge drinking and heavy drinking are highest among Whites in Mecklenburg.




- Among adults, 16% of Whites reported binge drinking in comparison to 12% of Hispanics and 8% of African Americans.
- Reports of binge drinking in the past 30 days among White teens were four times higher than those of Black teens and 1.6 times higher than Hispanic teens

### *Alcohol Related Injuries and Fatalities*

- According to a report from the Charlotte Mecklenburg Drug Free Coalition there are 27,288 crashes occur in Mecklenburg County each year. Approximately 4.4% of these crashes are alcohol-related.
- On average, 27% of fatal traffic crashes in the county are alcohol related.

### ***Sources***


Centers for Disease Control and Prevention. 2005 Youth Risk Behavior Survey, Mecklenburg County Data.

Centers for Disease Control and Prevention. 2005 Behavior Risk Factor Surveillance Survey, Mecklenburg County Data.

***Sources, cont.***

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Substance Abuse and Mental Health Services Administration. (2006). Results from the 2005 National Survey on Drug Use and Health: National Findings.

# ACCESS TO CARE

# ACCESS TO CARE

## OVERVIEW

Health access or access to care refers not only to health insurance coverage but to the willingness and ability to utilize services and the further ability to respond appropriately to care provided.

Those with health insurance, whether private or public, may chose not to use it for a variety of reasons, including lack of trust between community and provider; cultural differences regarding care; lack of knowledge to navigate the system; and incompatible locations and hours.

People who do access health care may not receive its benefits because low health literacy prevents them from understanding the information they receive.

## NEED FOR MEDICAL CARE AND INSURANCE COVERAGE

A precise picture of the need for medical care among those who cannot pay in Mecklenburg County does not exist. Factors to be considered include the uninsured, the number of low-income who are uninsured, the chronically uninsured, the under-insured, and the number of people from the groups above actually seeking medical care.

### *Low Income*

Low income refers to families or individuals with an annual income under 200% of the federal poverty limit—about $40,000 for a family of four or $19,600 for an individual in 2006.

### *A Note on Estimating the Uninsured*

National estimates for the uninsured usually come from one of three surveys: US Census Current Population Survey (CPS); US Census Survey of Income and Program Participation (SIPP), and the Agency for Healthcare Research and Quality Medical Expenditure Panel Survey (MEPS). Because the surveys are designed and conducted differently, the estimates may not always be the

## QUICK FACTS ON ACCESS TO CARE

- The majority of uninsured adults are working.
- A little less than half of the uninsured are not considered low income.
- As many as half of all adults may be affected by limited health literacy, the ability to read, understand and act on health information.

## SUMMARY OF ACCESS TO CARE TRENDS IN MECKLENBURG COUNTY

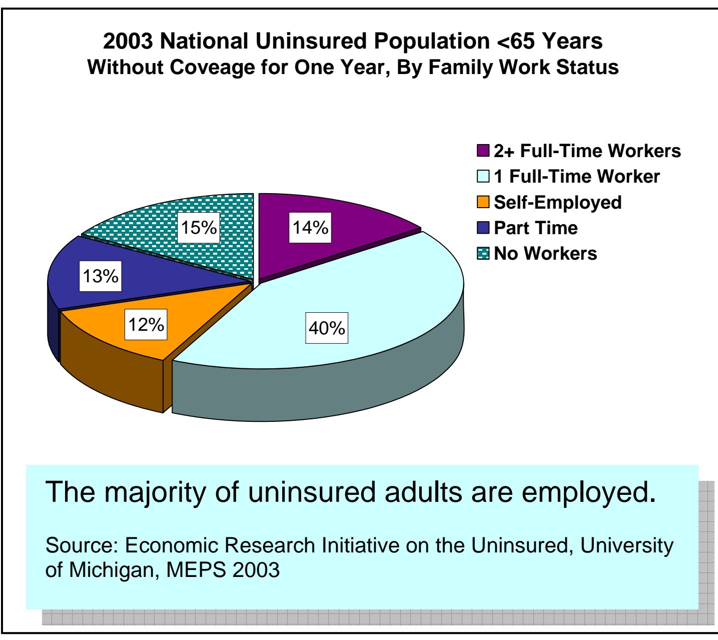
**Positive Trends**

- Increased indigent care funding from the county 2006-07.
- Increased funding for school health nurses from the county 2006-07.
- Establishmet of Physicians Reach Out 2004.
- Seven free clinics, CW Williams and CMC ambulatory clinics offer safety net care to low income residents.

**Areas for Improvement or Attention**

- Lack of care options for the un- or underinsured who are not low income or are undocumented.
- Need for culturally appropriate information and education as well as providers who can provide culturally appropriate services.
- Lack of dental services for low income adults and low numbers of dentists who accept Medicaid clients, adults or children, in significant numbers.
- Health literacy
- A fragmented safety net system of care vulnerable to the vagaries of support from organizations, foundations, and charitable giving.

same. In North Carolina, the Cecil G Sheps Center for Health Services Research at UNC-Chapel Hill produces NC county estimates of the uninsured from CPS data. County-level information is also available from the Behavioral Risk Factor Surveillance System (BRFSS), and local studies such as the Mecklenburg Community Needs Survey. It should be emphasized that the numbers generated by these surveys are estimates. When estimated percents from the surveys are then applied to estimated population numbers from various sources, the lack of precision increases. Therefore, while estimates may provide a sense of the numbers of the uninsured, it should be remembered that they are still estimates and may vary widely depending on the source.




The majority of uninsured adults are employed.

Source: Economic Research Initiative on the Uninsured, University of Michigan, MEPS 2003

### *Uninsured at Any Time Compared to Chronically Uninsured*

People's insurance status may shift during the year. Various factors may affect eligibility for public coverage. Changing jobs can leave one temporarily uninsured or underinsured. The loss of a job, especially if due to illness, can move individuals once fully covered to the ranks of the long-term or chronically uninsured. Some surveys of the uninsured look at people who are uninsured at the moment or have been uninsured at some time during the year. Others interview the same people over time and are able to determine those who have been without insurance for a long period of time. The number of people without insurance at any time is higher than the number of people who are chronically uninsured. MEPS data for 2003-2004 suggest that 10.3% of the adult population was uninsured for the full two years.

### *The Underinsured*

Similar to being uninsured, people may be underinsured—have insufficient catastrophic coverage, no preventive or acute coverage and lack prescription, dental, and vision benefits. Numbers on the underinsured are more difficult to find than statistics on the uninsured. A 2005 study by the Commonwealth Fund estimated that in 2003, in addition to the 45 million adults uninsured nationally that another 16 million were underinsured.

The study defined an underinsured person as one who has insurance all year but has inadequate financial protection, as indicated by one of three conditions: 1) annual out-of-pocket medical expenses amounting to 10 percent or more of income; 2) among low-income adults, out-of-pocket medical expenses amounting to 5 percent or more of income; or 3) health plan deductibles equal or exceeding 5 percent of income.

Low-income and chronically ill adults were the most likely to be underinsured. Inadequate coverage left those with health problems facing not only an inability to get needed care but the burden of unpaid medical bills.

### *Who are the uninsured?*

- National figures from the first half of 2005 show about 17.2% of the total population and 19.5% of the population under 65 uninsured at some time in the past year (MEPS 2005).
- An examination of 2003 national data shows 13.6% of the population under 65 uninsured for at least a year. Of these uninsured,

### *Who are the uninsured? (continued)*

- About half are ethnic or racial minorities.
- Only 53.5% are considered low-income.
- The majority of adults are working but their lack of education makes it more difficult for them to get jobs that offer employer-sponsored coverage or they may not earn enough to afford the premiums.
- Only 28% of families have no workers or part-time workers. The remainder have one or more full time workers or self-employed workers.
- 43% of primary wage earners earn at least $7 to $15 per hour. (MEPS 2003; prepared by ERIU, University of Michigan)

- National figures suggest that about 42% of the uninsured fall between the ages of 18 and 34, a group that is less likely to be seeking health care other than prenatal care.

- Not all people reporting no insurance coverage are uninsured for a long period of time. Nationally, from 2003-2004, 10.3% of the under-65 population were uninsured for at least two years. (MEPS). Applying this figure to Mecklenburg, approximately 74,000 people could be estimated to be uninsured long-term.

### *Mecklenburg County*

Nationally, adults 18-65 account for over 80% of the uninsured. Most adults, 65 years and older qualify for Medicare although those who cannot afford supplemental coverage may be underinsured.

In the 2005 BRFSS, 17.9% of Mecklenburg adults, or approximately 102,300 people, reported not having any kind of health care coverage at the time they were asked. Over 20% of adults under 65 reported no insurance and of those under 65 employed for wages, 16.8% had no insurance.

Adults are more likely to be uninsured than children because many low-income children qualify for Medicaid or SCHIP, the state Children's Health Insurance Plan (in North Carolina, NC Health Choice). Infants, in particular, qualify for public assistance. Approximately 43% of Mecklenburg children less than a year of age receive Medicaid (DSS). Reasons for children to be uninsured include living in families that do not meet eligibility requirements, parents not realizing they qualify for assistance, or not being documented. The number of children younger than 18 without coverage in Mecklenburg County was estimated at 9.4% or approximately 19,700 by the UNC Cecil G. Sheps Health Services Research Center in 2004.

**HEALTH CARE ACCESS – MECKLENBURG & NORTH CAROLINA ADULTS, 18 YEARS AND OLDER, 2005 BRFSS***

| Selected Measures of Access | Percent | |
|---|---|---|
| | Mecklenburg | North Carolina |
| No insurance** | 17.9 | 19.1 |
| No insurance <65 yrs age | 20.3 | 22.5 |
| No insurance, employed, <65 yrs age | 16.8 | 18.8 |
| No medical home*** | 23.2 | 22.8 |
| Didn't see doctor in past year because of cost | 13.0 | 15.6 |

* CDC Behavioral Risk Factor Surveillance System, Mecklenburg and North Carolina data
** No insurance anytime in the past year
*** Medical home = same provider seen on a regular basis

| MEASURES OF ACCESS MECKLENBURG POPULATION ESTIMATES[1] | | |
|---|---|---|
| Selected Measures of Access | Percent | Estimated # |
| No insurance, adults 18 yrs and older[2] | 17.9 | 102,300 |
| No insurance, children 17 yrs and under[3] | 9.4 | 19,700 |
| Chronically uninsured[4] | 10.3 | 74,100 |
| No medical home[2] | 23.2 | 132,500 |
| Didn't see doctor in past year because of cost[2] | 13.0 | 74,300 |

1 Population numbers from 2005 American Communities Survey
2 CDC Behavioral Risk Factor Surveillance System, 2005 Mecklenburg data
3 Shep's Center, UNC-Chapel Hill, Current Population Surveys 2004
4 Medical Expenditure Panel Survey 2005, AQHR

***Mecklenburg County (continued)***

Consistent with national figures, in the 2005 BRFSS, those reporting no insurance in Mecklenburg County included a greater percent of

- males than females,
- people of Other Races than Whites,
- people between 18 and 44 years than people 45 years or older,
- people with a high school or less education than people with some college or beyond, and
- people with a household income of less than $50,000 a year than people with a household income of $50,000 or greater.

This pattern was also true of those under 65 without insurance, those under 65 who worked for wages without insurance, those without a medical home, and those who had not obtained medical care in the past year because of cost.

***Groups at Particular Risk for Not Obtaining Needed Care***

- **Men:** While the poorest women and children often qualify for public insurance, few programs cover men under 65.

- **The uninsured and underinsured who are not low-income:** Uninsured or underinsured individuals and families who are not considered low-income (less than 200% of the federal poverty level) usually do not qualify for sliding scale and have few options. A single adult making more than $20,000 a year is not considered low income. For these people, regular preventive care can be cost prohibitive and in the case of illness, the emergency room is often the default provider.

- **The undocumented:** The rapid growth of the Hispanic population, documented and undocumented, has placed new demands on the safety net for health care in Mecklenburg County.  Many of these immigrants have jobs

| UNINSURED RATES OF SELECTED GROUPS MECKLENBURG COUNTY – BRFSS 2005 | |
|---|---|
| Characteristic | Percent |
| **Gender** | |
| ***Male*** | 20.2 |
| ***Female*** | 15.8 |
| **Race** | |
| ***White*** | 8.3 |
| ***Other*** | 36.2 |
| **Age** | |
| ***18-44 years*** | 25.3 |
| ***45+ years*** | 9.7 |
| **Education** | |
| ***High School or less*** | 38.9 |
| ***Some College+*** | 9.1 |
| **Household Income** | |
| ***<$50,000*** | 30.0 |
| ***$50,000+*** | 3.9 |

***Groups at Risk (continued)***

but do not have health insurance. Consequently, they often can pay something toward healthcare but not the full cost. Hispanic births in the past ten years have increased from around 1% of total births to 20% in 2005, creating a heightened demand for low-income prenatal care. The infants born to undocumented immigrants, considered citizens, become eligible for public assistance but the parents and the siblings not born in this country have few options for care on a sliding scale outside the independent free clinics. Specialty care is even more difficult to access. And again, the emergency department frequently becomes the default provider.

## SOURCES OF MEDICAL CARE FOR LOW-INCOME AND UNINSURED CLIENTS

- In 2005, local safety net clinics provided medical care to approximately 31,000 patients in the following sites:
  - Carolinas Medical Center's four ambulatory clinics (24,000),
  - Metrolina Comprehensive Health Care Center (3,000),
  - Seven Community Free Clinics (2,500), and
  - Physician's Reach Out (1,500)
    - -Carolinas HealthCare System Network (500)
    - - Presbyterian Network (1,000).

- **Carolinas Medical Center** operates four ambulatory sites—Myers Park, North Park, Eastland, and Biddle Point—offering primary care, OB/GYN services, and a variety of specialty clinics to low-income residents; documented residents are treated on a sliding scale fee. The Health Department pediatric dental clinic is also located at Biddle Point.

- **Metrolina Comprehensive Health Care Center** also known as CW Williams is the county's only federally qualified health center. CW Williams offers primary care and OB/GYN services to all residents, regardless of the ability to pay.

- Mecklenburg has **seven free clinics** located in Charlotte as well as other parts of the county including Davidson, Huntersville, and Matthews. Hours and services vary by site. Shelter Health Services provides care to homeless women and children living in the Salvation Army homeless shelter. These clinics are dependent on funding from local organizations, foundations, and charitable giving. Shifts in support can threaten their existence.

- **Physician's Reach Out** (PRO), a nonprofit partnership managed through the Mecklenburg County Medical Society, provides primary and specialized medical services at a nominal fee to low income residents who do not qualify for other assistance programs. Volunteer providers and greatly reduced hospitalization fees make this venture work along with financing from various charitable groups. Care is made available through local providers and the Presbyterian and CHS networks. Pharmacy needs are handled through MedAssist. PRO accepted its first patient in August 2004. As of September 2006, the value of donated services had exceeded $5 million.

- Children of the working poor, documented and undocumented, may not qualify for government assistance. **School health nurses** become important triage points in identifying such children and attempting to find for them an avenue of medical care as well as assistance with dental and vision problems.
  - The nationally recommended ratio of nurses to students is one nurse to 750 students. For the 2006-07 school year, Mecklenburg County funded 20 new school health nursing positions. This increase brings the ratio of nurses to students to one nurse for every 1,420 students.

## SOURCES OF MEDICAL CARE (CONTINUED)

- The energy behind the increase was provided by the Children's Alliance and United Agenda for Children, as well as the Junior League, the Youth Group of United Agenda for Children, and the Mecklenburg Medical Society.

- The request to the Board of County Commissioners for school nurses was for 26 each year for 5 years, working towards the goal of one nurse to 750 students and allowing for the increasing number of students entering the school system. With such strong community support, it is hoped that in each of the next 4 years, 26 additional positions will be added. This year, there is community advocacy for state legislation for funding of school nurses, so that the burden of the cost may be shared between state and local funding sources. However, as of January 2007, no funding has come from the state.

- **Mecklenburg County provides $19.5 million towards indigent care.** This amount represents a $1.5 million increase in 2006 after many years of flat funding. The money goes to the two hospital systems based on low-income clientele with the majority to Carolinas HealthCare System. This funding cannot be directed towards care for undocumented residents.

- **The Mecklenburg County Health Department** (MCHD) does not provide primary care. It does offer WIC, family planning, immunizations, STD and TB treatment, mammography, and a variety of other services at no charge or on a sliding scale fee, depending on the federal guidelines for the program. MCHD sees over 65,000 clients a year, about a quarter of whom are Hispanic.

## DENTAL CARE

- The 2003 Community Needs Survey suggests 48,000 individuals or 6.4% of Mecklenburg residents had unmet needs for dental care.

- Dental care for individuals with no coverage is very difficult to access

- The dental clinic at Carolinas Medical Center sees a small number of adults who have no coverage. The emergency department becomes the default for emergency dental care for those who have no coverage.

- Care is covered for low income clients with Medicaid but, many dentists do not accept Medicaid clients. North Carolina has a 20-21% dental participation rate in the Medicaid program. Reasons for not seeing Medicaid clients partially center around reimbursement, even though it has improved, especially for preventive services, since 2003. Other factors may include the perception that among other things, Medicaid clients have a lower show rates for appointments.

- The 2004-2005 Mecklenburg kindergarten decay rate (decay visible to the naked eye on inspection by dental hygienists) was 10% or approximately 1,000 kindergarten students. However, large disparities exist between different schools.

- Even more difficult to find than dentists who accept Medicaid are those accepting Medicaid who will see children, especially those five years old and younger. Information from the NC Division of Medical Assistance reports that in 2005-06, 45 Mecklenburg practices received some Medicaid reimbursement for the treatment of children, but that in total they saw 6,714 children five years of age younger, about 25% of the children in this eligibility group.

- Of 26 general dental practices in Mecklenburg accepting Medicaid, only 14 see children five years and under; only nine of these 14 see more than a 100 children in this eligibility group per year. This low up-take of Medicaid children makes accessing prevention appointments difficult.

## DENTAL CARE (CONTINUED)

- The Health Department operates a pediatric dental clinic treating children younger than 15 at the Carolinas Medical Center ambulatory clinic at Biddle Point. In 2006, this clinic provided 5,475 visits to 3,465 unduplicated clients, 35% (or 1,771) of whom were five years old or younger. On average, 68% of the children treated received Medicaid, and 12% had no dental insurance.

- Smart Start funding complements the comprehensive dental services provided by the Biddle Point Clinic and is used for teaching parents and guardians of more than 1,000 children ages 5 and younger how to prevent tooth decay. Education focuses on issues such as oral hygiene, nutrition and injury prevention.

## PRESCRIPTION DRUG ASSISTANCE

- The 2003 Community Needs Survey suggests that as many as 44,500 individuals did not get prescription medications in the past year because of cost.

- MedAssist is a non-profit community pharmacy seeking to meet the prescription medical needs of low-income uninsured or adults in Mecklenburg County. MedAssist also provides healthcare advocacy and educational resources for people of all ages.

- MedAssist works with the patient assistance programs of participating pharmaceutical companies to locally provide donated medications as well as assist clients in applying for expensive medications required for treatment of chronic conditions. MedAssist reports serving about 2,000 clients at any one time, and in 2006, dispensed over $6 million dollars of medication.

## CULTURE, TRUST, AND UNDERSTANDING OF THE SYSTEM

Individuals, even those with coverage, may not use medical care, especially preventive care, if they lack trust in or comfort with the provider, or if in their culture, medical issues are regarded and understood differently than by the general public. In many cases, how to navigate the medical system is not well understood. Inability to pay may further complicate all these issues.

The need for culturally appropriate information and education as well as providers who can provide culturally appropriate services is illustrated in the findings of several recent focus group explorations in the county.

### *Beliefs and Attitudes about Cancer Screening among People of Color*

In 2006, the Health Department, through a grant from the state Office of Minority Health, conducted focus groups with people of color on beliefs and attitudes about cancer screening, specifically for breast, cervical, and prostate cancers. Findings included:

- From people who had not been recently screened:
  - Fear associated with cancer may keep respondents from getting tested;
  - Information in the community about how tests are conducted may not be accurate; and
  - Fear exists that tests may be uncomfortable and perhaps embarrassing.
- From people who had been recently tested
  - Attitude that tests are empowering in maintaining personal health and keeping healthy for one's family.
- From all participants
  - Value placed on being treated with kindness, respect, and in a professional manner;
  - Lack of information and/or confusion over payment guidelines or inability to pay ;
  - Lack of information on availability of services;

### Beliefs and Attitudes about Cancer Screening among People of Color (continued)

- Important of culturally competent rather than simply bi-lingual staff;

- Importance of correctly identifying race/ethnicity when checking in rather than having person at desk make assumptions; such assumptions if wrong make the individual feel devalued.

For additional information see *Community Health Builders Trust Project, Cervical, Breast and Prostate Cancers Assessment Report*, available from the Mecklenburg County Health Department.

### Mental Health Needs of the Hispanic Community

In focus groups on mental health needs conducted with Hispanic audiences by the Mental Health Association in 2005, findings included:

- Difficulty in communicating because of differences in language, terminology, and beliefs;

- Dissimilar beliefs regarding mental health and the causes of mental illness than those commonly held by mental health providers and the general U.S. population. Noted was the belief that emotional and mental health problems are caused by something other than mental illness including "evil spirits" and "natural" causes;

- A higher likelihood of seeking help from a natural healer, religious counselor, or medical doctor than a mental health professional; and

- Distrust in mental health therapies, fear of breach of confidentiality, and fear among the undocumented that immigration services could be involved.

The report notes that these findings evidence a need for culturally appropriate education and information efforts for community members about mental health concepts and therapies, as well as the need for efforts to encourage mental health service providers to develop culturally appropriate services. For additional information, see Hispanic/Latino Mental Health Services Needs online at http://www.mhacentralcarolinas.org/Hispanic2.htm

### Healthcare Needs of the Hispanic Community

Focus groups conducted on medical needs with Hispanic audiences by Healthy Carolinians in 2005 yielded similar findings to those on mental health needs with communication and trust problems predominating in the discussion. Some findings included:

- Lack of trust in provider understanding of diseases that practitioners in their home country would have recognized immediately;

- A perceived lack of respect from some provider staff attributed to racism or the assumption of inability to pay,

- First choice of familiar medications from home countries sold in local "bodegas" or medications sent from home;

- Lack of funds to spend on sick care so little consideration of preventive care

- Frustration with understanding where affordable medical services were available and navigating the system; surprise at costs in the Emergency Department; a need for services available during non-working hours;

- Desire for providers who were not necessarily Hispanic but who could speak Spanish and understand their particular health concerns and perspective.

- Aside from communication issues, health insurance, medications, specialty referrals, and dental care were greatest concerns.

For additional information see Examining Healthcare Needs and Barriers in the Hispanic Community of Mecklenburg County online at www.mecklenburghealthycarolinians.org

## HEALTH LITERACY

- Researchers have determined that limited health literacy, *the ability to read, understand and act on health information*, is a stronger predictor of health status than age, race/ethnicity, education, income, or employment status.

- Even with ready access to a provider, inability of the patient to understand medical information translates into poor compliance resulting in less favorable outcomes and added expense.

- According to the 2004 Institute of Medicine report, low health literacy affects as many as 90 million Americans or nearly half of all adults and, by some estimates, costs the healthcare system between $50 billion and $73 billion annually. The report goes on to call for a national effort to improve health literacy.

- Low health literacy may be a factor for people of any age, race/ethnicity, background, or education level. Difficulties with literacy may not be immediately obvious as people are frequently embarrassed to admit they do not understand and may use coping mechanisms to mask their problem.

- The national Partnership for Clear Health Communication reports as myth that low health literacy affects a small specific population group and goes on to say that while ethnic minority groups may be disproportionately affected by low literacy, the majority of those with low health literacy skills in the US are white and native born. However, it must be noted that the heavy impact on some minority groups contributes to disparate health outcomes in these populations.

- Education may not be a good marker for literacy as many people read well below the level indicated by their years of education. Population groups considered particularly vulnerable include people with low socioeconomic status, recent immigrants, the elderly, and those with chronic disease.

- Recent literacy data estimates that 20% of Mecklenburg County adults are functionally illiterate and the 2004 ACS reports 8% of the population mainly speaking another language than English.

- Understanding of health messages and health information is not limited to people with low literacy levels. Clinicians may discuss unfamiliar concepts using vocabulary understandable only to those with a medical background. Consent forms are often written in language difficult to understand for the average reader. The added distress stemming from a serious diagnosis can further complicate a patient's understanding of clinician communication.

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2006 Mecklenburg County Community Health Assessment
Prepared by: Mecklenburg County Health Department (MCHD), Epidemiology Program

# CHRONIC CONDITIONS

## OVERVIEW

During the 20th Century, Americans gained almost 30 years in life expectancy. Much of this increase can be attributed to the development of antibiotics and advances in public health such as clean water and immunizations. With these changes came the end of large numbers of deaths due to tuberculosis, other respiratory and enteric illnesses, diphtheria, typhoid, polio, and measles. By the close of the 20th century, chronic diseases had replaced infectious diseases as the leading causes of death.

However, while Americans are living longer, they may not be living healthy longer. Chronic conditions may result in a diminished quality of life brought about by disability, dependence on medication, and high costs of medical care.

The positive news is that choosing healthy behaviors may help prevent, delay the onset of, or reduce the effect of many chronic conditions. Healthy behaviors include: maintaining healthy weight, blood pressure, and cholesterol levels as well as engaging in physical activity, eating nutritious foods, and avoiding tobacco use.

## CHRONIC CONDITIONS ARE LEADING CAUSES OF DEATH

Locally and nationally, cancer and cardiovascular diseases (heart disease and stroke) are the leading causes of mortality, accounting for almost half of all deaths. The likelihood of acquiring cancer and cardiovascular disease increases with age, and they are the leading causes of death for individuals 45 years of age or older.

In Mecklenburg, nine of the ten leading causes of death are chronic diseases or, as in the case of injury and HIV disease, have chronic components. Other leading causes of death include Alzheimer's disease, Chronic Obstructive Pulmonary Disease (COPD), diabetes, and kidney disease. Asthma, while not a leading cause of death, can kill and if not properly managed may result in disabiity.

## QUICK FACTS ON CHRONIC DISEASE

- Cancer, heart disease and stroke are the leading causes of mortality accounting for almost half of all deaths; they are the leading causes of death for people ages 45 years and above.
- Diabetes is a major contributor to cardiovascular disease as well as blindness, kidney disease, and amputations.
- While Americans are living longer with chronic conditions, the associated disability, medical costs, and dependence on medication may decrease quality of life.
- The choice of healthy behaviors can prevent or reduce the impact of many chronic conditions. Such behaviors include: maintaining healthy weight, blood pressure, and cholesterol levels as well as engaging in physical activity, eating nutritious foods including a diet rich in fruits & vegetables, and avoiding tobacco use.
- Screening tests can provide early detection and treatment for some types of chronic diseases.

## SUMMARY OF CHRONIC CONDITIONS TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- Decreasing mortality rates for heart disease, cancer, stroke, and diabetes.

**Areas for Improvement or Attention**

- Prevention through healthy behaviors
- Overweight and obesity
- Diabetes prevalence
- Cancer screening
- Health disaprities
- Bone Health

# CHRONIC CONDITIONS

| SELECTED CHRONIC CONDITIONS BY PERCENT AND ESTIMATED POPULATION EFFECTED - 2005 BRFSS* | | |
|---|---|---|
| **Condition** | **% Reporting** | **Estimated # Adults** |
| **Heart Attack** | 4% | 22,850 |
| **Heart Disease** | 4% | 22,850 |
| **Stroke** | 2% | 11,425 |
| **Diabetes** | 6% | 34,275 |
| **Asthma** | 7% | 40,000 |
| **Arthritis** | 22% | 125,675 |
| **Osteoporosis** | 7% | 40,000 |

Source: *CDC Behavioral Risk Factor Surveillance System; US Census ACS 2005; Prepared by MCHD Epidemiology Program

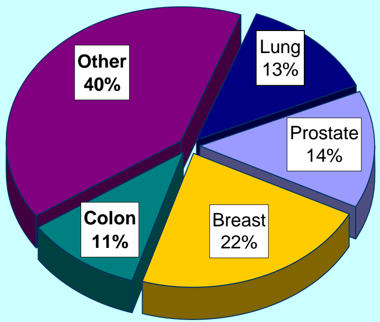
Osteoporosis and athritis are examples of other chronic conditions that may cause disability.

### *Cancer*

Following a national trend, cancer has replaced heart disease as the leading cause of death. This shift may be explained partially by improved prevention and treatment of heart disease. However, nationally and locally cancer mortality rates are slowly declining, a drop largely attributed to reduced smoking and improved detection and treatment of colorectal, breast, and prostate cancers.

- In 2005, Cancer was the leading cause of mortality in Mecklenburg County with 1,052 deaths.
- The 2005 cancer mortality rate of 132.1 deaths per 100,000 population has declined from the 2001 rate of 141.4, a decrease of 7%.
- The 2005 Mecklenburg cancer mortality rate of 132.1 is 31% lower than the state rate of 192.1. A comparison of age-adjusted rates from 2001-2005 shows a rate 7% lower than the state. Adjusted rates are used to better compare two groups when their demographics are different and when age over time increases the likelihood of disease. Many chronic diseases are associated with increasing age. Mecklenburg has a relatively young population when compared with the state.
- Four cancers are responsible for the majority of cancer deaths: lung, colon, breast, and prostate. Together they accounted for 51% of the cancer deaths in Mecklenburg County in 2005 and 60% of new cancer diagnoses from 1999-2003.
- The 2004 inpatient hospitalization charges for cancer in Mecklenburg County amounted to $74,477,314 with 2,617 cases, a 7.2 average days stay, and average charge of $28,459 per case.
- The likelihood of contracting cancer increases with age. National figures suggest that one out of three women and one out of two men will be diagnosed with some sort of cancer in their lifetimes.
- Risk factors for some cancers are well established such as sun exposure and skin

**Percent of Cancer Cases by Type**
**Mecklenburg County 1999-2003**




Of cancer cases diagnosed between 1999 and 2003, 60% were of four types: breast, prostate, colon, and lung.

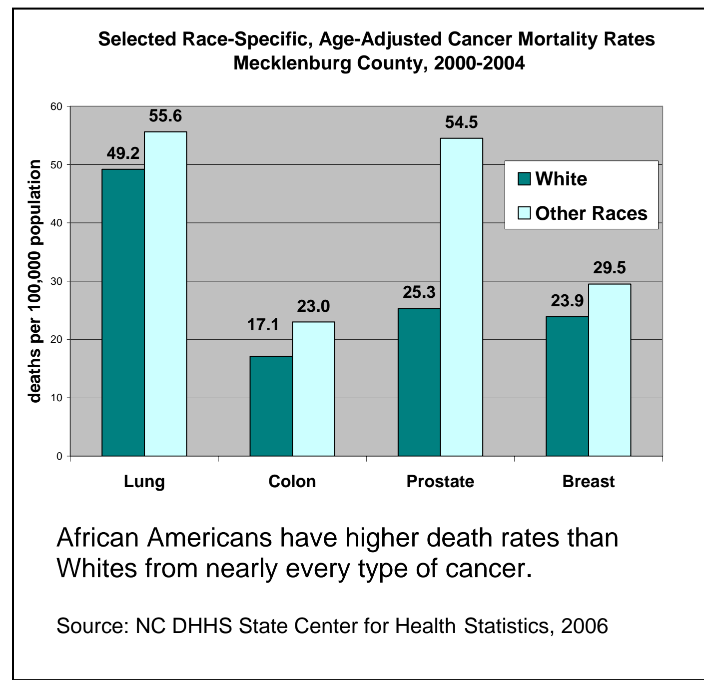
**Source: NC DHHS Central Cancer Registry, 2006; Prepared by MCHD Epidemiology Program, 01/07**

### Cancer (continued)

cancer, smoking and lung cancer, and human papilloma virus and cervical cancer. With other cancers where risk factors are less clear, early detection through screening tests can reduce deaths. Breast, prostate, and colon cancers, when detected early, may be successfully treated. Data from the BRFSS for residents 45 years and older show:

- o A doctor had recommended colorectal cancer screening to 70% (2005),
- o 75% of males had had a PSA test (2005), and
- o 80% of women had had a mammogram in the past two years (2004).

- African Americans have higher mortality rates than Whites from nearly every type of cancer. The reason why is not fully understand. Researchers say that factors such as income, eduation, and health care access may account for much of the difference they do not explain all of the difference.
- Breast cancer **incidence** is higher in **White** women than in African American women; however, **mortality** is greater in **African American** women, suggesting that breast cancers in African American women may be detected at a later stage when the disease is less treatable.
- In Mecklenburg, in 2000, the rate of breast cancer **incidence** was 1.8 times greater for **White** woman than women of Other Races. During 2000-2004, the **mortality** rate was 1.2 times greater for women of **Other Races** than White women.
- In the 2004 BRFSS, 78% of White women forty years or older reported a mammogram in the past two years compared to 71% of African American women. The difference, however, was not considered statistically significant.




African Americans have higher death rates than Whites from nearly every type of cancer.

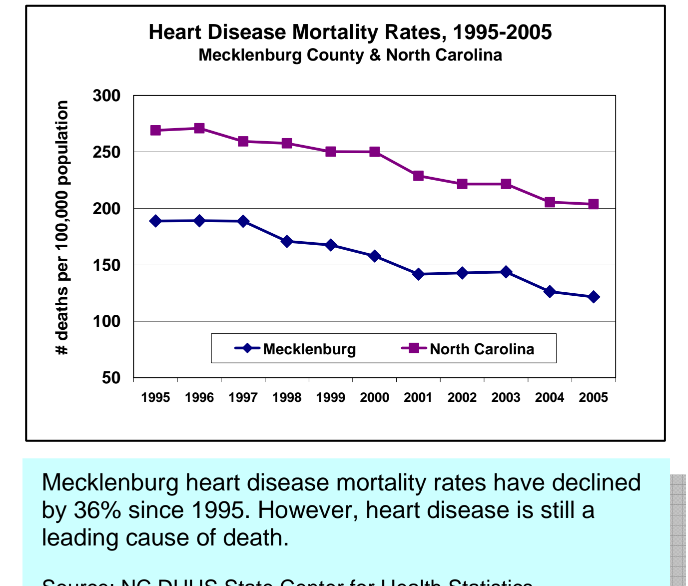
Source: NC DHHS State Center for Health Statistics, 2006

### Heart Disease

- In 2005, heart disease was the 2nd leading cause of death with 968 resident deaths.
- From 2001-2005, the heart disease mortality rate fell from 141.6 deaths per 100,000 population to 121.6, a decrease of 14%.
- The 2005 Mecklenburg rate of 121.6 is 40% lower than the NC rate of 203.6; a comparison of age-adjusted rates from 2001-2005 shows a rate 16% lower than the state..
- The 2004 inpatient hospitalization charges for heart disease in Mecklenburg County amounted to $184,906,134 with 6,260 cases, an average days stay of 4.8 days and an average charge or $29,538 per case.
- In 2005, 4% of residents reported ever being told by a medical professional that they had experienced a heart attack or myocardial infarction and 4% reported angina or coronary heart disease.

### Heart Disease (continued)

- Risk factors for heart disease include diabetes, smoking, overweight, inadequate physical activity, not eating a diet rich in fruits and vegetables, elevated cholesterol, and high blood pressure. In the 2005 BRFSS, Mecklenburg residents reported:
    - elevated cholesterol – 33%,
    - high blood pressure – 27%,
    - overweight or obese – 56%,
    - diabetes – 6%,
    - no physical exercise – 21%,
    - less than five servings of fruits & vegetables per day – 76%, and
    - current smoking – 16%.




Mecklenburg heart disease mortality rates have declined by 36% since 1995. However, heart disease is still a leading cause of death.

Source: NC DHHS State Center for Health Statistics

### Cerebrovascular Disese (Stroke)

- In 2005, stroke was the 3rd leading cause of mortality with 289 resident deaths.
- From 2001 to 2005, the stroke mortality rate fell from 47.9 deaths per 100,000 population to 36.3, a decrease of 24%.
- The 2005 rate of 36.3 is 35% lower than the state rate of 55.8; a comparison of age-adjusted rates from 2001-2005 shows a rate 7% lower than the state.
- The 2004 inpatient hospitalization charges for stroke in Mecklenburg County amounted to $37,272,533 with 1,583 cases, an aveage days stay of 5.8, and an average charge of $23,546 per case.
- In 2005, 2% of residents reported ever being told by a medical professional that they had experienced a stroke.
- Risk factors for stroke are similar to those for heart disease.

### Alzheimer's Disease

- In 2005 Alzheimer's disease was the 4th leading cause of mortality with 249 resident deaths.
- The mortality rate from Alzheimer's disease has risen from 23.7 deaths per 100,000 population in 2001 to 31.3 in 2005, an increase of 32%.
- The mortality rate for Alzheimer's disease is higher in Mecklenburg County than the state and the nation.
- Alzheimer's disease is associated with older age. One partial explanation for the rising rates and high rate in Mecklenburg is that as people live longer and mortality rates from other diseases drop due to better prevention and improved treatments, Alzheimer's disease fills the gap.
- White women have the longest life expectancy and in Mecklenburg, accordingly, they have the highest rates of death from Alzheimer's disease.
- Alzheimer's disease is largely a diagnosis of exclusion with certainty only at autopsy although means for diagnosis are improving. Another explanation for rising rates in Mecklenburg is better recognition and diagnosis because of proximity to specialty medical care.

### *Alzheimer's Disease (continued)*

- Currently, there are no clear cut prevention measures for Alzheimer's disease.
- As the population ages, adequte facilities for care of people with Alzheimer's disease may be of concern.

### *Injury*

While injury itself may not be a chronic disease, the associated trauma may result in a range of chronic neurological and musculoskeletal conditions. Please see Injury section for additional information.

- Unintentional injury was the 5th leading cause of death in 2005 with 237 resident deaths.
- The 2004 inpatient hospitalization charges for injury and poisoning in Mecklenburg County amounted to $121,881,492 with 5,013 cases, an average days stay of 5.3 days and an average charge or $24,313 per case.

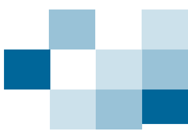
### *Chronic Obstructive Pulmonary Disease (COPD)*

- COPD also know as chronic lower respiratory disease includes conditions such as chronic bronchitis and emphysema.
- In 2005, COPD was the 6th leading cause of mortality with 226 resident deaths.
- From 2001-2005, the rate for COPD mortality in Mecklenburg has remained virtually the same at 28 deaths per 100,000 population.
- The 2005 Mecklenburg mortality rate 28.4 is 41% lower than the state rate of 47.4; a comparison of age-adjusted rates from 2000-2004 shows a rate %14 lower than the state.
- The 2004 inpatient hospitalization charges for COPD in Mecklenburg County amounted to $21,652,968 with 1,681 cases, an average days

**INPATIENT HOSPITAL UTILIZATION AND CHARGES BY PRINCIPAL DIAGNOSIS FOR SELECTED CHRONIC CONDITIONS, MECKLENBURG COUNTY, 2004**

| Condition | Total Cases | Avg Days Stay | Total Charges | Avg Charge Per Case |
|---|---|---|---|---|
| Cancer | 2,617 | 7.2 | $74,477,314 | $28,459 |
| Heart Disease | 6,620 | 4.8 | $184,906,134 | $29,538 |
| Stroke | 1,583 | 5.8 | $37,272,533 | $23,546 |
| Injury | 5,013 | 5.3 | $121,881,492 | $24,313 |
| COPD | 1,681 | 4.6 | $21,652,968 | $2,881 |
| Diabetes | 962 | 4.5 | $13,537,199 | $14,072 |
| Total | 18,476 | 5.4 | $453727640 | $20,468 |

Source: NC DHHS State Center for Health Statistics, 2005





### COPD (continued)

stay of 4.6 days and an average charge or $12,881 per case.

- Smoking is a major risk factor for COPD.

### Diabetes mellitus

- In 2005, diabetes was the 7th leading cause of mortality with 111 resident deaths.
- From 2001-2005, the diabetes mortality rate fell from 19.1 deaths per 100,000 population to 13.9, a decrease of 27%.
- The 2005 Mecklenburg rate of 13.9 is 46% lower than the NC rate of 26.0; a comparison of age-adjusted rates from 2001-2005 shows a rate 18% lower than the state.
- The age-adjusted Other Races mortality rate for diabetes for 2000-2004 in Mecklenburg is 2.7 times that for Whites.
- The 2004 inpatient hospitalization charges for diabetes in Mecklenburg County amounted to $13,537,199 with 962 cases, an average days stay of 4.5 days and an average charge or $14,072 per case.
- Not only is diabetes a leading cause of death on its own, it also is a leading contributor to the development of heart disease, blindness, kidney disease, and amputation.
- In the 2005 Mecklenburg BRFSS, 6% of the population reported being told by a medical professional that they had diabetes. It is estimated that another 3% may have the disease and not realize it.
- 7% of the African American population compared to 5% of the white population reported diabetes although the difference did not reach statistical significance.
- Prevention of diabetes emphasizes healthy weight, appropriate diet, and physical activity.
- Nationally, there is an increase in the incidence of type II diabetes with this disease being diagnosed at younger ages. This increase is largely attributed to the dramatic rise in overweight children and overweight and obese adults over the last 20 years. In the 2005 YRBS, X% of teens were reported overweight and in the 2005 BRFSS, 56% of Mecklenburg adults were considered overweight or obese.

### Asthma

- Asthma affects both children and adults. A leading chronic illness among children and youth, asthma is a major cause of school absenteeism.
- In the 2005 BRFSS, 7% or aproximately 40,000 Mecklenburg adults reported ever being told by a health professional that they had asthma.
- In the 2005 Charlotte-Mecklenburg Youth Risk Behavior Survey, 18% of students said they had ever been told by a medical professional that they had asthma, a finding which means that in a given group of 30 Mecklenburg Teens almost 6 would have asthma.
- In 2005, in selected CMS schools, children with asthma were absent on average seven days, though the absence may not necesarially have been asthma related. Of 72 high needs students with asthma in the Respiratory Care Services program, 86% missed at least one day of school in the previous six months due to asthma; 25% missed more than 8 days due to asthma; 45.8% had at least one ED visit in the previous six mos; 23.6% required hospitalization.
- Fifteen percent of local teens reported current asthma compared to 16% of North Carolina students.
- Nationally, asthma is the third-ranking cause of hospitalization among children under 15. In 2005, 297 Mecklenburg children 0-14 years of age were hospitalized because of asthma at a rate of 172.0 per 100,000 children 0-14 years, a rate 4.5% greater than the state rate of 164.6.

# SEXUALLY TRANSMITTED DISEASES (STDs)

## OVERVIEW

Sexually Transmitted Diseases (STDs) are diseases that are spread primarily through sexual contact. STDs are extremely widespread and, without treatment, can result in severe and sometimes deadly consequences. Nearly $14.1 billion annually is spent in direct medical cost for the treatment of STDs. The Centers for Disease Control estimates that 19 million new infections occur each year, almost half of them among young people ages 15 to 24. However the true magnitude of the STD epidemic is unknown because many cases of reportable STDs are undiagnosed, and in some cases such as human papillomavirus and genital herpes, are not reported at all.

**Estimated New STD Cases in the U.S.**
*(for selected STDs per year)*

| STD | INCIDENCE (Estimated number of new cases every year) |
|---|---|
| Chlamydia | 3 million |
| Gonorrhea | 650,000 |
| Syphilis | 70,000 |
| Herpes | 1 million |
| Human Papillomavirus (HPV) | 5.5 million |
| Hepatitis B | 120,000 |
| Trichomoniasis | 5 million |

Source: Cates, 1999

### QUICK FACTS ON SEXUALLY TRANSMITTED DISEASES

- An estimated19 million new sexually transmitted infections occur each year, almost half of them among young people ages 15 to 24.
- Women account for approximately 80% of new Chlamydia cases reported in Mecklenburg.
- Over the past few years, Syphilis case rates have increased in Mecklenburg. Primary and Secondary Syphilis case rates for 2005 were more than twice that of the 2004 case rate *(2005 case rate =10.8 per 100,000 vs. 2004 rate=5.3 per 100,000).*

### SUMMARY OF STD TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- Overall rates of gonorrhea infection have declined in the county.
- Increased screening and use of more sensitive diagnostic tests have led to better diagnosis of Chlamydia infections.

**Areas for Improvement**

- While case reports dramatically declined between 1994 and 2003, Syphilis case reports have notably increased for the county.
- Adolescents remain at increased risk for STD infections.
- Increased reports of drug-resistance among STDs in the nation are a growing public health concern.

***Asthma (continued)***

- Adults hospitalized numbered 716. The rate for asthma hospitalizations for all ages was 127.2, about 1% lower than the state rate of 128.5. Hospitalization numbers are for inpatient stays and do not count the much more frequent asthma-related visits to emergency departments.
- Low-income populations, minorities, and children living in inner cities experience more emergency department visits, hospitalizations, and deaths due to asthma than the general population.
- Asthma attacks can be caused by tobacco smoke, dust mites, furred and feathered animals, certain molds, chemicals, and strong odors in the school environment.
- Asthma can be controlled with proper diagnosis, appropriate asthma care, and management activities.
- School health nurses provide case management for students with asthma.

***Arthritis***

- Arthritis is the leading cause of disability in the United States.
- One in five Americans reports being told by a medical professional that they have arthritis. Similarly, in the 2005 BRFS, 22% of Mecklenburg residents report medically diagnosed arthritis.
- Increasing physical activity, losing excess weight, and participating in self-management education classes have been shown to reduce pain, improve functional limitations and mental health, and reduce disability among persons with arthritis.

***Osteoporosis***

- Osteoporosis or "porous bone" is a disease of the skeletal system characterized by low bone mass and deterioration of bone tissue. Osteoporosis leads to an increase risk of bone fractures typically in the wrist, hip, and spine.
- Per the 2004 Surgeon General's Report:
  - An estimated 10 million Americans over age 50 have osteoporosis and another 34 million are at risk.
  - Each year an estimated 1.5 million people suffer an osteoporotic-related fracture, an event that can lead to a downward spiral in physical and mental health; 20 percent of senior citizens who suffer a hip fracture die within 1 year.
  - One out of every two women over 50 will have an osteoporosis-related fracture in their lifetime, with risk of fracture increasing with age.
  - Due primarily to the aging of the population and the previous lack of focus on bone health, the number of hip fractures in the United States could double or even triple by the year 2020.
- In the 2005 BRFSS, 7% or an estimated 40,000 Mecklenburg adults report having been told by a medical professional that they have osteoporosis.
- While everyone is at risk for developing osteoporosis, those at higher risk are female, White/Caucasian, post menopausal women, older adults, small in body size, eating a diet low in calcium, and physically inactive .
- Individuals develop most of their bone mass by their early twenties, women by about age twenty. Developing healthy bone mass, therefore, requires that children eat a diet rich in calcium. Young girls in particular may not be getting the calcium they need for peak bone development.
- Keeping healthy bones requires regular physical activity and appropriate nutrition throughout life.

**SOURCES**

NC DHHS, State Center for Health Statistics, 2005 Mecklenburg Mortality Data; 2004 Hospital Discharge Data

**SOURCES (CONTINUED)**

NC DHHS, Central Cancer Registry, Mecklenburg Cancer Incidence

CDC Behavioral Risk Factor Surveillance System, 2005 Mecklenburg Data

CDC Youth Risk Behavior Survey, 2005 Mecklenburg Data

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CMS Asthma absenteeism: Private email correspondence from Nancy Langenfeld, Consolidate School Health, CMS

CDC arthritis websitesite found at http://www.cdc.gov/arthritis/

DHHS, Surgeon General's Report on Osteoporosis, 2004 found on the National Osteoporosis Foundation's website at http://www.nof.org/osteoporosis/sgr_release.htm

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2006 Mecklenburg County Community Health Assessment
Prepared by: Mecklenburg County Health Department (MCHD), Epidemiology Program

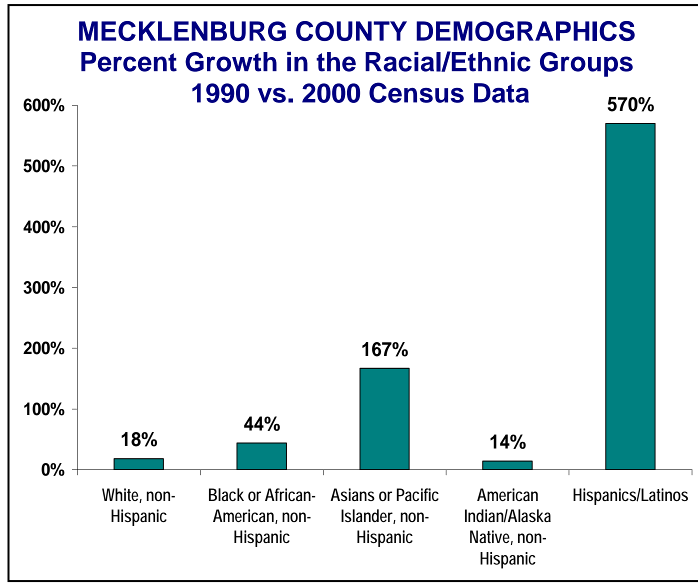
# HEALTH DISPARITIES

## OVERVIEW

The National Institute of Health defines health disparities as differences in the incidence, prevalence, mortality and burden of disease and other adverse health conditions that exist among specific population groups in the United States. While the overall health of Americans has dramatically improved, African Americans, Hispanics, Native Americans, and Asian/Pacific Islanders continue to experience striking health disparities, including shorter life expectancy and higher rates of diabetes, cancer, heart disease, stroke and infant mortality. Addressing and eliminating these and other health disparities must remain a priority in order for the nation to maintain the continued improvements in overall health status.

### *Changing Demographics Shape Future Prevention Efforts*

Increased growth among groups experiencing poor health outcomes also magnifies the importance of eliminating health disparities. According to the US Census Bureau, People of Other Races have the fastest rate of growth and are expected to surpass non-Hispanic Whites after 2050. Future efforts to improve health and health care will be shaped by the needs of this increasingly diverse population.




## QUICK FACTS ON HEALTH DISPARITIES

- Health disparities as differences in the incidence, prevalence, mortality and burden of disease and other adverse health conditions that exist among specific population groups in the United States.
- There is no single reason why health disparities exist. The health of an individual or population is influenced by multiple, interrelated factors.
- The projected rate of growth among groups currently experiencing poorer health status magnifies the importance of addressing health disparities.

## SUMMARY OF HEALTH DISPARITY TRENDS IN MECKLENBURG COUNTY

**Positive Trends**

- Eliminating disparities in health is a top priority for the nation and has resulted in the formation of several initiatives and research efforts.
- Since 1994, mortality rates for both Whites and People of Other Races have declined in Mecklenburg County.

**Areas for Improvement**

- Despite declines in overall death rates, Other Races are more likely to experience death from disease such as heart disease, cancer and stroke than Whites.
- Other Races as well as persons with lower socioeconomic status are more likely to report poor health behaviors in comparison to their respective counterparts.

### *Health Disparities and Socioeconomic Status (SES)*

While health disparities are readily demonstrated through data, there is no single reason why they persist. A multitude of complex and often, interrelated factors contribute to the existence of health disparities. 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. The Centers for Disease Control and Prevention notes socioeconomic status, (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." Additional information on SES and its link to health is included in the Social Determinants of Health section of this report.

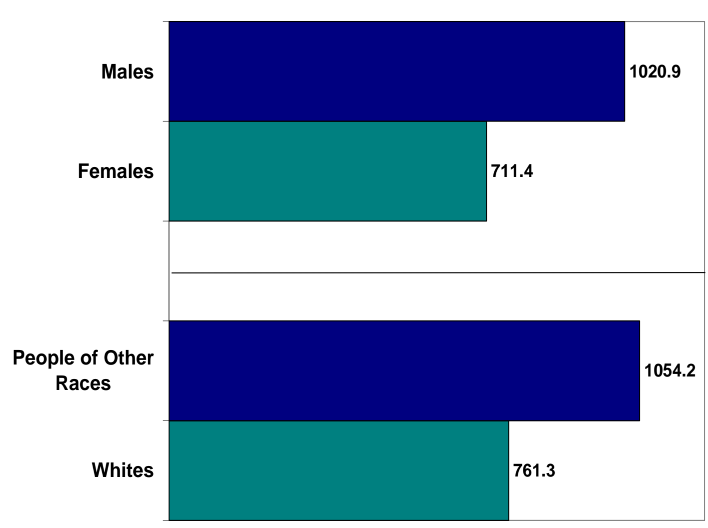
## HEALTH DISPARITIES IN MECKLENBURG

### *General Health Status and Infant Mortality*

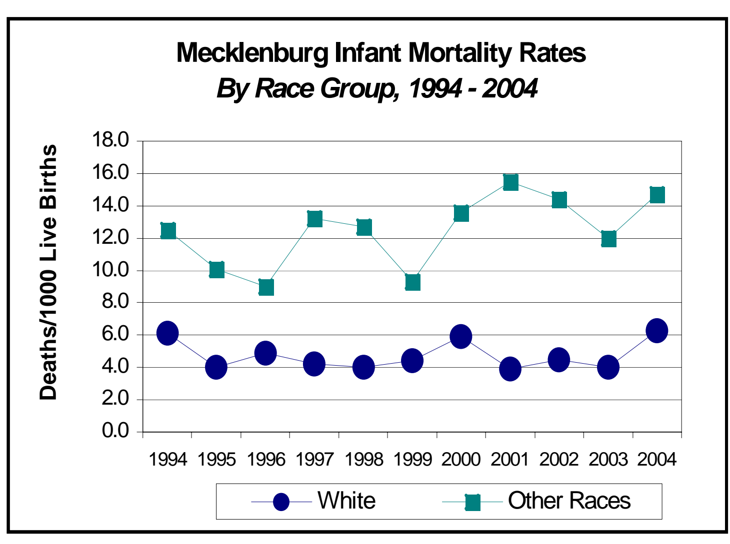
- When comparing Mecklenburg to North Carolina and the United States, most health indicators for the county appear favorable.
- In general, males tend to die at higher rates than females. The age-adjusted rate for All Causes of Death is 1.4 times higher for men than women.
- The overall mortality rate has fallen for both Whites and Other Races however the gap in mortality rates that exists between the two populations persists.
- The 2001 -2005 age-adjusted rate for All Causes of Death is 1.4 times greater for People of Other races than Whites.
- While both Whites and Other Races saw a decline in infant mortality from 1990 until 1995, this trend has not continued since then, and the gap between the two populations remains wide.
- The 2004 Infant Mortality rate is 2.3 times greater for Other Races than Whites.

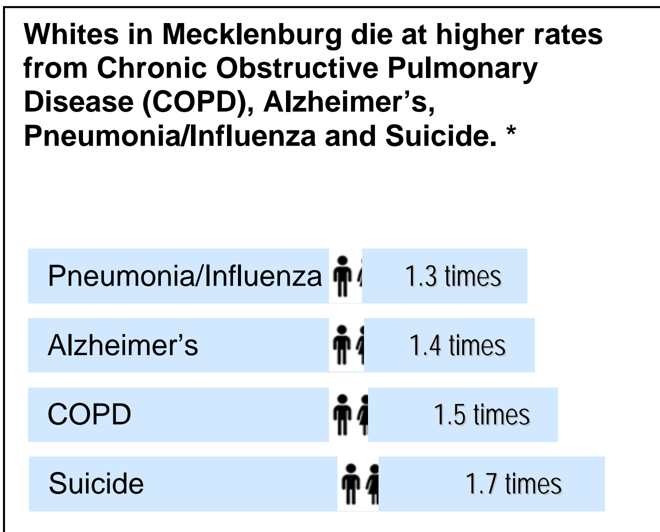
**Health Disparities in Overall Mortality Rates for Mecklenburg County**

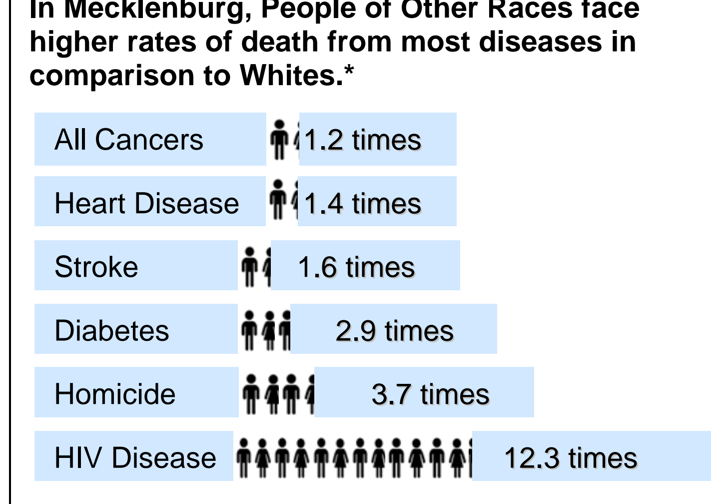
**2001-2005 Gender- and Race-Specific Age-Adjusted Rates***




*Death Rates for All Causes per 100,000 population.
Source: NC State Center for Health Statistics 2001 - 2005 Race-Specific and Age-Specific Death Rates






** Based upon 2003/2004 Death Rates*

## Understanding Disparity Ratios

There is no single, best way to measure disparity that is appropriate in all situations. However, health disparities are often measured in terms of differences between rates, percentages, proportions or other quantifiable measures.

In terms of this report, a ratio is calculated by dividing the highest rate of disease or specific condition by the lower rate, providing a general measurement of disparity. In the above example of All Cancers death rate, Other Races have a higher rate of death than Whites. The disparity ratio in this instance (1.2) can be interpreted as such: The All Cancer death rate for Other Races is 1.2 times higher than that of Whites.

### *Disparities in Leading Causes of Death*

- 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.
- Whites, in comparison to Other Races, are more likely to die of Chronic Obstructive Pulmonary Disease (COPD), Alzheimer's disease, Pneumonia/Influenza and suicide.
- In data from 1999-2003, death rates for People of Other Races were 1.4 times higher for heart disease and 1.6 times higher for stroke in comparison to Whites.
- Cancer death rates are also higher among People of Other Races. In comparison to Whites, death rates for Other Races are 1.2 times higher for breast cancer, 1.4 times higher for colon cancer and 2.2 times higher for prostate cancer.
- Racial and ethnic populations have been disproportionately affected by the HIV/AIDS epidemic. In fact, one of the largest gaps in health status between Whites and Other Races is for HIV disease related deaths. Other Races are more than 12 times more likely to die of HIV than are Whites.
- 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
- Additional information on leading causes of death and chronic conditions can be found in previous sections of this report.

| Health Risk Factors from the 2005 Behavior Risk Factor Surveillance System | | | | | | |
|---|---|---|---|---|---|---|
| | % Other Races | % Whites | Disparity Ratio | % Household Income <$50,000 | % Household Income $50,000 or more | Disparity Ratio |
| ***Current Smoker*** | 18% | 15% | **1.2** | 18.4% | 13.5% | **1.4** |
| ***Overweight or Obese*** | 60.4% | 53.3% | **1.1** | 56.1% | 55.9% | **1.0** |
| ***No Exercise in Past Month*** | 38% | 12.2% | **3.1** | 32.8% | 8.4% | **3.9** |
| ***Not Having 5 or more Fruits and Veggies Per day*** | 84.9% | 71% | **1.2** | 79.9% | 69.3% | **1.2** |

### *Disparities in Health Risk Behaviors*

- According to the 2005 Mecklenburg Behavioral Risk Factor Surveillance Survey (BRFSS), the percent of persons who were overweight or obese was only slightly higher for Other Races in comparison to Whites.
- The percent of Other Races is greater than the percent of Whites in those reporting being a current smoker (1.2 times) and not having 5 or more fruits and vegetables daily (1.2 times).
- People of Other Races were over 3 times more likely to report not exercising in the past month in comparison to Whites.
- Disparities by income level are noted when comparing BRFSS responses of individuals with household incomes less than $50,000/yr and the responses of individuals with household incomes $50,000 or above.
- Individuals with a household income of less than $50,000 were:
    - 1.4 times more likely to report smoking,
    - 1.2 times more likely to eat less than 5 or more servings of fruits & vegetables per day, and
    - 3.9 times more likely to report no physical activity in the past month.
- The percent of individuals reporting overweight or obesity was similar across the two income levels.
- For more information on healthy behaviors, see the Health Risk Factor section of this report.

### Eliminating Disparities in Health: A Priority for the Nation, State and County

The commitment to understanding and eliminating racial and ethnic health disparities is a top priority for the nation and has resulted in the formation of several initiatives and research efforts to identify solutions to this problem. Examples of such efforts include:

- ***In the Nation***: Including health disparities elimination as one of the overarching goals for Healthy People 2010, a comprehensive, nationwide health promotion and disease prevention agenda.
- ***In North Carolina***: Health Disparities is included as one of four top priorities established for the NC Department of Health and Human Services.
- ***In Mecklenburg***: The County Manager's charge and establishment of the Mecklenburg Health Disparities Taskforce, for the development of a county-wide strategic plan to eliminate health disparities.

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# ASSETS AND CHALLENGES

## COMMUNITY ASSETS FOR INFLUENCING HEALTH

While Mecklenburg County encounters numerous health challenges from a diverse and rapidly growing population, it also possesses a wealth of assets that offer assistance in addressing them.

A survey of community assets includes but is not limited to the following:

- Two hospital systems: Carolinas HealthCare System and Novant
- Safety Net System of Care
  - One federally qualified community health center: Metrolina Comprehensive Health Center
  - Seven free clinics
    - Charlotte Community Health Clinic
    - Charlotte Volunteers in Medicine Clinic
    - Community Health Services
    - Free Clinics of Our Town (Davidson)
    - Matthews Volunteers in Medicine Clinic
    - Lake Norman Free Clinic
    - Shelter Health Services
  - Carolinas Medical Center Ambulatory Care Clinics
    - Biddle Point
    - Eastland
    - Meyers Park
    - North Park
  - Volunteer physician care for the low-income uninsured program: The Mecklenburg Medical Society's Physicians Reach Out
  - A Community Pharmacy: MedAssist
  - Mecklenburg County Health Department
- Board of County Commissioners that strongly supports the Health Department
- Strong Health and Human Services Agencies and Organizations
- Flourishing greenway system
- Consolidated School Health Committee within Charlotte Mecklenburg Schools
- Numerous community collaborations affecting health
  - Carolinas Association for Creating Health Equity (CACHE)
  - Children's Alliance
  - Charlotte Mecklenburg Drug Free Coalition
  - Community Child Fatality Prevention and Protection Team
  - Fit City Challenge
  - HIV Community Task Force
  - Homeless Services Network
  - Mecklenburg MedLink
  - Dental Alliance
  - Partnership for Children's Dental Health
  - Reach 2010
  - Smoke Free Charlotte
  - Syphilis Elimination Project
- Over 1000 places of worship

- Multiple Institutions of Higher Education
    - Central Piedmont Community College
    - Johnson C. Smith University
    - Pfeiffer University
    - Queens University
    - University of North Carolina at Charlotte
- Poverty rate lower than the state and median income higher than the state
- Low unemployment

## POSITIVE HEALTH TRENDS AND INDICATORS

When comparing community health indicators with North Carolina and the United States, for the most part Mecklenburg County fairs as well as if not better. Exceptions are conditions associated with urban areas such as HIV disease, tuberculosis and homicide. However, some health indicators like overweight and obesity are negative across the county so a similar or better comparison does not necessarily indicate a favorable status. In addition, when examining Mecklenburg health indicators by race and ethnicity, it is obvious that not all populations are equally enjoying good health. Listed below are examples of indicators that are strongly positive for the county. However, it is important to remember that positive progress has been achieved through attention and resources. To no longer address these issues because they are trending well would be to risk a reversal of positive direction.

- Falling total mortality rates for all race and gender groups
- Decreasing mortality rates for cardiovascular disease, cancer, diabetes, and influenza and pneumonia
- Falling adolescent pregnancy rates; a 49% decrease between 1990 and 2004 for girls 15-19; the original community goal was 50% by 2000; it is noteworthy that this goal, if only a few years late, has largely been realized. The rate for 15-17 old girls of 32.9 pregnancies per 1000 girls 15-17 exceeds the Healthy People 2010 goal of 43.0.
- Low rates of vaccine preventable communicable disease
- Declining smoking rates; on track (16% in 2005) to potentially meet the Healthy People 2010 adult goal of 12%.
- Declining reports of smoking and alcohol use during pregnancy
- Smoke free school system and hospital system (CHS)
- High level of seatbelt use approaching Healthy People 2010 goal of 92%
- Over 80% of women over 40 report a mammogram within the past two years exceeding the Healthy People 2010 goal of 70%.
- Carbon monoxide detector ordinance

## CHALLENGES: AREAS REQUIRING ADDITIONAL ATTENTION OR CONCERN

The information presented below reflects a quick summary of the priority health concerns and information from throughout this report including community recommendations. Some concerns or areas for attention may be reflected in several categories. For a more extensive presentation of data and recommendations by priority health concern, see the Priority Ranking Exercise Section.

# ASSETS & CHALLENGES

### *Health Disparities*

- Are evident in all priority concerns
- Special attention is needed to diabetes, infant mortality, and HIV disease

### *Preventing Chronic Disease through Healthy Choices*

- Promoting healthy behavior choices in physical activity, nutrition, and tobacco use
- Overweight and obesity
- Appropriate nutrition and physical activity for children and teens for building healthy bones to prevent osteoporosis in the future as well as preventing overweight and obesity
- Promoting preventive screenings for skin, breast, prostate, and colon cancer

### *Access to Care*

- Lack of dental care for low-income adults and low percent of dentists who accept Medicaid for children or adults
- Medical care for the low-income who do not qualify for assistance programs and the underinsured who earn too much to be considered low income but work for employers who do not offer health insurance or who cannot afford premiums; low-income males and the undocumented are at particular risk for not receiving care.
- Need for culturally appropriate health and mental health information and education as well as providers who can provide culturally appropriate services.
- Health literacy

### *Environmental Health – Healthy Places Supporting Healthy Choices*

- Air quality
- Built environment
- Worksite wellness
- Smoke free public places

### *Mental Health*

- Child/Teen mental health issues
- Stigma attached to treatment for mental illness
- Services for low income groups
- As population ages, adequate resources for growing numbers of Alzheimer's disease cases,
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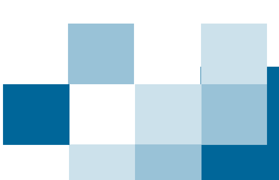
### *Substance Abuse Prevention*

- Underage drinking
- Binge drinking
- DUI
- Perception that some alcohol use among minors is acceptable
- Hispanic alcohol use
- Prescription drug abuse



# ASSETS & CHALLENGES

### *Injury Prevention*

- Unintentional Injury is the 5th leading cause of death for the total population and the leading cause of death for those one to 44 years of age as well as Hispanics. Homicide is the 2nd leading cause of death for adolescents and young adults, and suicide is the 3rd leading cause of death for this group. National data suggest that trauma and associated costs resulting from injury exceed those for heart disease. However, public interest in injury prevention as indicated by survey and prioritization is very low as is funding. Changing the perception that injuries are accidents that are unavoidable to injuries are preventable is a challenge that will require considerable creativity and effort.
- Falls in the elderly
- Safe sleeping arrangements affect infant mortality by decreasing the likelihood of SIDS and suffocation
- Driving under the influence
- Domestic violence

### *Responsible Sexual Behavior*

- Rising rates of HIV disease and syphilis
- Disproportionate burden of HIV disease in the African American community
- 12% of births occur with an interpregnancy interval of less than or equal to six months
- Even though exceeding the HP2010 goal, the number of pregnancies in girls 15-17 is still of concern as is the number in girls 10-14.

### *Maternal Child Health*

- Gap between white and African American rates of infant mortality
- Safe sleeping arrangements affect infant mortality by decreasing the likelihood of SIDS and suffocation
- Declining rates of entry into prenatal care during the first trimester
- 12% of births occurs with an interpregnancy interval of less than or equal to six months
- Even though exceeding the HP2010 goal, the number of pregnancies in girls 15-17 is still of concern as is the number in girls 10-14.

# DATA SOURCES

# DATA & INFORMATION SOURCES

The following is an overview of selected data and information sources used in compiling the community health overview. For a more complete list of sources, see the end of each topic section.

**MECKLENBURG**

- Charlotte Mecklenburg 2003 Community Needs Survey, report online at http://www.charmeck.org/Departments/DSS/Data+and+Research/Publications/home.htm
- Charlotte Mecklenburg Chamber of Commerce website, http://www.charlottechamber.com/
- Charlotte Mecklenburg Youth Risk Behavior Survey, 2005 , conducted by the Charlotte Mecklenburg Schools and the Mecklenburg County Health Department with funding from the Centers for Disease Control, summary online at http://www.teenhealthconnection.org/PDF/YRBS.pdf
- *Community Health Builders Trust Project, Cervical, Breast and Prostate Cancers Assessment Report,* 2006, focus groups conducted by the Mecklenburg County Health Department Community Health Administration Program, with funding from the State Office of Minoriity Health, available from Mecklenburg County Health Department
- *Examining Healthcare Needs and Barriers in the Hispanic Community of Mecklenburg County,* focus groups conducted by Mecklenburg Healthy Carolinians (MHC) with funding from a Healthy Carolinians , Inc. initiative, report and summary online at http://www.mecklenburghealthycarolinians.org/
- *Hispanic/Latino Mental Health Services Needs*, 2005, focus groups conducted by the Mental Health Association of Central Carolinas, Inc. with funding from the United Way, report online at http://www.mhacentralcarolinas.org/Hispanic2.htm
- Mecklenburg County Health Department, Epidemiology Program: births, deaths, STDs/HIV, TB, reportable communicalbe disease, http://www.charmeck.org/Departments/Health+Department/Health+Statistics/Home.htm
- Mecklenburg County Geospatial Information Services: maps of health related information: http://www.charmeck.org/Departments/Geospatial+Information+Services/Maps.htm and GIS Supporting Healthy Communities, http://www.charmeck.org/Departments/Geospatial+Information+Services/Applications+Inventory/Healthy+Communities.htm?header=healthmaps%2echarmeck%2eorg
- Mecklenburg County Department of Social Services, Data and Research: economic indicator information: food stamps, Medicaid, poverty, http://www.charmeck.org/Departments/DSS/Data+and+Research/home.htm .
- Substance Abuse Indicators Report, Charlotte Mecklenburg Drug Free Coalition, 2006, available online at http://www.drugfreecharlotte.org/Indicators.pdf
- Teen Drug Survey, Substance Abuse Prevention Services, 2004, available online at http://www.preventionservices.org

# DATA & INFORMATION SOURCES

## NORTH CAROLINA

- Cecil G Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, http://www.shepscenter.unc.edu
- NC DHHS, Division of Public Health, General Communicable Disease Control Branch
- NC DHHS, Division of Public Health, HIV/STD Prevention and Care Branch
- NC DHHS, Division of Public Health, State Center for Health Statistics
  - Behavioral Risk Factor Surveillance System, Mecklenburg Data, http://www.schs.state.nc.us/SCHS/data/brfss.cfm
  - Central Cancer Registry
  - County Level Data Book, http://www.schs.state.nc.us/SCHS/data/county.cfm
  - Vital Records
    - Birth Files
    - Mortality Files
- North Carolina State Data Center, http://sdc.state.nc.us/

## FEDERAL

- Centers For Disease Control, http://www.cdc.gov
- Medical Panel Expenditure Survey, Agency for Healthcare Research and Quality, http://www.meps.ahrq.gov/mepsweb
- National Center for Health Statistics, CDC, http://www.cdc.gov/nchs
- National Institute of Mental Health, National Institues of Health, http://www.nimh.nih.gov
- US Census, http://www.census.gov

## OTHER

- Economic Research Initiative on the Uninsured, University of Michigan, http://www.umich.edu/~eriu/index.html
- Henry J Kaiser Family Foundation, Health Insurance/Costs, http://www.kff.org/insurance/index.cfm
- National Osteoporosis Foundataion, http://www.nof.org

# COMMUNICATIONS PLAN

# COMMUNICATION PLAN

| COMMUNICATION PLAN – MECKLENBURG COMMUNITY HEALTH ASSESSMENT 2007 | | |
|---|---|---|
| **FORMAT** | **MEANS OF DISTRIBUTION** | **TIME LINE** |
| ***Final Report*** | | Completed March 2007 |
| | ***Internet*** – Post on Health Department Epidemiology and Healthy Carolinians websites in format that allows easy browsing | March 2007 |
| | Use ***e-letter*** to notify interested parties, including community leaders, county commissioners, municipalities, county manager and other county agencies, health related non-profits and collaborations, hospitals, and universities that the information is available; include reminder for Community Health Forum. | March 2007 |
| ***Brochure*** | Tri-fold design similar to that used for 2002 (good feedback received) summarizing findings | Design and print April 2007 |
| | ***Internet*** - Post on Health Department Epidemiology and Healthy Carolinians websites as pdf for easy download and printing | April 2007 |
| | ***Press release*** - issue with web posting | April 2007 |
| | ***Mailing*** with specific recommendations from priority setting session to area funders such as Foundation for the Carolinas, Duke Endowment, CHS Foundation | April 2007 |
| | ***Mailing*** to those who participated in priority setting and county commissioners | April 2007 |
| | Make ***copies*** available to all partner groups | April 2007 and on-going as needed |

# COMMUNICATION PLAN

| COMMUNICATION PLAN (CONTINUED) | | |
|---|---|---|
| | Provide ***copies*** to Health Department administration, health educators, and other appropriate staff to be distributed when making public presentations of any sort | April 2007 and on-going as needed |
| | Include in ***packet materials*** for Community Health Forum | May 2007 |
| ***PowerPoint Presentation*** | Create presentation summarizing findings and recommendations | April 2007 |
| | ***Internet*** - Post on Health Department Epidemiology and Healthy Carolinians websites as pdf for easy download and printing | April 2007 |
| | ***Presentation*** to Health Department Middle Management | April 2007 |
| | ***Presentation*** with brochure to the Board of County Commissioners | TBA |
| | Use for ***presentations*** as needed | On-going as scheduled |
| ***Written Articles*** | Identify opprtunities for publicizing information and write articles summarizing findings and recommendations or selected areas of interest | On-going as identified |
| | Mecklenburg Medical Journal – Summary of findings and priority setting exercise with recommendations; follow up with an article every month featuring one of the eight focus areas | Begin April 2007 with Public Health Month issue |

# COMMUNITY ACTION PLANS

## Preventing Chronic Diseases: Tobacco

## Preventing Chronic Diseases: Physical Activity

## Preventing Chronic Diseases: Nutrition

## Injury Prevention

## Access to Care: Health Literacy

## Environmental Health: The Built Environment

## Substance Abuse

# Healthy Carolinians Action Plan

**County Mecklenburg   Partnership Mecklenburg Healthy Carolinians   Period Covered   2004-2008**

**LOCAL PRIORITY ISSUE**
- Priority issue: Preventing Chronic Disease through Healthy Behaviors: Reduction in use of tobacco
- Was this issue described in your county's most recent Community Health Assessment? _X Yes __ No
- List other sources of information about this priority issue: Behavioral Risk Factor Surveillance System-Mecklenburg Data, CDC website, Substance Abuse Prevention Services Teen Drug Survey, 2005 Mecklenburg Youth Risk Behavior Survey, Campaign for Tobacco Free Kids, Project ASSIST, Smoke Free Charlotte
- 

**LOCAL COMMUNITY OBJECTIVE** - Please check one: __ New _X_ Ongoing from last re/certification
- By: 2010
- Objective: Decrease smoking (among youth and adults) by 25%
- Original Baseline: Smoking prevalence at 19.9% for persons >17, and 17.1% for adolescents in grades 6-12
- Date and source of original baseline data: adults - 2001, NC State Center for Health Statistics BRFSS; students -2001 Substance Abuse Prevention Services, Teen Drug Survey
- Updated information (For continuing objective only): 2005, Smoking prevalence at 18.5% for persons >17, and 10.7% for adolescents in grades 6-12
- Date and source of updated information: 2005 BRFSS, 2004 Teen Drug Survey

**POPULATION(S)**
- Local population(s) experiencing disparities in relation to this local objective: Low income
- Describe the local population(s) that will benefit: All smokers (and all who are subjected to second-hand smoke)
- Total number in population: 90,000 (adults)
- Number you plan to reach: 22,500 (adults)

**NC 2010 FOCUS AREA AND NC 2010 HEALTH OBJECTIVE ADDRESSED**
- Check one NC 2010 focus area:

  __ Access to Health Care
  __ Chronic Disease
  __ Community Health
  __ Disability
  __ Environmental Health
  _X Health Promotion
  __ Infant Mortality
  __ Infectious Diseases
  __ Injury
  __ Mental Health
  __ Older Adult Health
  __ Oral Health
  __ Other - Please Describe: ______________________________

- NC 2010 Health Objective: Reduce tobacco use (cigarette smoking) by adults, reduce cigarette smoking by middle school students, reduce cigarette smoking by high school students

| INTERVENTIONS, SETTING, & TIMEFRAME | COMMUNITY PARTNERS Roles and Responsibilities | EVALUATION PLAN & PROGRESS TO DATE |
|---|---|---|
| 1. In order to secure the active involvement of the priority population(s), our Partnership will:<br><br>Specifically target areas with high smoking prevalence | | Progress to Date:<br><br>Partnership with Reach 2010 (see below) |
| 2. Marketing/Communication activities related to this community objective:<br><br>Information on smoking and cessation on various websites including MCHD, mailings to churches in NW Corridor, Public Service Announcements, pamphlets available in many community settings | Lead agency: Mecklenburg County Health Department (MCHD)<br><br>Other agencies: American Cancer Society (ACS), Smoke Free Meck., Carolinas Healthcare System, TRU | **Progress to Date:** Information on smoking and cessation on various websites including MCHD, mailings to churches in NW Corridor, Public Service Announcements, pamphlets available in many community settings |
| 3. Intervention: Project ASSIST<br><br>Setting: General community, businesses<br><br>Start Date - End Date (1992-2008+): | Lead agency: MCHD<br><br>Other agencies: ACS, Smoke Free Meck, CHS, NCTCPB, EnTER, ALA, AHA | This intervention is:<br>_ New X Ongoing _ Completed<br><br>Process: Train providers on counseling on cessation, talk to businesses about promoting cessation |

| | | |
|---|---|---|
| | | Output/ Impact: Percent of smoke-free restaurants has increased from 25% to 45%. Over 10 trainings held for healthcare providers on cessation counseling.<br><br>Health/ Safety Outcomes: Percent of current smokers in Mecklenburg has declined from 19.8% in 2003 to 16% in 2005<br><br>Progress to Date: More businesses have adopted tobacco-free policies, helping cessation rates and changing societal norms |
| 4. Intervention: Youth Tobacco Prevention<br><br>Setting: CMS schools, youth groups, community agencies<br><br>Start Date - End Date (2003-2009+): | Lead agency: MCHD<br><br>Other agencies: Substance Abuse Prevention Services, Chemical Dependency Center, Question Y, Charlotte Mecklenburg Schools | This is _ New X Ongoing _ Completed<br><br>Process: Train youth to be peer advocates, work to improve policies that promote cessation in schools, community<br><br>Output/ Impact: Currently funding 10 local youth groups. Design media campaigns for youth audiences.<br><br>Health/ Safety Outcomes: Decreased student smoking. Percent of student smokers, grades 6-12 has declined from 12.2% in 2002 to 10.7% in 2004.<br><br>Progress to Date: Historic drop in youth tobacco rates, thought to be due in part to increased funding across state to these efforts. |
| 5. Intervention: Tobacco Reduction on Campuses<br><br>Setting: College campuses in 10 county region<br><br>Start Date - End Date (2006-2008+): | Lead agency: MCHD<br><br>Other agencies: EnTER, HWTF, college | This is _ New X Ongoing _ Completed<br><br>Process: Manage active coalition with area colleges, mini-grant program, media campaigns, surveys<br><br>Output/ Impact: 25 colleges are now involved with effort, 10 have been given mini-grants this semester for education and advocacy efforts.<br><br>Health/ Safety Outcomes: More smoke free public spaces; perhaps fewer smoking college students<br><br>Progress to Date: Two colleges have announced that they will become 100% Tobacco Free Colleges. |
| 6. Intervention: Tobacco Reduction in North West Corridor<br><br>Setting: NW Corridor community groups, churches, businesses<br><br>Start Date - End Date (mm/yy): | Lead agency: MCHD<br><br>Other agencies: Reach 2010 | This is:_ New X Ongoing _ Completed<br><br>Process: Attend community events, do media campaigns, meet with business and community leaders; send mailing out to churches about tobacco cessation, host Commit 2 Quit event<br><br>Output/ Impact: 5 churches adopted tobacco-free policy last year<br><br>Health/ Safety Outcomes: More public spaces are smoke-free<br><br>Progress to Date: More restaurants, businesses, churches making the change to tobacco-free |

# Healthy Carolinians Action Plan

**County Mecklenburg  Partnership Mecklenburg Healthy Carolinians  Period Covered 2001-2010**

**LOCAL PRIORITY ISSUE**
- Priority issue: Preventing Chronic Disease through Healthy Behaviors: Increasing Physical Activity
- Was this issue described in your county's most recent Community Health Assessment? _X_ Yes __ No
- List other sources of information about this priority issue: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, Mecklenburg data, 2005 Mecklenburg Youth Risk Behavior Survey, CDC website, Fit City Challenge website

**LOCAL COMMUNITY OBJECTIVE** - Please check one: __ New _X_ Ongoing from last re/certification
- By: 2010
- Objective: Increase physical activity among adults by 25%
- Original Baseline: 21.1% of adults engaging in no leisure-time activity
- Date and source of original baseline data: 2000 BRFSS
- Updated information (For continuing objective only): 19.2% of adults engaging in no leisure-time activity
- Date and source of updated information: 2005 BRFSS

**POPULATION(S)**
- Local population(s) experiencing disparities in relation to this local objective: Low income, African Americans, Hispanics, females
- Describe the local population(s) that will benefit: Individuals, families, employees
- Total number in population: ~800,000 individuals
- Number you plan to reach: ~40,000 individuals, 15 worksites

**NC 2010 FOCUS AREA AND NC 2010 HEALTH OBJECTIVE ADDRESSED**
- Check one NC 2010 focus area:

| | |
|---|---|
| __ Access to Health Care | __ Infant Mortality |
| __ Chronic Disease | __ Infectious Diseases |
| __ Community Health | __ Injury |
| __ Disability | __ Mental Health |
| __ Environmental Health | __ Older Adult Health |
| _X Health Promotion | __ Oral Health |

__ Other - Please Describe: ____________________

- NC 2010 Health Objective: Reduce the proportion of adults (18 years and older) who engage in no leisure-time physical activity

| INTERVENTIONS, SETTING, & TIMEFRAME | COMMUNITY PARTNERS Roles and Responsibilities | EVALUATION PLAN & PROGRESS TO DATE |
|---|---|---|
| 1. In order to secure the active involvement of the priority population(s), our Partnership will:<br><br>Actively recruit representatives from key population areas to assist in the planning and development of interventions | | Progress to Date:<br>Regular monthly meeting of Team; key individuals invited to participate |
| 2. Marketing/Communication activities related to this community objective:<br><br>The programs will be promoted in various ways via health fairs, speaking engagements, website promotion, a billboard campaign, TV commercials, and promotion at community meetings and events | Lead agency: Fit City Challenge responsible for communicating goals and objectives. Responsible for setting up health fairs and speaking engagements.<br><br>Other agencies: Mecklenburg County Public Service and Information | Progress to Date:<br><br>Currently utilizing TV ads and billboards. Have done radio and print in the past. Have Fit City brochures and display boards. Currently developing brochure for Fit City Worksite Wellness program. Ask partners to provide links on their website to steer people to Fit City Challenge website. Will have information available at upcoming CIAA tournament |

| | | |
|---|---|---|
| 3. Intervention: Increase physical activity (Focus: Individuals)<br><br>Setting: Community<br><br>Start Date - End Date:<br>Started October 2003 and ongoing | Lead agency: Fit City Challenge, Mecklenburg County Health Department<br><br>Other agencies: Fit City for Fit Families, Fit City Worksite Wellness Program, Carolinas Healthcare System, Charlotte-Mecklenburg Schools, Carolina Panthers, Department of Parks and Recreation, and AARP | This intervention is:<br>_ New_X Ongoing _ Completed<br><br>Process: The online fitness log provides a confidential tool for recording physical activity and optional data such as weight, BMI, waist and hip measurements and body fat. Participants can track progress. Individuals can form teams online and compete with other groups. Businesses can use program internally to motivate employees to engage in healthy behaviors and reward them for doing so.<br><br>Output/ Impact: Increased physical activity<br><br>Health/ Safety Outcomes: As a result of being more physically active (and eating more fruits and vegetables) many surveyed participants report weight loss, reduced hypertension, cholesterol, glucose, lower BMI, reduced stress, and more energy.<br><br>Progress to Date: Over 14, 000 registered participants to website. Averaged 425,000 hits per month in 2006. Conducted online survey with current participants in early 2006. Survey sample (450 responded) reported increase in physical activity since joining the Fit City Challenge. 14 businesses have utilized Fit City Challenge for internal programs. Developed numerous collaborations and partnerships to implement community initiatives. |
| 4. Intervention: Increase physical activity (Focus: Families)<br><br>Primary Setting: Community<br>Secondary Settings: Charlotte-Mecklenburg Schools, Childcare facilities<br><br>Start Date - End Date:<br>09/06 – On-going | Lead agency: Fit City for Fit Families Mecklenburg County Health Department<br><br>Other agencies: Charlotte-Mecklenburg Schools | This intervention is:<br>_X New_ Ongoing _ Completed<br><br>Process: Success is evaluated with the following numbers: resources available, website visitors, questions submitted, featured kids/families, community events, presentations, advertisements/media and environmental/policies adopted.<br><br>Output/ Impact: Increase knowledge of the benefits of and the eagerness to participate in physical activity and access to physical activity opportunities.<br><br>Health/ Safety Outcomes: Macro-level environmental/policy changes influence the public's ability to be physically active and thus can improve obesity rates long-term.<br><br>Progress to Date: 229 available resources, 33,522 visitors, 3 submitted questions, 50 featured kids/families, 22 community events, 17 presentations, 16 media events and 0 environmental/ policies adopted (have not begun this part of the program to date). |
| 4. Intervention: Increase physical activity (Focus: Worksites)<br><br>Setting :Business | Lead agency :Fit City Challenge Worksite Wellness, Mecklenburg County Health Department<br><br>Other agencies: Fit City for Fit | This is X_ New_ Ongoing _ Completed<br><br>Process: Visit worksites to conduct assessment of work environment to determine how conducive it is for |

| | | |
|---|---|---|
| Start Date - End Date:<br>July 1, 2006 – June 30, 2008 (Grant funded through NC Health and Wellness Trust Fund but hope that program will be sustained beyond end date.) | Families, Mecklenburg County Parks and Recreation, Mecklenburg County Public Service and Information, Mecklenburg County Healthy Carolinians, Charlotte Department of Transportation, Metropolitan Union Mecklenburg Planning Commission, Charlotte Area Transit Authority | physical activity and healthy eating. Assessment tool developed by Worksite Wellness program. Review of built environment policies such as onsite walking trails and fitness centers. Customized recommendations are then developed for change as well as tools and resources for implementation. Currently developing worksite wellness information for Fit City website so employers can access these resources and tools online.<br><br>Output/ Impact: Create healthier work environments that are more conducive for physical activity. Encourage participation in programs such as Fit City Challenge to reward healthy behaviors.<br><br>Health/ Safety Outcomes: Studies have shown that these types of interventions produce healthier, more productive employees which in turn saves the company healthcare dollars.<br><br>Progress to Date: Developed assessment tool, resource guide and survey tools for measuring satisfaction and impact. Have assessed 3 worksites so far. One worksite has implemented several of recommended changes. Too early to measure impact of those changes. |

**(Insert extra rows as needed)**

# Healthy Carolinians Action Plan

**County** **Mecklenburg** **Partnership** **Mecklenburg Healthy Carolinians** **Period Covered** **2001-2010**

**LOCAL PRIORITY ISSUE**
- Priority issue: Preventing Chronic Disease Through Healthy Behaviors: Improving Nutrition
- Was this issue described in your county's most recent Community Health Assessment? _X_ Yes __ No
- List other sources of information about this priority issue:

**LOCAL COMMUNITY OBJECTIVE** - Please check one: __ New _X_ Ongoing from last re/certification
- By: 2010
- Objective: Increase by 30% the percentage of adults who eat at least 5 servings of fruits and vegetables each day
- Original Baseline: 30.8% of adults eating 5 servings of fruits and vegetables per day
- Date and source of original baseline data: 2000 BRFSS
- Updated information (For continuing objective only): 38.2% of adults eating 5 servings of fruits and vegetables per day
- Date and source of updated information: 2005 BRFSS

**POPULATION(S)**
- Local population(s) experiencing disparities in relation to this local objective: Low-Income, low educations levels, African American, Hispanic
- Describe the local population(s) that will benefit: individuals, families, worksites
- Total number in population: ~800,00 individuals
- Number you plan to reach: 40,000 individuals, 15 worksites

**NC 2010 FOCUS AREA AND NC 2010 HEALTH OBJECTIVE ADDRESSED**
- Check one NC 2010 focus area:

| | |
|---|---|
| __ Access to Health Care | __ Infant Mortality |
| __ Chronic Disease | __ Infectious Diseases |
| __ Community Health | __ Injury |
| __ Disability | __ Mental Health |
| __ Environmental Health | __ Older Adult Health |
| _X Health Promotion | __ Oral Health |

__ Other - Please Describe: ____________________________________________

- NC 2010 Health Objective: Increase the proportion of adults eating 5 or more servings of fruits and vegetables each day, Increase the percent of middle- and high-school students eating any fruit or fruit juice or any vegetables on a given day

| INTERVENTIONS, SETTING, & TIMEFRAME | COMMUNITY PARTNERS Roles and Responsibilities | EVALUATION PLAN & PROGRESS TO DATE |
|---|---|---|
| 1. In order to secure the active involvement of the priority population(s), our Partnership will:<br><br>Actively recruit representatives from key population areas to assist in the planning and development of interventions | | Progress to Date:<br><br>Recipes listed on program websites have been reviewed to ensure they represent typical foods from many cultures |
| 2. Marketing/Communication activities related to this community objective:<br><br>The programs will be promoted in various ways via health fairs, speaking engagements, website promotion, a billboard campaign, TV commercials, and promotion at community meetings and events | Lead agency: Fit City Challenge responsible for communicating goals and objectives. Responsible for setting up health fairs and speaking engagements.<br><br>Other agencies: Mecklenburg County Public Service and Information | Progress to Date:<br><br>Currently utilizing TV ads and billboards. Have done radio and print in the past. Have Fit City brochures and display boards. Currently developing brochure for Fit City Worksite Wellness program. Ask partners to provide links on their website to steer people to Fit City Challenge website. Will have information available at upcoming CIAA tournament |
| 3. Intervention: Increase healthy food choices (Focus: Individuals)<br><br>Setting: Community<br><br>Start Date - End Date:<br>Started October 2003 and ongoing | Lead agency: Fit City Challenge, Mecklenburg County Health Department<br><br>Other agencies: Fit City for Fit Families, Fit City Worksite Wellness Program, Carolinas Healthcare | This intervention is:<br>_ New_X Ongoing _ Completed<br><br>Process: The online fitness log provides a confidential tool for recording physical activity and fruits and vegetables consumed and optional data such as |

| | | |
|---|---|---|
| | System, Charlotte-Mecklenburg Schools, Carolina Panthers, Department of Parks and Recreation, and AARP | weight, BMI, waist and hip measurements and body fat. Then participants can track progress. Individuals can form teams online and compete with other groups. Businesses can use program internally to motivate employees to engage in healthy behaviors and reward them for doing so.<br><br>Output/ Impact: Increased fruit and vegetable consumption.<br><br>Health/ Safety Outcomes: As a result of eating more fruits and vegetables (and increased physical activity), many surveyed participants report weight loss, reduced hypertension, cholesterol, glucose, lower BMI, reduced stress, and more energy. They are also more likely to read nutrition labels and watch caloric intake.<br><br>Progress to Date: Over 14, 000 registered participants to website. Averaged 425,000 hits per month in 2006. Conducted online survey with current participants in early 2006. Survey sample (450 responded) reported increase in physical activity and healthy eating since joining the Fit City Challenge. 14 businesses have utilized Fit City Challenge for internal programs. Developed numerous collaborations and partnerships to implement community initiatives. |
| 3. Intervention: Increase healthy food choices (Focus: Families)<br><br>Primary Setting: Community<br>Secondary Settings: Charlotte-Mecklenburg Schools, Childcare facilities<br><br>Start Date - End Date:<br>09/06 – On-going | Lead agency: Fit City for Fit Families, Mecklenburg County Health Department<br><br>Other agencies: Charlotte-Mecklenburg Schools | This intervention is:<br>_X New_ Ongoing _ Completed<br><br>Process: Success is evaluated with the following numbers: resources available, website visitors, questions submitted, featured kids/families, community events, presentations, advertisements/media and environmental/policies adopted.<br><br>Output/ Impact: Increase knowledge and skills in healthy eating and access to healthy food and beverage choices.<br><br>Health/ Safety Outcomes: Macro-level environmental/policy changes influence the public's eating behaviors and thus can improve obesity rates long-term.<br><br>Progress to Date: 229 available resources, 33,522 visitors, 3 submitted questions, 50 featured kids/families, 22 community events, 17 presentations, 16 media events and 0 environmental/ policies adopted (have not begun this part of the program to date). |
| 4. Intervention: Increase healthy food choices (Focus: Worksites)<br><br>Setting: Business<br><br>Start Date - End Date:<br>July 1, 2006 – June 30, 2008 (Grant funded through NC Health and Wellness Trust Fund but hope that program will be | Lead agency: Fit City Challenge Worksite Wellness, Mecklenburg County Health Department<br><br>Other agencies: Fit City for Fit Families, Mecklenburg County Parks and Recreation, Mecklenburg County Public Service and Information, Mecklenburg County | This is X_ New_ Ongoing _ Completed<br><br>Process: Visit worksites to conduct assessment of work environment to determine how conducive it is to healthy eating. Assessment tool developed by Worksite Wellness program. Review of company policies relating to food and snacks such as vending machines, |

| | | |
|---|---|---|
| sustained beyond end date.) | Healthy Carolinians, Charlotte Department of Transportation, Metropolitan Union Mecklenburg Planning Commission, Charlotte Area Transit Authority | microwaves, refrigerators, and break-rooms to name a few. Customized recommendations for change as well as tools and resources for implementation. Currently developing worksite wellness information for Fit City website so employers can access these resources and tools online.<br><br>Output/ Impact: Create healthier work environments that are more conducive to healthy eating. Encourage participation in programs such as Fit City Challenge to reward healthy behaviors.<br><br>Health/ Safety Outcomes: Studies have shown that these types of interventions produce healthier, more productive employees which in turn saves the company healthcare dollars.<br><br>Progress to Date: Developed assessment tool, resource guide and survey tools for measuring satisfaction and impact. Have assessed 3 worksites so far. One worksite has implemented several of recommended changes. Too early to measure impact of those changes. |

**(Insert extra rows as needed)**

# Healthy Carolinians Action Plan

**County** Mecklenburg **Partnership** Mecklenburg Healthy Carolinians **Period Covered** 2006-2010

**LOCAL PRIORITY ISSUE**

- Priority issue: Injury Prevention
- Was this issue described in your county's most recent Community Health Assessment? _X_ Yes __ No
- List other sources of information about this priority issue: NC SCHS Vital Records; Mecklenburg Safe Communities Burden of Injury Report; CMC Injury Prevention Center website; NC Office of the Chief Medical Examiner; NHTSA; CDC website; CDC Behavioral Risk Factor Surveillance System (BRFSS), Mecklenburg data; Mecklenburg YRBS

**LOCAL COMMUNITY OBJECTIVE** - Please check one: __ New _X_ Ongoing from last re/certification

- By: 2010
- Objective: Reduce rate of motor vehicle injury deaths by 25% to 10 deaths per 100,000 population
- Original Baseline: 13.1 deaths per 100,000
- Date and source of original baseline data: 2000, NC SCHS Vital Statistics
- Updated information (For continuing objective only): 10.8 deaths per 100,000
- Date and source of updated information: 2005, NC SCHS Vital Statistics

**POPULATION(S)**

- Local population(s) experiencing disparities in relation to this local objective: Motor vehicle crashes are the leading cause of death for children and young adults; Hispanic males may be particularly at risk for DUI; adolescent driving fatalities are most often due to inexperience
- Describe the local population(s) that will benefit: Parents of children in car seats, adolescent drivers, all drivers and passengers on the highway
- Total number in population: ~800,000
- Number you plan to reach: ~10,000

**NC 2010 FOCUS AREA AND NC 2010 HEALTH OBJECTIVE ADDRESSED**

- Check one NC 2010 focus area:

| | |
|---|---|
| __ Access to Health Care | __ Infant Mortality |
| __ Chronic Disease | __ Infectious Diseases |
| __ Community Health | _X_ Injury |
| __ Disability | __ Mental Health |
| __ Environmental Health | __ Older Adult Health |
| __ Health Promotion | __ Oral Health |

__ Other - Please Describe: ____________________

- NC 2010 Health Objective: Reduce deaths caused by motor vehicle crashes

| INTERVENTIONS, SETTING, & TIMEFRAME | COMMUNITY PARTNERS Roles and Responsibilities | EVALUATION PLAN & PROGRESS TO DATE |
|---|---|---|
| 1. In order to secure the active involvement of the priority population(s), our Partnership will: Maintain a coalition atmosphere that allows for the collaboration of activities through non partisan meetings. | | Progress to Date:<br>Small groups actively convene to discuss/start/end projects. |
| 2. Marketing/Communication activities related to this community objective: | Lead agency: Carolinas Medical Center (CMC)<br><br>Other agencies: As needed, Community Child Fatality Prevention and Protection Team (CFT), Safe Kids, Charlotte Mecklenburg Police Department (CMPD), Highway Patrol | Progress to Date:<br>On average 8 press conferences, press requests, press releases are conducted monthly from community partners and lead agency. |
| 3. Intervention: CATS- teen driving course<br>Setting: CCPC<br>Start Date - End Date Sept 2006-present | Lead agency: CMC<br>Other agencies: Central Piedmont Community College, CMPD Driving instructors | This intervention is:<br>_X New_ Ongoing _ Completed<br><br>Process: hands on teen driving course<br><br>Output/ Impact: an average of 165 teens will receive additional hands on driving instruction in common road hazard situations. |

| | | |
|---|---|---|
| | | Health/ Safety Outcomes: Reduction in teen crashes and deaths<br><br>Progress to Date: secured curriculum, partners, awaiting insurance approval. |
| 4. Intervention: Reduction underage drinking<br>Setting: ABC Law, Chemical Dependency Center (CDC)<br>Start Date - End Date: Sept 2006 - ongoing | Lead agency: ABC law, CDC<br>Other agencies: CMC, CMPD, Schools, MADD | This is _X New_ Ongoing _ Completed<br><br>Process: introduction of marked enforcement vehicle around alcohol establishments to reduce likelihood of selling to minors. Coalition parent activities to reduce underage drinking<br><br>Output/ Impact: Education and behavior change in sellers of alcohol and parents.<br><br>Health/Safety Outcomes: reduction in underage drinking and driving<br><br>Progress to Date: Parent forums held, three in depth articles in paper, PSA's on TV channel, in process of purchase of vehicle. |
| 5. Intervention: SBIRT<br>Setting: Emergency Department<br>Start Date - End Date): April 2006-ongoing | Lead agency: CMC<br>Other agencies: Area Mental Health | This is X_ New_ Ongoing _ Completed<br><br>Process: conduct brief alcohol screening and intervention with referral to substance abuse services in ER.<br><br>Output/ Impact: Impact of patient services to over 115,000 ED visits a year.<br><br>Health/ Safety Outcomes: Reduction in drinking and driving.<br><br>Progress to Date: Development of screening tools and resource guide with physicians "voluntarily" participating, development of on call SA counselor for physician use. |
| 6. Intervention: Checkpoint/arrest/processing efficiency.<br>Setting: CMPD checkpoints, ER processing of DWI<br>Start Date - End Date): Jan/2007 to present | Lead agency: CMPD<br>Other agencies: CMC, Sheriff, Matthews, Pineville police | This is X_ New_ Ongoing _ Completed<br><br>Process: Assess ways in ways to make checkpoints and processing more efficient to keep hazardous drivers off the streets.<br><br>Output/ Impact: Increased number of drivers screened for danger activities<br><br>Health/ Safety Outcomes: Safer roads<br><br>Progress to Date: Development of list of barriers and possible avenues for decreasing those barriers. Maintaining a supply of Alcohol testing kits in the ER's for doctors to conduct blood draws without law having to remember to bring them. |

| 7. Intervention: Car seat checking station and professional services<br>Setting: Community and agencies<br>Start Date - End Date: Ongoing | Lead agency: Fire, CMC<br>Other agencies: Sheriff, CMPD, | This is _ New_ Ongoing X_ Completed<br><br>Process: development and maintaining of permanent checking stations and other "special" events for seats which includes replacement seats for low income families as well as parent education<br><br>Output/ Impact: Reaching over 5,000 parents a year to ensure they have the right car seat and installed correctly for their children.<br><br>Health/ Safety Outcomes: Reduction in 5-9 and infant mortality.<br><br>Progress to Date: See Output |
|---|---|---|
| 8. Intervention: Education<br>Setting: Various<br>Start Date - End Date: ongoing | Lead agency: CMC<br>Other agencies: Child Fatality, Fire, Safe Kids, CMPD, Highway patrol, MTAC. | This is _ New_X Ongoing _ Completed<br><br>Process: Development of resource guide for agencies to use to provide parent education directly to the parents they serve on highway safety. Development of training and policies with local hospital to address patient services in relation to car seat issues. Two safety websites, development of law enforcement education piece to increase number of law enforcement officers addressing the situation and assisting with education to parent at crash site of replacing seats, development of highway speeding enforcement campaign with highway patrol to reduce speed related injuries, along with safety days at welcome centers to reduce crashes from non county residents. Ongoing press education on highway safety topics and multiple "health fair type "outreach.<br><br>Output/ Impact: Increasing number of professionals and agencies who have knowledge of the issue and service the families on safety.<br><br>Health/ Safety Outcomes: Reduction in MV mortality<br><br>Progress to Date: 5 nurses going through CPS training and starting to develop training policies for hospital, development of preemie car seat brochure, developed and distributing resource guide. Developing a law enforcement card. Developing "kits" for people to take to health fairs and community events to advocate for highway safety without having to develop materials on their own. |
| 9. Intervention: Research<br>Setting: CMC<br>Start Date - End Date): April 2066-present | Lead agency: CMC<br>Other agencies: UNCC, CDC, NICHD, CPN | This is _ X New_ Ongoing _ Completed<br><br>Process: Development of research studies to lead to impactful changes in highway safety<br><br>Output/ Impact: three studies conducted.<br><br>Health/ Safety Outcomes: leading to knowledge of change in different systems.<br><br>Progress to Date: completed SBIRT study with ENA in ER, completed CDC study with UNCC on dissemination of teen parent driving guide, ongoing development of dissemination study in CPN practices of injury intervention that includes car seat education for at risk children and pediatric guidance. |

# Healthy Carolinians Action Plan

**County Mecklenburg Partnership Mecklenburg Healthy Carolinians Period Covered 10/06-10/08**

**LOCAL PRIORITY ISSUE**

- Priority issue: Access to Care: Health Literacy
- Was this issue described in your county's most recent Community Health Assessment? _X_ Yes No
- List other sources of information about this priority issue: Institute of Medicine Report on Health Literacy, American Medical Association, Coalition for Clear Communication, Ask Me 3

**LOCAL COMMUNITY OBJECTIVE** - Please check one: X New __ Ongoing from last re/certification

- By: September, 2007
- Objective: Increase awareness of low-health literacy and possible ways to address it among health care professionals
- Original Baseline: No data available, no outreach provided in Mecklenburg county
- Date and source of original baseline data: N/A
- Updated information (For continuing objective only): N/A
- Date and source of updated information: N/A

**POPULATION(S)**

- Local population(s) experiencing disparities in relation to this local objective: Patients with low literacy skills: most frequently non-English speaking, low-income, the elderly, and the chronically ill. National research suggests that almost half of all Americans may be affected by low health literacy levels.
- Describe the local population(s) that will benefit: Patients with low literacy skills: most frequently non-English speaking, low-income, the elderly, and the chronically ill. About 40,500 people in Mecklenburg are estimated to be low income (SCHS) and about 8% of the population to not speak English as a first language
- Total number in population: Over 300 practices and two hospital systems
- Number you plan to reach: Initially, 11 safety net practices, 250 health professionals

**NC 2010 FOCUS AREA AND NC 2010 HEALTH OBJECTIVE ADDRESSED**

- Check one NC 2010 focus area:

| | |
|---|---|
| X Access to Health Care | __ Infant Mortality |
| __ Chronic Disease | __ Infectious Diseases |
| __ Community Health | __ Injury |
| __ Disability | __ Mental Health |
| __ Environmental Health | __ Older Adult Health |
| __ Health Promotion | __ Oral Health |

__ Other - Please Describe: ____________________

- NC 2010 Health Objective: None closely correlated

| INTERVENTIONS, SETTING, & TIMEFRAME | COMMUNITY PARTNERS Roles and Responsibilities | EVALUATION PLAN & PROGRESS TO DATE |
|---|---|---|
| 1. In order to secure the active involvement of the priority population(s), our Partnership will:<br><br>Establish a Health Literacy Advisory Committee that will include representatives from key populations experiencing disparities and develop strategies for reaching these populations | | Progress to Date:<br><br>Have created a list of potential committee members and have drafted purpose and objectives for advisory committee |

<table>
<tr>
<td>2. Marketing/Communication activities related to this community objective:<br><br>• Post information on Mecklenburg County Health Department web page<br>• Present health literacy information at Public Health grand rounds<br>• Create health literacy cards for provider distribution<br>• Submit article for Carolinas Healthcare System Newsletter</td>
<td>Lead agency: Mecklenburg County Health Department<br><br>Other agencies:<br>Carolinas HealthCare System</td>
<td>Progress to Date:<br><br>• Health literacy info. has been posted on website<br>• 2 grand rounds presentations have been made reaching 40 health professionals<br>• Health literacy card has been created, printed in English and Spanish, and 2,000 distributed<br>• Newsletter article published</td>
</tr>
<tr>
<td>3. Intervention: Provide trainings to health care providers working in “safety net” clinics<br><br>Setting: Safety net clinics in Mecklenburg County<br><br>10/06-03/07</td>
<td>Lead agency: Mecklenburg County Health Department<br><br>Other agencies: Mecklenburg MedLink, MedAssist, Matthews Free Clinic, Carolinas Medical Center Ambulatory Clinics</td>
<td>This intervention is:<br>_ New X Ongoing __ Completed<br><br>Process: Deliver training to increase awareness of low health literacy among providers and teach the “teach back” and Ask Me 3 techniques; assess provider experience for lessons on how techniques were used and their efficacy, and determine if provider plans to continue using techniques to improve communication.<br><br>Output/ Impact: Conducted 11 trainings, reaching 176 providers<br><br>Health/ Safety Outcomes:<br>• Increased awareness of the prevalence and signs of low health literacy in patients<br>• Increased knowledge of methods for and skills in improving communication with low literacy patients<br><br>Progress to Date: Conducted 11 trainings and gathered feedback on efficacy of trainings</td>
</tr>
<tr>
<td>4. Intervention: Provide trainings to health care providers working in private practices<br><br>Setting: Charlotte AHEC: ongoing</td>
<td>Lead agency: Mecklenburg County Health Department<br><br>Other agencies: UNCC Literacy Center, Charlotte AHEC</td>
<td>This is X New_ Ongoing _ Completed<br><br>Process: Develop course on health literacy for Charlotte AHEC training schedule.<br><br>Output/Impact: Training on health literacy will be available to the healthcare community on a regular basis.<br><br>Health/Safety Outcomes:<br>• Increased awareness of the prevalence and signs of low health literacy in patients<br>• Increased knowledge of methods for and skills in improving communication with low literacy patients<br><br>Process to date: First AHEC course taught Dec 2006; planning in place for additional classes</td>
</tr>
<tr>
<td>5. Intervention: Provide trainings to health care providers working in private practices<br><br>Setting: Private practices in Mecklenburg County<br>6/07-10/08</td>
<td>Lead agency: Mecklenburg County Health Department<br><br>Other agencies: Identified practices wishing to avail of training</td>
<td>This is X New_ Ongoing _ Completed<br><br>Process: Based on feed-back from trainings conducted in safety net clinics, training will be reviewed and revised to present to providers in private practices;</td>
</tr>
</table>

| | | |
|---|---|---|
| | | Output/ Impact: Trainings and outreach efforts will begin to reach private health care providers in Mecklenburg County<br><br>Health/ Safety Outcomes:<br>• Increased awareness of the prevalence and signs of low health literacy in patients<br>• Increased knowledge of methods for and skills in improving communication with low literacy patients<br><br>Progress to Date: Reviewing feed-back from safety-net trainings, preparing to revise training |
| 6. Intervention: Develop plan for Mecklenburg County incorporating health literacy training into existing healthcare provider training and basic literacy training<br><br>Setting: community: 05/07-05/08 | Lead agency: Mecklenburg County Health Department<br><br>Other agencies: UNCC Literacy Center, Library, others to be determined | This is X New_ Ongoing _ Completed<br><br>Process: Use advisory committee to generate ways health literacy training can be incorporated into existing educational programs such as nursing curriculums and basic literacy training<br><br>Outputs/Impact: health literacy taught routinely to providers; health literacy taught routinely to those in literacy training or ESL training<br><br>Health/Safety Outcomes: Improved communication in the medical setting which may lead to improved compliance and better health outcomes.<br><br>Progress: Have created a list of potential committee members and have drafted purpose and objectives for advisory committee |
| 7. Intervention: Provide trainings to lay health advisors in Mecklenburg County<br><br>Setting: community<br><br>06/07-10/07 | Lead agency: Mecklenburg County Health Department<br><br>Other agencies: Reach 2010 | This is X New_ Ongoing _ Completed<br><br>Process: Conduct training/awareness session with lay health advisors<br><br>Output/ Impact: Trainings will enable lay health advisors to educate clients on health literacy and empower them to be more engaged at visits to health care providers<br><br>Health/ Safety Outcomes: Increased awareness of low-health literacy for lay health advisors, and patient empowerment when communicating with healthcare providers<br><br>Progress to Date: Initial meetings with lay health advisors have been scheduled |
| 5. Intervention: Provide trainings to Spanish-English translators working in Mecklenburg County<br><br>Setting: community<br><br>06/07-10/07 | Lead agency: Mecklenburg County Health Department<br><br>Other agencies: To be Determined | This is X New_ Ongoing _ Completed<br><br>Process: Conduct training/awareness session with Spanish-English translators<br><br>Output/ Impact: Trainings will enable translators to educate clients on health literacy and empower them to be more engaged at visits to health care providers<br><br>Health/ Safety Outcomes: Increased awareness of low-health literacy for |

| | | |
|---|---|---|
| | | translators, and patient empowerment when communicating with healthcare providers<br><br>Progress to Date: Identifying agencies to partner with |

# Healthy Carolinians Action Plan

**County** **Mecklenburg** **Partnership** **Mecklenburg Healthy Carolinians** **Period Covered** **2007-2010**

**LOCAL PRIORITY ISSUE**
- Priority issue: Environmental Health: the built environment
- Was this issue described in your county's most recent Community Health Assessment? _X_ Yes __ No
- List other sources of information about this priority issue: NC State Center for Health Statistics, Charlotte Department of Transportation, US Census Bureau (Mecklenburg County, North Carolina), CDC National Center for Environmental Health website, Mecklenburg State of the Environment Report, Active Living by Design. National Center for Smart Growth

**LOCAL COMMUNITY OBJECTIVE** - Please check one: _X_ New __ Ongoing from last re/certification
- By: 2010
- Objective: Increase awareness of the impact of the built environment on public health and increase a public health voice in community planning collaborations for the built environment
- Original Baseline: N/A
- Date and source of original baseline data: N/A
- Updated information (For continuing objective only): N/A
- Date and source of updated information: N/A

**POPULATION(S)**
- Local population(s) experiencing disparities in relation to this local objective: Low-income, African American, Hispanic
- Describe the local population(s) that will benefit: All Mecklenburg County residents would potentially benefit from improvements in the built environment that improve air quality, pedestrian safety, greenway development, safe & attractive places to exercise, transportation, and accessible healthy foods
- Total number in population: ~800,000 residents,
- Number you plan to reach: In the short-term, ~250: Planning community; Department of Transportation, Community Leaders, Injury Advocates, Clean Air Advocates, elected officials, academics, interested residents, etc.

**NC 2010 FOCUS AREA AND NC 2010 HEALTH OBJECTIVE ADDRESSED**
- Check one NC 2010 focus area:

| | |
|---|---|
| __ Access to Health Care | __ Infant Mortality |
| __ Chronic Disease | __ Infectious Diseases |
| __ Community Health | __ Injury |
| __ Disability | __ Mental Health |
| X_ Environmental Health | __ Older Adult Health |
| __ Health Promotion | __ Oral Health |

__ Other - Please Describe: ____________________________________________

- NC 2010 Health Objective: (None identified in NC 2010 Objectives) Increase awareness of the impact of the built environment on public health

| INTERVENTIONS, SETTING, & TIMEFRAME | COMMUNITY PARTNERS Roles and Responsibilities | EVALUATION PLAN & PROGRESS TO DATE |
|---|---|---|
| 1. In order to secure the active involvement of the priority population(s), our Partnership will:<br><br>Engage key community leaders and stakeholders, educate key populations on built environment issues, and foster communication between these populations and elected officials and those responsible for programs/policies impacting the built environment | | Progress to Date:<br><br>Community Dialogue session scheduled for May 2007 |

| 2. Marketing/Communication activities related to this community objective:<br><br>Send out Save-the-Date card via email promoting the conference, promote conference on health department website, promote at various community meetings/venues; follow-up with personal letters of invitation from the Health Director to key stakeholders.<br><br>After conference, maintain contact with attendees via email updates regarding future meetings and educational opportunities | Lead agency: Mecklenburg County Health Department<br><br>Other agencies: Charlotte Department of Transportation, AHEC, Charlotte Chamber, Clean Air Coalition, Fit City Challenge | Progress to Date:<br><br>Save the Date notices have been emailed. Invitations to follow in late March. |
|---|---|---|
| 3. Intervention: Built Environment Conference<br>Setting: Community<br>05/07 | Lead agency: Mecklenburg County Health Department<br><br>Other agencies:<br>Board of County Commissioners, Charlotte Department of Transportation, Department of Parks and Recreation, Active Living by Design, National Center for Smart Growth | This intervention is:<br>X New_ Ongoing _ Completed<br>Process: Offer a free educational conference<br><br>Output/ Impact: Anticipated attendance is 300, 4 educational sessions will be offered<br><br>Health/ Safety Outcomes: Participants will have an improved awareness of how the built environment impact public health by influencing physical activity, access to food and healthcare, air quality, and motor vehicle injuries<br><br>Progress to Date: Conference speakers, agenda, and venue planned and approved |
| 4. Intervention: Establish coalition of key stakeholders interested in built environment issues that will engage the community and work toward integrating a public health/community point of view with policy and planning procedures.<br><br>Setting: Community<br><br>Start Date – End Date: 05/07-inefinate | Lead agency: To be determined<br><br>Other agencies: Potential—Charlotte Department of Transportation, Department of Parks and Recreation, local planners and developers, Charlotte Mecklenburg Schools, Board of County Commissioners, community representatives | This is _X_ New_ Ongoing _ Completed<br><br>Process: Convene monthly in central location<br><br>Output/ Impact: Set coalition objectives and action plan<br><br>Health/ Safety Outcomes: Regional policies and planning efforts that promote a healthy lifestyle<br><br>Progress to Date: |

**(Insert extra rows as needed)**

# Healthy Carolinians Action Plan

**County** **Mecklenburg**   **Partnership** **Mecklenburg Healthy Carolinians**   **Period Covered** **2001-2010**

**LOCAL PRIORITY ISSUE**

- Priority issue: Substance Abuse
- Was this issue described in your county's most recent Community Health Assessment? _X_ Yes __ No
- List other sources of information about this priority issue: 2005 Mecklenburg Substance Abuse Indicators Report, 2005 Mecklenburg Youth Risk Behavior Survey (YRBS), 2005 Behavioral Risk Factor Surveillance Survey (BRFSS), 2004 Mecklenburg Substance Abuse Prevention Services Teen Drug Survey, NC Office of the Chief Medical Examiner, Healthcare Needs and Barriers in the Hispanic Population 2005 focus groups, Safe Communities Injury Report, Community Child Fatality Prevention and Protection Team, Charlotte Observer (stories on deaths related to underage drinking and DUI)..

**LOCAL COMMUNITY OBJECTIVE** - Please check one: __ New _X_ Ongoing from last re/certification

- By: 2010
- Original objective: Reduce by 20% the percentage of students, grades 6-12, who consumed alcohol within the past 30 days to 15.6%.
- Original Baseline: 23.6%
- Date and source of original baseline data: 1998 Substance Abuse Prevention Services (SAPS) Teen Drug Survey
- Updated information (For continuing objective only): 14.9% of students grades 6-12 reported current alcohol use in the 2004 SAPS survey. While this suggests that the goal has been met, underage use of alcohol is still a problem in this community as highlighted by several much publicized alcohol related deaths in the past two years. 25% of students grades 9-12 reported current alcohol use in the 2004 SAPS survey and 39% of students grades 9-12 reported consumption of alcohol in the past 30 days in the 2005 YRBS survey. Therefore, the objective continues to be reduce student current alcohol consumption by 20% but will be based on grades 9-12 and data from both the SAPS and YRBS surveys will be considered.

**POPULATION(S)**

- Local population(s) experiencing disparities in relation to this local objective: Surveys and GIS mapping of students reporting alcohol consumption show that student alcohol consumption and binge drinking are more prevalent in white students and higher income zipcodes. The BRFSS suggest the same for white adults although Hispanics are not well measured in this survey. Focus groups, injury data, and mortality data suggest immigrant adult Hispanic males to be particularly at risk.
- Describe the local population(s) that will benefit: Middle and High School Adolescents
- Total number in population: ~67,500
- Number you plan to reach: ~67,500

**NC 2010 FOCUS AREA AND NC 2010 HEALTH OBJECTIVE ADDRESSED**

- Check one NC 2010 focus area:

| | |
|---|---|
| __ Access to Health Care | __ Infant Mortality |
| __ Chronic Disease | __ Infectious Diseases |
| __ Community Health | __ Injury |
| __ Disability | __ Mental Health |
| __ Environmental Health | __ Older Adult Health |
| _X Health Promotion | __ Oral Health |

__ Other - Please Describe: ___________________________________________________________________

- NC 2010 Health Objective: Reduce the percentage of high school students who consumed alcohol in the past 30 days

| INTERVENTIONS, SETTING, & TIMEFRAME | COMMUNITY PARTNERS Roles and Responsibilities | EVALUATION PLAN & PROGRESS TO DATE |
|---|---|---|
| 1. In order to secure the active involvement of the priority population(s), our Partnership will:<br><br>Actively recruit coalition members to ensure membership demographics are representative of the demographics of Mecklenburg county (in terms of age, race, and sex). Educational materials will be provided in English and Spanish | | Progress to Date:<br>• Meeting attendance and coalition membership are reviewed periodically to assess demographics and recruitment strategies are planned accordingly.<br>• Many print materials have already been translated into Spanish and a coalition member is available for print translating services.<br>• SAPS has a Spanish drug line which averages about 3 calls daily.<br>• The Coalition has formed a youth council, SPIDA, Students Preventing and Informing on Drugs and Alcohol. |
| 2. Marketing/Communication activities related to this community objective:<br><br>Programs and activities will be promoted on various agency websites, through announcements at community events and meetings, Public Service Announcements will be developed, services will be promoted through the school system, and yearly events (Substance Abuse Awareness Month, Sober-Bowl party) will be supported through agency collaboration. An annual Substance Abuse Indicators Report will be produced which along with available information on a range of substance data will include information on teen alcohol use.<br>SAPS will continue to conduct the Teen Drug Survey, the results of which are released with a press conference and posted on the SAPS website. | Lead agency: Charlotte-Mecklenburg Drug Free Coalition (CMDFC)<br><br>Other agencies: There are over 30 groups represented including Charlotte/Mecklenburg Schools, Substance Abuse Prevention Services, Chemical Dependency Center, Fighting Back, University of North Carolina at Charlotte, Mecklenburg County Health Department, MI Casa Su Casa, Area Mental Health, Mecklenburg Jails, Charlotte Mecklenburg Police Department, the Public Defender's Office and the District Attorney. | Progress to Date:<br>• The Coalition has established its own website at www.drugfreecharlotte.org . SPIDA has its own section on this website.<br>• Program flyers are distributed regularly both in print form and electronic form. Training schedules are distributed quarterly.<br>• SPIDA has developed two PSA's with funding from the state Office of Prevention and a third is being planned.<br>• Upcoming events are regularly promoted at local meetings and through the communication channels or participating agencies and groups.<br>• 2005 Substance Abuse Indicators Report online at www.drugfreecharlotte.org/Indicators.pdf<br>• 2004 Teen Drug Survey online at www.preventionservices.org |
| 3. Intervention: Youth/Adolescent Education –: Students Preventing and Informing on Drugs and Alcohol Youth Council (SPIDA)<br><br>Setting: Community with students drawn from schools across the county<br><br>Start Date - End Date:<br>04/05, end date TBD | Lead agency: CMDFC<br><br>Other agencies: SPIDA Youth Council, Chemical Dependency Center, Substance Abuse Prevention Services, Charlotte Mecklenburg Schools, Fighting Back, Mothers Against Drunk Driving, ABC Board, Mecklenburg County Health Department | This intervention is:<br>X New_ Ongoing _ Completed<br><br>Process: Work on youth-centered initiatives to reduce underage drinking in the county<br><br>Output/ Impact: Youth council meets bi-weekly to develop strategies to reach youth including:<br>• PSAs educating youth on underage drinking, and<br>• Interventions with local vendors to prevent the sale of alcohol to underage youth.<br><br>Health/ Safety Outcomes:<br>• Reduction in underage drinking,<br>• Increased age at first drink,<br>• Decrease in alcohol-related injuries and fatalities<br><br>Progress to Date:<br>• 2 PSAs have been developed with funding from the state Office of |

| | | |
|---|---|---|
| | | Prevention and, a 3rd prom message is in the planning stages<br>• SPIDA website is being updated<br>• Survey of 100 local beer and wine vendors has been conducted to assess alcohol advertising and sales to minors, 10 have been selected for an intervention to reduce advertising |
| 3. Intervention: Parent Centered Prevention<br><br>Setting: Local substance abuse prevention organizations and Charlotte/Mecklenburg Schools<br><br>Start Date - End Date:<br>06/05 to indefinite | Lead agency:<br>Charlotte/Mecklenburg Drug Free Coalition<br><br>Other agencies:<br>Charlotte/Mecklenburg Schools<br>Substance Abuse Prevention Services<br>Chemical Dependency Center<br>Mecklenburg County Health Department<br>MI Casa Su Casa<br>Area Mental Health | This intervention is:<br>_ New_X Ongoing _ Completed<br><br>Process: 8 events in English have reached 242 individuals; 5 events in Spanish have reached 97 individuals.<br><br>Output/ Impact:<br>• Parents and other adults are learning more about underage drinking<br>• Parents are learning more about designing and delivering parent centered prevention programs at their schools and they have come together to support each other in their efforts and consult with local substance abuse prevention professionals.<br><br>Health/ Safety Outcomes:<br>• The long term goal is to reduce underage drinking and other alcohol and other drug use among local youth.<br>• The short term goal is to have parent centered prevention parent liaisons designing and implementing parent centered prevention programs in local middle and high schools both public and independent.<br><br>Progress to Date: 9 trainings have been delivered. They will be ongoing throughout the 06/07 and 07/08 school years. |
| 5. Intervention: Underage Drinking Initiative<br><br>Setting: Community<br><br>Start Date - End Date:<br>2004 to indefinite | Lead agency: CMDFC<br><br>Other agencies: Charlotte Mecklenburg Schools, Charlotte Mecklenburg Police Department, Substance Abuse Prevention Services | This intervention is:<br>X New_ Ongoing _ Completed<br><br>Process: 5 parent education forums reaching approximately 70 parents<br><br>Output/ Impact: participants were educated on parent liability, prevalence of binge drinking, and effects of underage drinking<br><br>Health/ Safety Outcomes: Parents will re-conceptualize underage drinking as a “rite of passage” and will be better able to discourage underage drinking and preventing potentially dangerous situations such as alcohol poisoning and drunk driving<br><br>Progress to Date: 5 forums throughout the county held thus far, planning meetings scheduled to plan future events |

# ATTACHMENTS

## 2006 Community Health Forum Opinion Survey Instrument and Findings

## Summary of Findings: Healthcare Needs and Barriers of the Hispanic Population in Mecklenburg County, 2005 Hispanic Focus Groups conducted by Mecklenburg Healthy Carolinians

## *Mecklenburg Healthy Carolinians Community Health Survey*

The following questionnaire has been developed to assess community opinion of local health-related needs, concerns, and problems. The survey is part of a community health assessment that is currently in progress. Results of this survey will be combined with other community health statistics to help determine priority community health concerns. Conclusions of the assessment will be reported to the community. Your responses to this survey are anonymous. If you have further questions about the survey, please contact the Mecklenburg County Health Department at 336-2900. Thank you for you participation.

E Winters Mabry, MD
Health Director

### Health Problem Identification

Below you are presented with selected issues of health concern. In your opinion, how much of a problem is each of these issues in the Charlotte-Mecklenburg Community? **Consider not only the importance of the health issue itself but also how well the community is already responding to it**. For each of the issues named, check one of the five responses.

**Not a Problem** This issue is not a problem and requires no additional attention

**Minor Problem** This issue is a minor or small problem. The community needs to address this problem, but only after some attention has been given to more pressing issues.

**Somewhat of a Problem** This issue is somewhat of a problem. It is important that the community address it at some time or continue addressing it at current levels.

**Major Problem** This issue is a major problem. It is important that the community address this issue as soon as possible or put even more effort into the current response.

**Don't Know/ No Opinion** I do not have enough information to determine whether or not this issue is a problem, or I have no opinion.

| Health Concerns | Not Problem | Minor Problem | Somewhat A Problem | Major Problem | Don't Know |
|---|---|---|---|---|---|
| **A. Health Lifestyle Behaviors** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Physical activity, nutrition, tobacco | | | | | |
| **B. Responsible Sexual Behavior** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Unplanned pregnancy, HIV disease, syphilis, gonorrhea, other sexually transmitted diseases | | | | | |
| **C. Health Disparities** | ☐ | ☐ | ☐ | ☐ | ☐ |
| All population groups (socioeconomic, race, cultural, etc.) do not experience similar health outcomes and do not have similar access to care | | | | | |
| **D. Chronic Disease** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Heart disease, stroke, diabetes, cancer, respiratory disease (emphysema, asthma), kidney disease | | | | | |
| **E. Communicable Disease** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Foodborne disease, pneumonia/influenza, tuberculosis, antibiotic resistant infections, vaccine-preventable disease (whooping cough, tetanus, measles, etc.), disease carried by insects/arthropods | | | | | |
| **F. Intentional Injury** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Homicide, suicide, domestic violence, assault | | | | | |
| **G. Unintentional Injury** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Motor vehicle, falls, drowning, burns, cuts, poisoning | | | | | |
| **H. Maternal /Child Health** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Immunizations, birth defects, genetic disease (sickle cell), child abuse and neglect, prenatal care, infant mortality (prematurity/immaturity, SIDS, unsafe sleeping) | | | | | |

| **I. School Health** | | | | | |
|---|---|---|---|---|---|
| Chronic disease (asthma, diabetes) management, vision and hearing problems, learning disabilities, health screening and referral, medications, physical activity, nutrition, communicable disease control | | | | | |
| **J. Senior Health** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Alzheimer's Disease, elder abuse and neglect, immunizations (pneumonia/influenza), medications, nutrition, physical activity, care giving assistance | | | | | |
| **K. Environmental Health** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Air and water quality; restaurant food handling & cleanliness; pest control (mosquitoes, rats) | | | | | |
| **L. Public Health Preparedness** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pandemic influenza, bioterrorism, natural disaster | | | | | |
| **M. Mental Health** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Depression, anxiety, bipolar disease, ADD, psychotic and cognitive disorders, etc. | | | | | |
| **N. Substance Abuse** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Alcohol, illegal drugs, prescription drug abuse | | | | | |
| **O. Disabilities** | ☐ | ☐ | ☐ | ☐ | ☐ |
| Developmental disabilities, injury and medical related disabilities, mental retardation | | | | | |

Of the concerns above that you listed as **Major** health problems, which three would you consider the most important? Please list.

1.
2.
3.

| **Health Services and Other Social Services Affecting Health** | **Not A Problem** | **Minor Problem** | **Somewhat A Problem** | **Major Problem** | **Don't Know** |
|---|---|---|---|---|---|
| **Availability and Access to:** | | | | | |
| Affordable health care for under- and uninsured residents | ☐ | ☐ | ☐ | ☐ | ☐ |
| Affordable dental, vision, and hearing care | | | | | |
| Counseling and mental health services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Culturally and linguistically appropriate health care services for non-English speakers | ☐ | ☐ | ☐ | ☐ | ☐ |
| Drug and alcohol treatment services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Geriatric specific health services | | | | | |
| Long term medical care | ☐ | ☐ | ☐ | ☐ | ☐ |
| Prescription medicine assistance | ☐ | ☐ | ☐ | ☐ | ☐ |
| Respite, home health, and hospice services | ☐ | ☐ | ☐ | ☐ | ☐ |
| Services for diagnosing, treating, and supporting those with disabilities | ☐ | ☐ | ☐ | ☐ | ☐ |
| School health nurses in appropriate numbers | ☐ | ☐ | ☐ | ☐ | ☐ |
| Adequate and affordable housing | ☐ | ☐ | ☐ | ☐ | ☐ |
| Adequate public transportation | ☐ | ☐ | ☐ | ☐ | ☐ |
| Food and shelter assistance programs | ☐ | ☐ | ☐ | ☐ | ☐ |
| Parenting support/education | ☐ | ☐ | ☐ | ☐ | ☐ |

Of the **Health & Social Service** concerns that you listed as **Major** problems, which three would you consider the most important? Please list below.

1.
2.
3.

These categories are broad. Are there other particular health conditions or issues you think have pressing urgency or are there other comments you would like to make?

## Demographic Information

*The following information is strictly confidential and will only be used to provide a general description of those responding to the survey. Please circle the number to the left of your answer.*

What is your age?
1. Under 18 2. 18-24 3. 25-44 4. 45-64 5. 65-84 6. 85+

Gender? 1. Male 2. Female

What is your race?
1. White 2. Black 3. Native American 4. Asian/Pacific Islander 5. Multiracial 6. Other Race

Are you of Hispanic/Latino origin? 1. Yes 2. No

What is your home zip code? _______________

How long have you lived in Charlotte/Mecklenburg County?
1. Less than 1 year
2. 1-2 years
3. 3-4 years
4. 5-10 years
5. 11-15 years
6. More than 15 years

What was your household income last year?
1. Less than $15,000
2. $15,000-$24,999
3. $25,000-$34,999
4. $35,000-$49,999
5. $50,000-$74,999
6. $75,000-$99,999
7. $100,000 or more
8. Don't know

What is the highest level of schooling you have completed?
1. 12$^{th}$ grade or less, no diploma or equivalent
2. High school graduate or equivalent
3. Some college, but no degree (includes vocational training)
4. Associate degree in college
5. Bachelors degree in college
6. Advanced college degree beyond Bachelors degree

What is your job field? (Circle only one)
1. Business and Industry (banker, lawyer, plumber, self-employed, etc.)
2. Education (teacher, principal, researcher, etc.)
3. Government other than Health & Human Services (city manager, county employee, police, etc.)
4. Government - Health and Human Services
5. Private or non-profit healthcare delivery, promotion, advocacy, etc.
6. Not employed outside the home
7. Religion
8. Retired
9. Student
10. Unemployed
11. Other ___________________________

**Thank you for your assistance! Returning this survey implies your consent to participate in this study. Please return this survey prior to exiting the conference. Thank you.**

# COMMUNITY SURVEY FINDINGS

## HEALTHY CAROLINIANS COMMUNITY HEALTH SURVEY FINDINGS

Attendees of the 2006 Mecklenburg Community Health Forum were asked to complete a questionnaire developed to assess community opinion of local health-related needs, concerns, and problems (see attached survey instrument). Surveys were completed by 102 of the approximately 150 forum participants.

Survey takers were asked to rank from one to five, with five being the greatest problem, the importance of 15 different problems (e.g. communicable disease, chronic disease, intentional injury) and 15 different health related services (e.g. affordable health care, housing, transportation). In addition they were asked to choose (prioritize) the three concerns and the three services they felt most important.

When looking at Health Services by mean score and by priority, respondents were in agreement that the top three services were

- Affordable healthcare for under and uninsured residents
- Affordable dental, vision, and hearing care, and
- School health nurses in appropriate numbers.

Both ranked affordable care number one. Mean score ranked nurses number three and priority ranked them number two.

When looking at Health Concerns, the results were also similar. The top four for both mean and priority included:

- Responsible sexual behavior
- Health lifestyle behaviors
- Health disparities, and
- Chronic disease.

Mean rank filled out the top five with substance abuse and priority ranked mental health number five. Both ranked disabilities fifteen and included communicable disease and unintentional injury in the bottom five. The remaining positions were mixed.

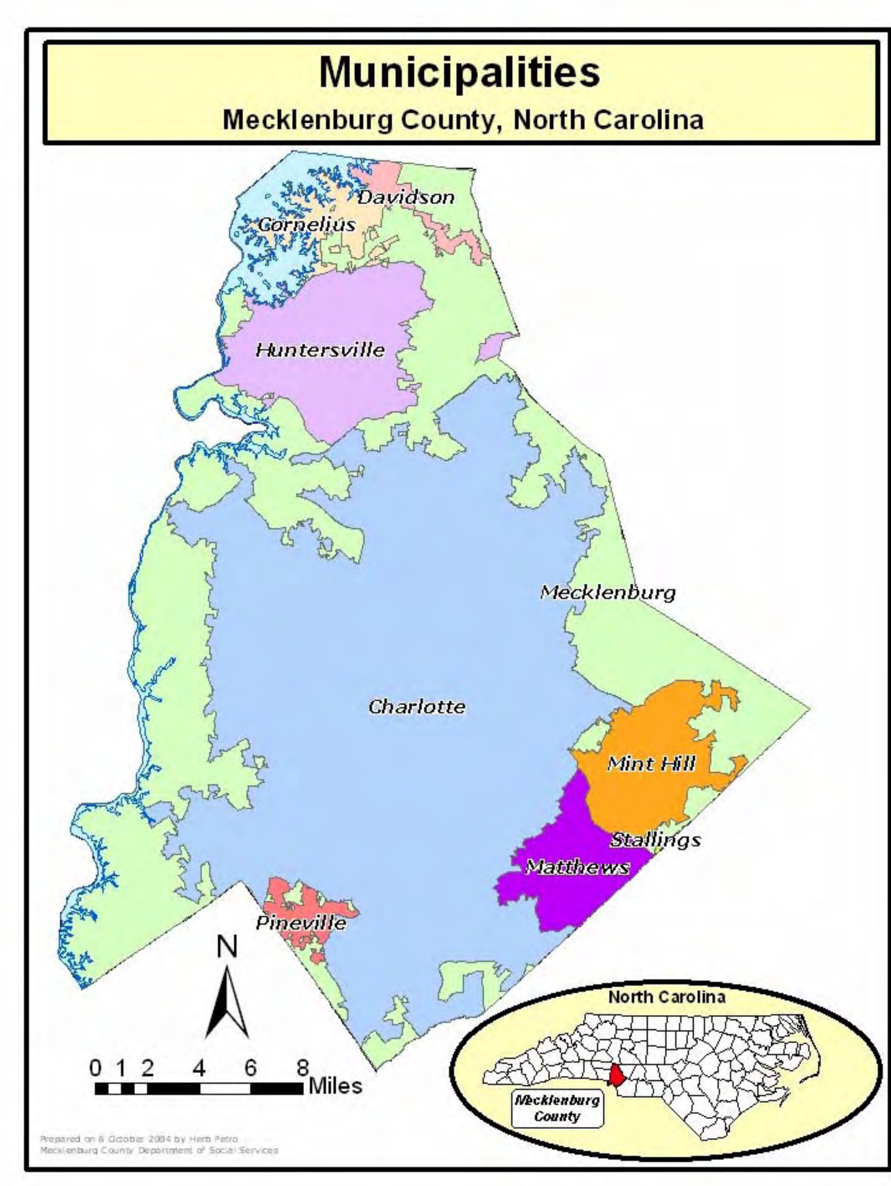
| Mean Score | Health Problem | Priority |
|---|---|---|
| 1 | Responsible Sexual Behavior | 4 |
| 2 | Health Lifestyle Behaviors | 1 |
| 3 | Health Disparities | 2 |
| 4 | Chronic Disease | 3 |
| 5 | Substance Abuse | 8 |
| 6 | School Health | 6 |
| 7 | Intentional Injury | 11 |
| 8 | Mental Health | 5 |
| 9 | Maternal Child Health | 12 |
| 10 | Senior Health | 7 |
| 11 | Environmental Health | 10 |
| 12 | Public Health Preparedness | 9 |
| 13 | Unintentional Injury | 14 |
| 14 | Communicable Disease | 13 |
| 15 | Disabilities | 15 |

# Health Needs & Concerns of the Emergent Latino Population in Mecklenburg County

Mecklenburg County Health Department

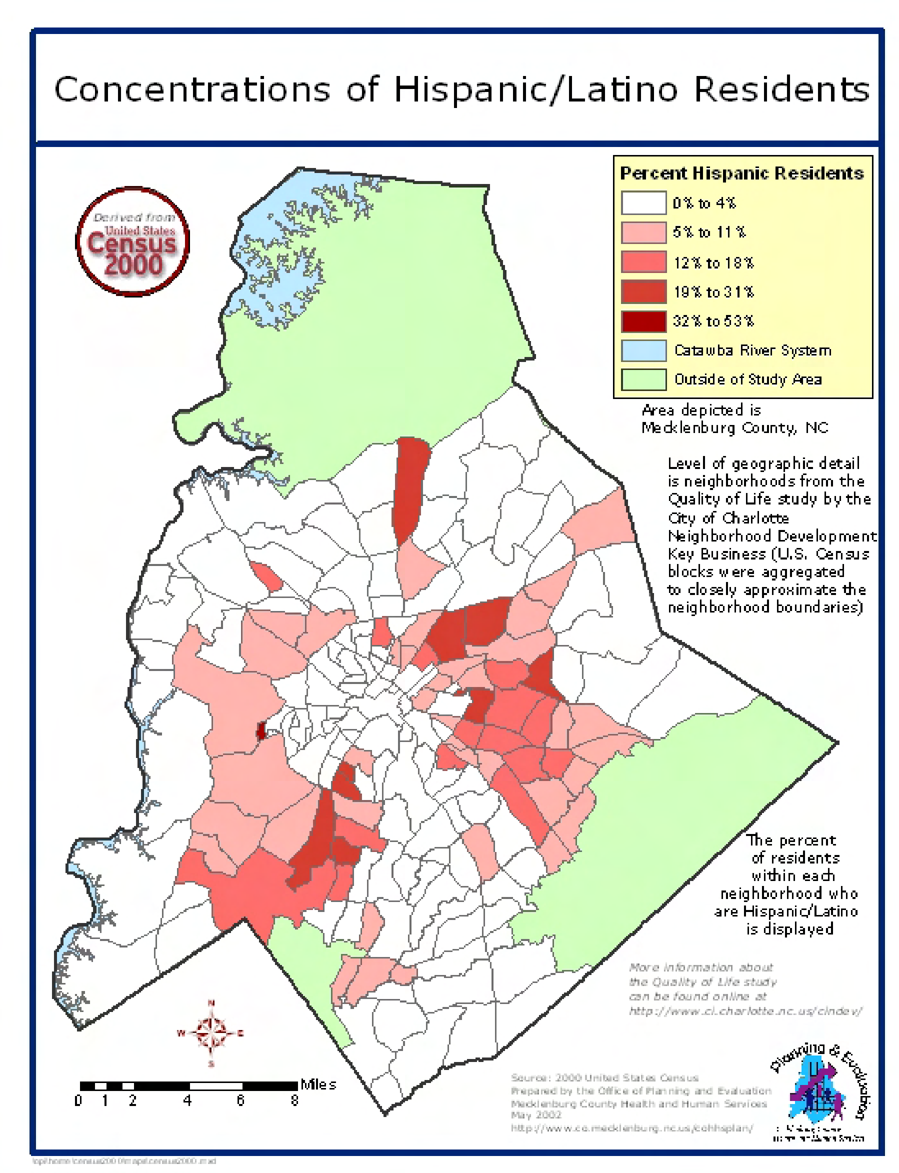
March 31, 2006

# Mecklenburg Municipalities



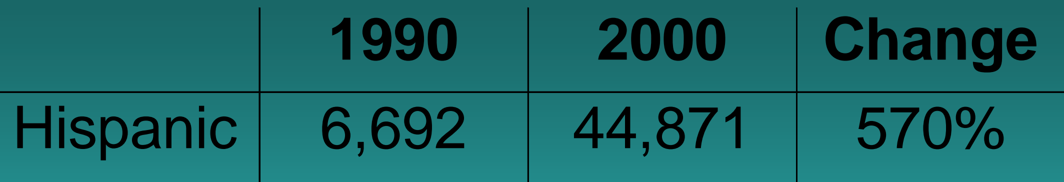

SOURCE: DSS, 2004

# Concentration of Hispanic Residents

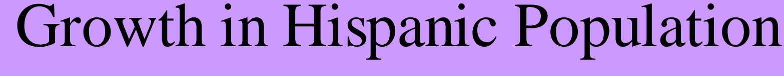


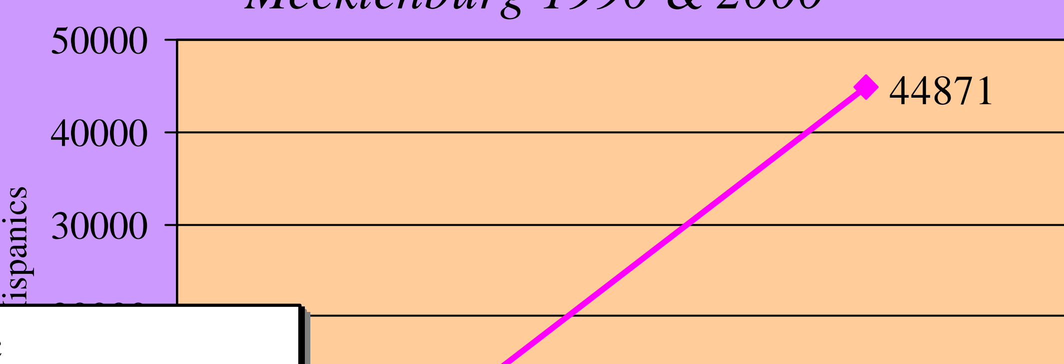

SOURCE: DSS, 2004

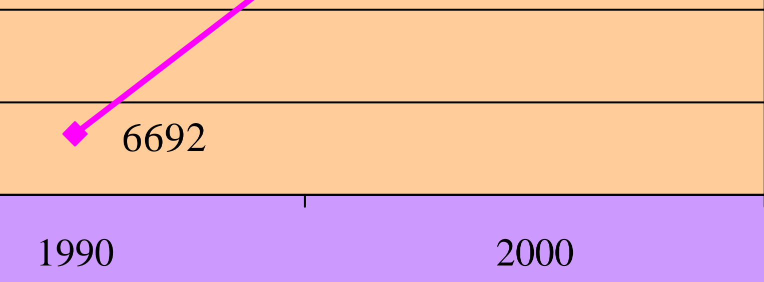
# Hispanic Population Growth

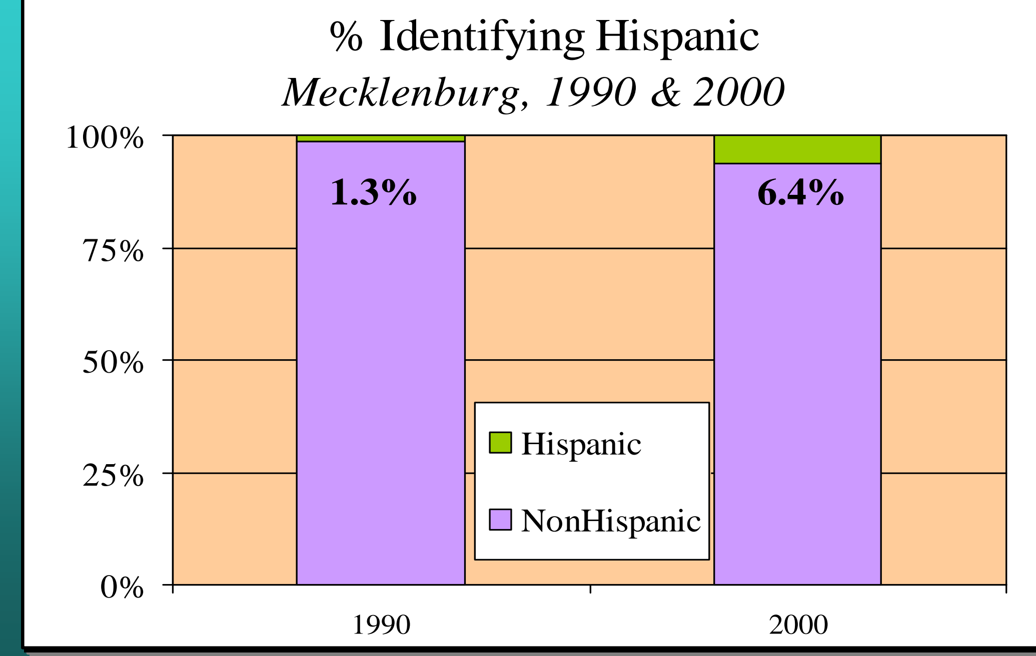


| | 1990 | 2000 | Change |
|---|---|---|---|
| Hispanic | 6,692 | 44,871 | 570% |




SOURCE: US Census 2000

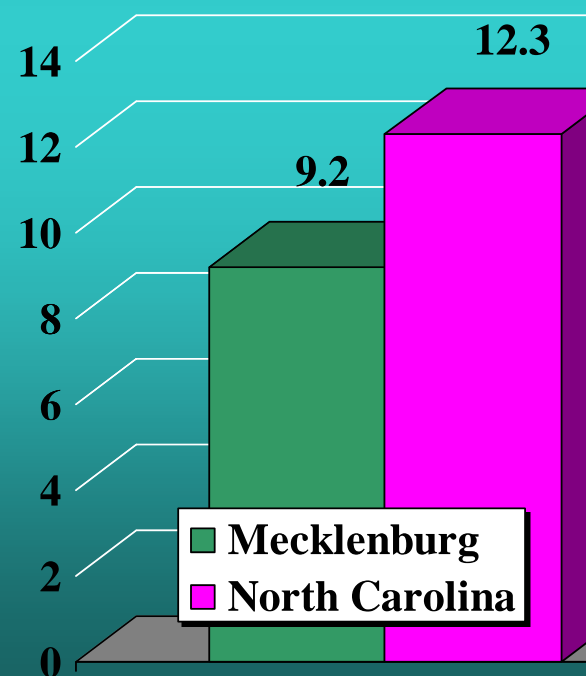
# Hispanic Population Growth

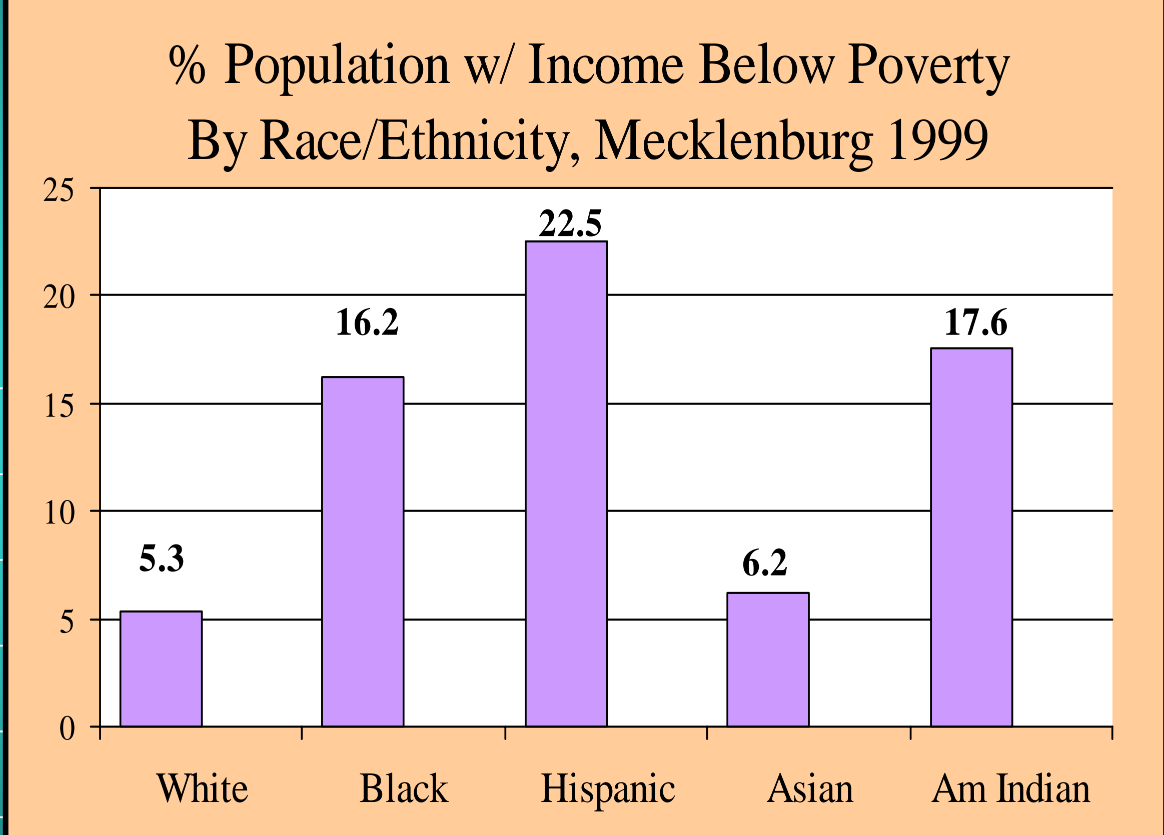
The American Communities Survey estimates that the 2004 Mecklenburg Latino community numbers greater than 60,000 and represents approximately 8% of the total population.

SOURCE: ACS 2004

# Income

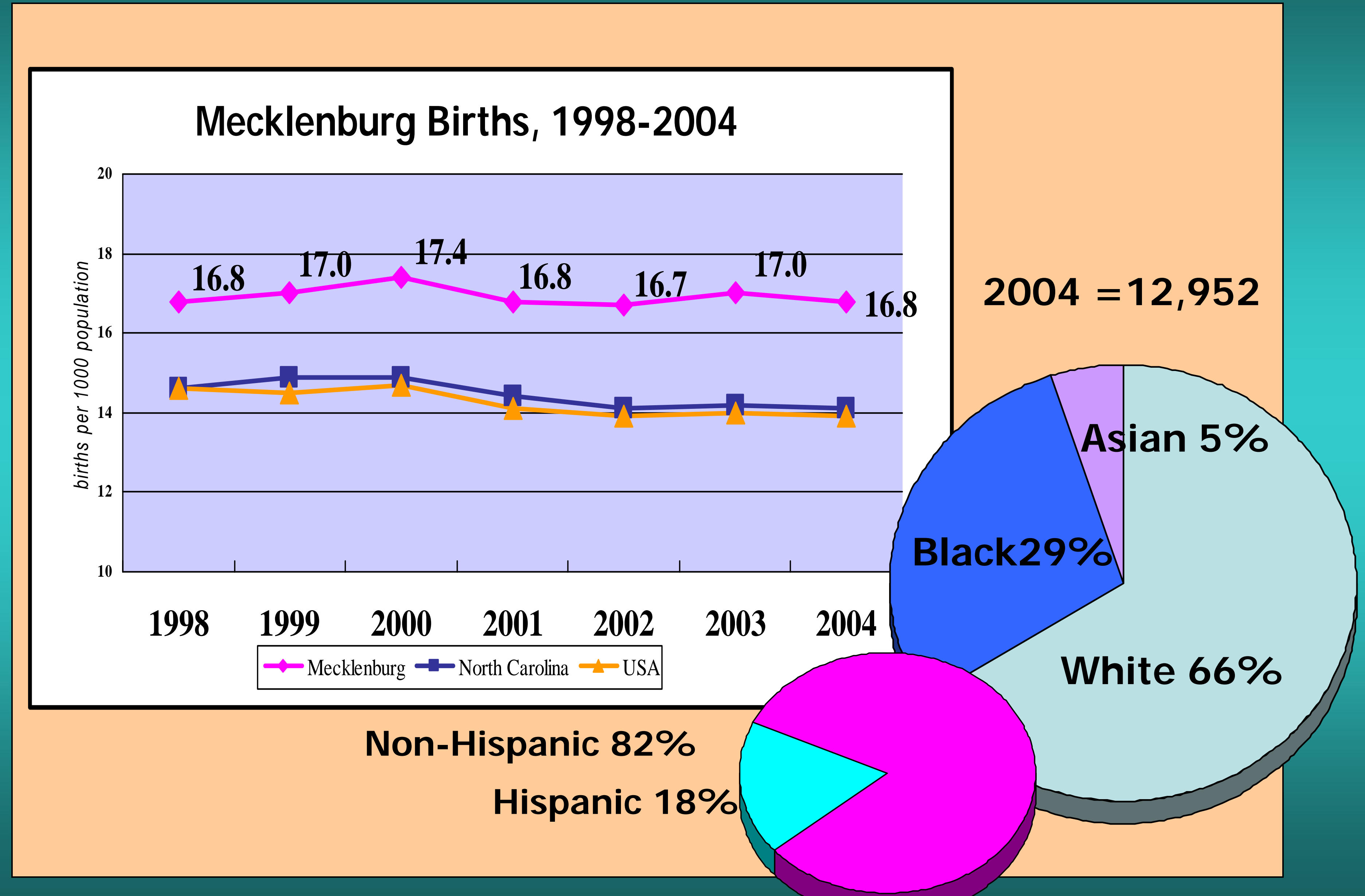
| | Mecklenburg | North Carolina |
|---|---|---|
| Median Household Income | $50,579 | $39,184 |




SOURCE: US Census 2000

# Natality




SOURCE: NC SCHS

# Mortality

Leading causes of death for the general population: cancer, heart disease, and stroke.

Leading cause of death for the Hispanic community, which as a group tends to be younger and healthier than the population as a whole: injury—motor vehicle crashes and homicide.

SOURCE: NC DHHS/SCHS, NCHS

Mecklenburg Community Health Assessment - 2006

+

Healthy Carolinians – UNC Health Initiative

↓

Hispanic Focus Group Project

# Hispanic Focus Group Project

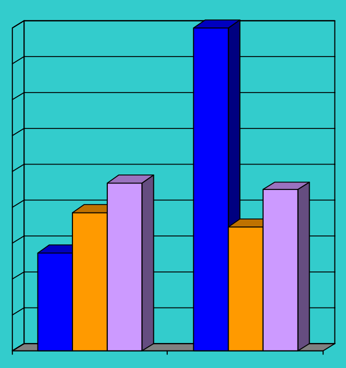
## Why?

To examine health needs and concerns of the emergent Latino population in Mecklenburg County.

→ Barriers to healthcare services

→ How information is obtained

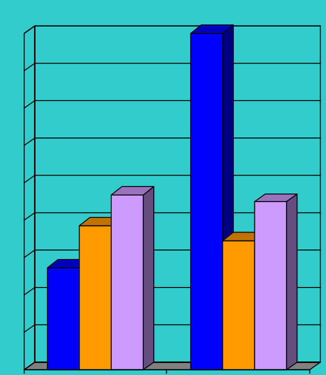
→ Preferred health topics and format



# Hispanic Focus Group Project

## What?

- 4 Focus Groups
- 4 Different sites in the County
- 78 Participants



## When?

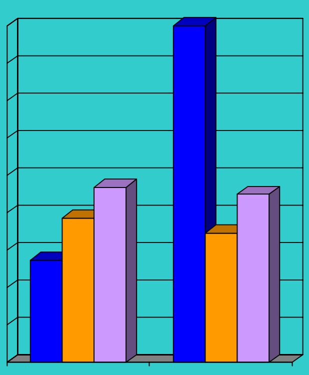
Fall of 2005

# Hispanic Focus Group Project

## Who?

**Target Participants**

- Latino origin, living in Mecklenburg County
- Spanish as first language
- Low Income
- Adult



# Hispanic Focus Group Project

## Profile of Participants

- Average age - 32.5 years
- Gender - 76% Female, 24% Male
- Avg time lived in US – 6 yrs
- Avg time lived in Mecklenburg – 4 yrs
- Nation of origin - 73% from Mexico
- Avg educational attainment -10.6 years

# Profile of Participants (cont'd)

- Income

  59% <$20,000, 34% $20,000-$39,999

- Health insurance - <7%
- Ownership of residence -72% rent, 23% own
- Job status

  27% employed FT, 19% PT, 40% homemaker

- Marital status – 50% married, 32% single

# Hispanic Focus Group Project

## Key Findings

### Where Healthcare Obtained

- Local bodega/self-prescribed remedies/treatments from native country
- Hospitals/EDs
- Private practices
- Low utilization of free clinics, health dept, health fairs
- Lack money to see doctor unless sick

# Hispanic Focus Group Project

## Key Findings

### Where Healthcare Information Obtained

- Churches
- Friends & family
- Word of mouth/neighborhood postings
- Some indicated doctors, clinics, media, & social services organizations like Mi Casa Su Casa & Solomon House
- Importance of trusted groups; fear of INS

# Hispanic Focus Group Project

## Key Findings

### Greatest Healthcare Needs

- Prescription drugs
- Health insurance
- Information on available services as well as services that are affordable and convenient to the work schedule
- Dental & vision care
- Specialist care

# Hispanic Focus Group Project

## Key Findings

### Desired Information/Education

- Numerous, diverse topics including gynecological health, child care and development, mental health, substance abuse, and STDs
- Classes/meetings should be free, conducted in Spanish, provide childcare, and be scheduled at a convenient time- evenings & Saturdays; lack of transportation could be a problem
- Suggestion from several people for English classes to help interact with healthcare providers

# Hispanic Focus Group Project

## Key Findings – Barriers

**Biggest Problem**

Communication issues with healthcare providers

- Perception of mistrust of and receiving poor treatment from healthcare workers
- High cost of healthcare
- Language barrier
- General lack of understanding of healthcare delivery system