

# Community Health Assessment

## *Wayne County*

**Calendar Year 2008**

(Secondary Data updated in 2010)

**Wayne County Health Department**

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## ***Acknowledgments***

Many thanks go out to all the individuals who shared data or assisted with the compiling of data for this years' Community Health Assessment.

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*Wayne County Health Department*

*Wayne County Public Schools*

*Wayne County Partnership for Children*

*Wayne Initiative for School Health (WISH)*

*Wayne Action Teams for Community Health (WATCH)*

*Wayne Action Group for Economic Solvency (WAGES)*

*NC Oral Health Section*

*Communities in Schools*

*North Carolina Cooperative Extension*

*Wayne County Department of Social Services*

*Wayne Memorial Hospital*



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# Introduction



## Introduction

A Community Health Assessment is a process involving many agencies to determine where public health needs exist. The assessment determines the health status of the community, identifies resources needed to address health and social problems, and provides a plan to improve the health status of the community. The Community Health Assessment examines data from many sources and involves stakeholders in the community to identify and offer solutions concerning issues that affect health. Community Health Assessments are mandated by the state, and is a joint project supported by the State Center for Health Statistics and the Office of the Healthy Carolinians. Most of the information in this report is provided through the State Center for Health Statistics, and can be accessed at the following website: <http://www.schs.state.nc.us/SCHS>. Other data sources that were used in this report can be found in the Reference Section, located towards the end of the document.

## 2008 Community Assessment Key Features

1. The Community Health Assessment (CHA) is available to anyone with Internet access at: <http://www.waynegov.com>. Click on Departments to access the Wayne County Health Department.
2. Internet access saves the county money in printing costs.
3. This document can be used by anyone wishing to understand key trends affecting the health of Wayne County residents.
4. Comparisons are made in most cases to state-wide and national averages.
5. The CHA has active links that allows the reader to go directly to our data sources. This is convenient for people doing research and writing grants. Please note that these links will direct the user to the website where the data can be found. We do not use links to the data web page because these links change frequently.
6. The CHA tracks changes in health status over long periods of time. This allows a more accurate picture of how our community's health is changing.
7. The CHA does not just focus on mortality and morbidity data but also on factors that affect health such as demographics, socioeconomic status, social indicators of well being, health insurance statistics both public and private and the Wayne County health care environment.

## A Note on Portraying Health Data by Race

Throughout the Community Assessment, Minorities are compared to Whites on a variety of health measures. For most measures, Minorities have lower health status than Whites, on average. This statistical pattern will, of course, not be true for many individual persons. The advantages of showing the data by race are obvious for targeting resources and interventions toward populations most in need; but hazards exist in interpreting the data. Race in and of itself does not cause poor health status. We do not have a complete understanding of why race is associated with health problems, but it is very likely that factors such as socioeconomic status, stress, and racism are among the underlying causes of the lower health status of minorities (on average) compared to Whites. These differences in health status have been termed "health disparities". One example of a health disparity is: African Americans die from heart disease at a rate 30% higher on average than whites. There is no doubt that health care resources are not allocated equally among individuals in our nation but by ones ability to pay. Addressing the striking differences in health status between whites and minorities must be a priority public health issue. A detailed discussion of this issue can be found at:

<http://www.schs.state.nc.us/SCHS/pdf/RaceEthnicRpt.pdf>

Many factors that contribute to a person's health status, such as socio-economic condition and education, are difficult to measure. However, demographic information is readily available. Thus, race (in addition to age and sex) often serves as a surrogate measure for a variety of other related factors.

## A Note on Interpreting Data

<sup>1</sup>When interpreting rates of mortality and morbidity, many factors must be taken into consideration. Rates based on fewer than 10 to 20 events in the numerator, or number of occurrences, may be subject to serious error, and as such, should be interpreted with extreme caution and reservation. A difference in only a few events, especially in a small population, can make a large difference in the rate. This is a problem with measures, such as infant mortality, in which there are usually only a few events per year. A single event, such as a traffic accident, in which two infants are killed could double or triple the infant mortality rate. Thus, caution should be used in interpreting rates based on small numbers of events.

One way to address this problem is to use five-year rates in which all events over the five-year period are combined and divided by the population estimate, or denominator, combined over the same time period. However, even over a period of five years, there may only be a few events and therefore the reported rates may still be unreliable. In this report, where practical, the actual numbers of people affected for mortality and morbidity statistics are given to assist with determining the actual stability of events.

Death rates may be presented as "crude" death rates, which are calculated as the number of deaths divided by the population at risk or as age adjusted death rates. Age adjusted death rates adjust for the population age distributions so that age of a population does not skew the results. This helps when comparing death rates of two counties, when one county has a younger population than the other.

Births and deaths are based on place of residence. College and military personnel are considered residents of the county in which they reside.

In this report, two broad categories of race are used; white and minority. Minority is predominately African-American. For births and fetal deaths, the child is considered to be of the same race as the mother.

-NC State Center for Health Statistics



# Demographics



## Wayne County Demographics

The graph and table below represents projected population data for Wayne County as of 2009. This information, in addition to providing a snapshot of the population, can be used to make predictions concerning public demand for services. Examples would be: estimating the number of children that could be expected to enroll in kindergarten, or estimating the number of Medicare recipients ten years from now in the county.

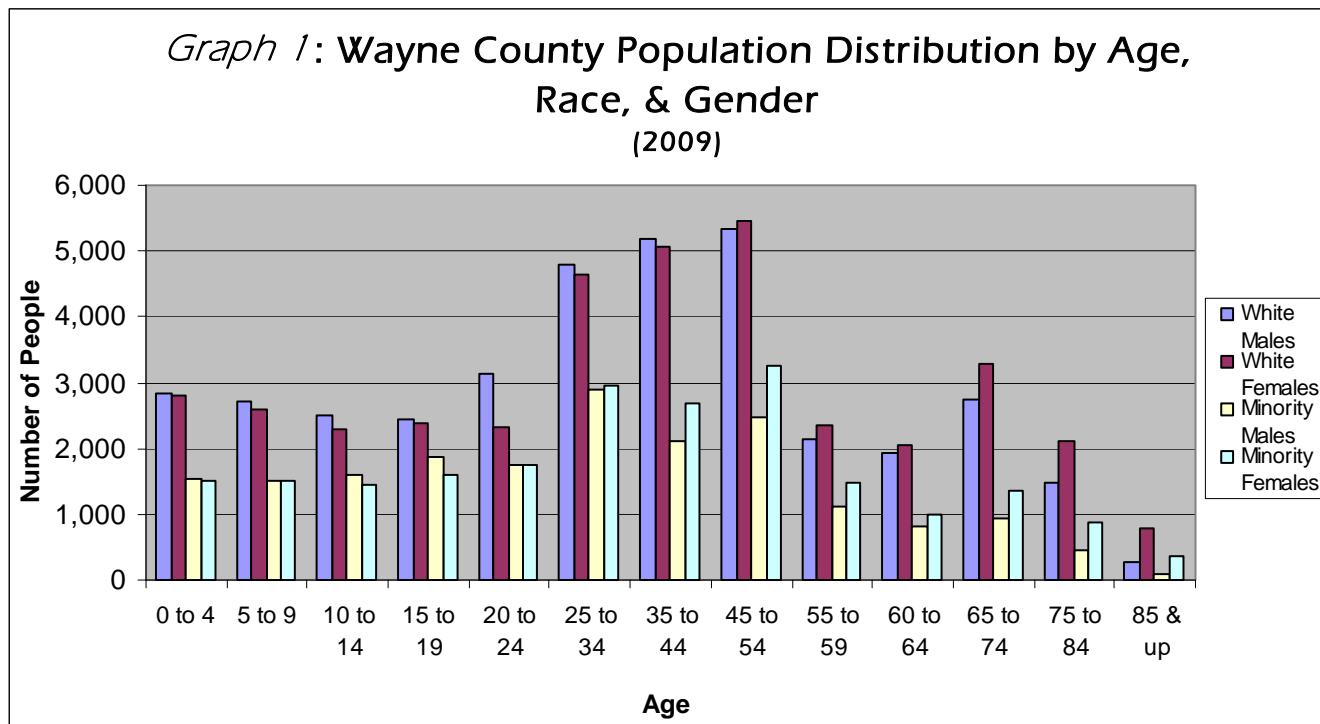


Table 1: Estimated Population as of July 2009 - distributed by Age, Race, and Gender

| <u>Age</u>   | <b>White</b>  |               | <b>Minority</b> |               | <b>Total</b>   |
|--------------|---------------|---------------|-----------------|---------------|----------------|
|              | <u>Male</u>   | <u>Female</u> | <u>Male</u>     | <u>Female</u> |                |
| 0 to 4       | 2,829         | 2,806         | 1,537           | 1,516         | 8,688          |
| 5 to 9       | 2,716         | 2,584         | 1,519           | 1,510         | 8,329          |
| 10 to 14     | 2,509         | 2,281         | 1,612           | 1,444         | 7,846          |
| 15 to 19     | 2,441         | 2,383         | 1,859           | 1,605         | 8,288          |
| 20 to 24     | 3,137         | 2,332         | 1,752           | 1,743         | 8,964          |
| 25 to 34     | 4,785         | 4,641         | 2,886           | 2,944         | 15,256         |
| 35 to 44     | 5,189         | 5,061         | 2,121           | 2,690         | 15,061         |
| 45 to 54     | 5,324         | 5,452         | 2,475           | 3,258         | 16,509         |
| 55 to 59     | 2,126         | 2,355         | 1,109           | 1,471         | 7,061          |
| 60 to 64     | 1,925         | 2,064         | 814             | 988           | 5,791          |
| 65 to 74     | 2,730         | 3,284         | 943             | 1,343         | 8,300          |
| 75 to 84     | 1,492         | 2,123         | 451             | 865           | 4,931          |
| 85 & up      | 285           | 787           | 92              | 361           | 1,525          |
| <b>Total</b> | <b>37,488</b> | <b>38,153</b> | <b>19,170</b>   | <b>21,743</b> | <b>116,554</b> |

Source: NC State Center for Health Statistics and <http://www.osbm.state.nc.us/>

Last updated: 09/13/2010

## Observations:

- The 2009 total projected population of Wayne County is, 116,554 up from the 114,930 projected population for 2006.
- Of the total population in Wayne County, 65% are White and 35% are minority. Seven point four percent (7.4%) of the total population are of Hispanic ethnicity (around 7,991 people).
- **Seymour Johnson Air Force Base** is located in Wayne County in the city of Goldsboro. It is home to the 4<sup>th</sup> Fighter Wing and the 916<sup>th</sup> Refueling Wing. As of 2007 there are 3,984 active duty military personnel and 5,280 total dependents. There are 956 Reservists/National Guard with Seymour Johnson Air Force Base. Seymour Johnson Air Force Base has been a positive force in Wayne County for more than 65 years and presently has an economic impact of \$468,000,000.
- School age (ages 5-19) population for Wayne County is approximately 24,463 (for pop year 2009). Although the total population has increased, this population has decreased by 434 since 2006.
- White males, in the age range 20-24, outnumber white females, most likely due to the location of the Air Force base in Wayne County.
- White females over the age of 65 out number all other race/gender populations over the age of 65.
- There are 14,756 people age 65 or older.

Table 2: Wayne County Births and Deaths 2001-2008

| Year | Births |          |       | Deaths |          |       |
|------|--------|----------|-------|--------|----------|-------|
|      | White  | Minority | Total | White  | Minority | Total |
| 2000 | 1,104  | 659      | 1,763 | 691    | 406      | 1,097 |
| 2001 | 1,119  | 619      | 1,738 | 651    | 378      | 1,029 |
| 2002 | 1,048  | 612      | 1,660 | 641    | 391      | 1,032 |
| 2003 | 1,102  | 605      | 1,707 | 724    | 322      | 1,046 |
| 2004 | 1,154  | 606      | 1,760 | 721    | 382      | 1,103 |
| 2005 | 1,182  | 633      | 1,815 | 668    | 390      | 1,058 |
| 2006 | 1,130  | 642      | 1,772 | 687    | 374      | 1,061 |
| 2007 | 1,190  | 612      | 1,802 | 707    | 382      | 1,089 |
| 2008 | 1,128  | 645      | 1,773 | 691    | 355      | 1,046 |

Source: <http://www.schs.state.nc.us/SCHS/data/pregnancies/2008/>

## **Observations:**

- The number of births has remained relatively consistent over the six-year period, as shown in table 2.
- The average number of births over the six-year period has been 1,771.5 per year, from 2003-2008.
- White births outnumber minority births in the ratio of almost 2:1.
- Resident deaths have averaged 1,067.2 per year from 2003-2008.





# Socioeconomic Information



**Table 3:**

Socioeconomic Information for Wayne County: Selected Indicators, Health Insurance and Medicaid

| <u>Indicator</u>                                                             |       | <u>2003</u> | <u>2004</u> | <u>2005</u> | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|------------------------------------------------------------------------------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Unemployment Rate</b><br>(%)                                              | Wayne | 6.3         | 5.4         | 5.2         | 4.8         | 4.5         | 5.8         | 9           | 7.9         |
|                                                                              | NC    | 6.5         | 5.5         | 5.2         | 4.8         | 4.7         | 6.2         | 10.6        | 9.1         |
| <b>Per Capita Income</b> (\$)                                                | Wayne | 22,564      | 23,139      | 23,584      | 24,901      | 26,141      | 27,417      |             |             |
|                                                                              | NC    | 27,493      | 27,640      | 28,071      | 29,322      | 31,041      | 32,247      |             |             |
| <b>Average Annual Wage</b><br>(\$)<br>(per worker)                           | Wayne | 25,364      | 25,792      | 26,312      | 27,456      | 28,288      | 29,276      |             |             |
|                                                                              | NC    | 32,026      | 32,708      | 33,540      | 34,788      | 35,932      | 37,440      |             |             |
| <b>Divorce Rate</b><br>(per 1,000 population)                                | Wayne | 4.7         | 5.3         | 4.8         | 4.7         | 4.2         | No data     |             |             |
|                                                                              | NC    | 4.6         | 4.4         | 4.2         | 4.2         | 4.1         | No data     |             |             |
| <b>Persons Receiving Food Stamps</b>                                         | Wayne | 7,960       | 8,719       | 9,578       | No data     | No data     | 13,275      |             |             |
|                                                                              | NC    | 483,015     | 555,591     | 624,167     | No data     | No data     | 842,363     |             |             |
| <b>Rate of Substantiated Child Abuse / Neglect</b><br>(per 1,000 population) | Wayne | 18.9        | 17.2        | 20.4        | 19.9        | 19          | *           |             |             |
|                                                                              | NC    | 16.6        | 16.1        | 14.5        | 11.7        | 10          | *           |             |             |
| <b>Violent Crime Rate</b><br>(per 100,000 population)                        | Wayne | 443.4       | 460.8       | 516.5       | 497.4       | 457.8       | 514         |             |             |
|                                                                              | NC    | 503.8       | 475.3       | 454.7       | 446.9       | 478.6       | 476         |             |             |

\* See observation notes regarding 2006 child abuse and neglect.

Sources: The Employment Security Commission of NC (Labor Market Information)

North Carolina State Center for Health Statistics

Log Into North Carolina (LINC)

NC SBI Division of Criminal Information (NC Crime Statistics)

CLICKS: Community-Level Information on Kids (The Annie E. Casey Foundation)

<http://linc.state.nc.us/>

<http://www.kidscount.org/cgi-bin/cliks.cgi>

<http://www.ncesc.com/lmi/default.asp?init=true>

<http://www.ncesc.com/lmi/laborStats/laborStatMain.asp>

**Table 4:** Poverty Rates Wayne County

|                                                |       | <u>2004</u> | <u>2005</u> | <u>2006</u> | <u>2007</u> | <u>2008</u> |
|------------------------------------------------|-------|-------------|-------------|-------------|-------------|-------------|
| <b>Poverty Rate</b>                            | Wayne | 15.40%      | 17.30%      | 16.80%      | 17.30%      | 18.30%      |
|                                                | NC    | 13.80%      | 14.90%      | 14.60%      | 14.30%      | 14.90%      |
| <b>Poverty Rate of Children</b><br>(≤ 18 yrs.) | Wayne | 18.90%      | 18.90%      | 22.30%      | 22.50%      | 5.60%       |
|                                                | NC    | 16.10%      | 16.10%      | 20.10%      | 19.50%      | 8.20%       |

<http://linc.state.nc.us/>

## Observations:

- During the years 2003 through 2008, the average annual wage in NC and in Wayne County has grown by 18%. The average annual wage in Wayne County is 15% lower than the state average - Wayne's average annual wage in 2008 was \$29, 276 as compared to the state average annual wage of \$37,440.
- The number of people receiving food stamps in Wayne County increased by 40% from 2003 to 2008. The number of people receiving food stamps in N.C. increased by 43% from 2003 to 2008.
- The unemployment rate In Wayne County, from 2003 – 2010 year has increased and is lower than the state average, for the same time period.
- The unemployment rate for Wayne County in 2009 was 9.0 % and as of September 2010 the unemployment rate is 7.9 as compared to NC at 9.1%.
- The percent of people living at or below the poverty rate in Wayne County has increased by 15% from 2004 – 2008.
- The number of substantiated abuse and neglect cases in Wayne County has remained about the same between 2003 and 2007. For 2007 Wayne County's rate is 47% higher than the state average. In 2005 Wayne County ranked 16<sup>th</sup> in the state for child abuse and neglect. This might be explained by the fact that local DSS authorities in Wayne County prefer to err in favor of the child and therefore any potential for abuse is documented and thus may cause numbers to be higher as compared to the state.
- \*In 2005-06 Wayne County had a child population of 29, 756 children under the age of 18 and 749 were found to be abused or neglected. North Carolina had a child population in 2005-06 of 2,133,982 children under 18 and 35,035 were found to be abused or neglected. Wayne County's rate of substantiated child abuse and neglect is higher than the state rate and continues to be a major concern for Wayne County. Based on a community assessment conducted by the United Way of Wayne County, child abuse & neglect was considered one of the top ten critical issues for Wayne County (ranked 7 out of 10).
- DSS reports (2004) that substance abuse is increasing as a factor for abuse and neglect cases, and approximately 75% of cases involve substance abuse.
- The number of work first recipients in Wayne County has decreased as reflected by the fact that in 1996 there were 5,440 monthly recipients as compared to 3,053 in 1999 and 1,408 in 2003. This data is not shown in chart form but is included here. The state number of work first recipients also decreased for the state with there being 285,524 in 1996 as compared to 152,589 in 1999 and 96,042 in 2003. According to DSS officials work first has impacted people in Wayne County in that you now have more working class poor. Work first recipients still get food stamps, Medicaid, and daycare assistance – they are not self-sufficient due to low paying wages. However, there is less dollars going to these individuals. Socially, DSS officials consider it a concept that is good for their children and may change the future for their children in that children now see Mom and Dad employed versus no job and receiving public assistance. In terms of whether Work First has increased the poverty rate, DSS officials state they do not know that it increased the poverty rate but instead we now have more working poor. DSS officials

feel there should be an education component to work first in order to prepare recipients with the skills they need in order to get higher paying jobs.

➤ The violent crime rate for Wayne County has increased and was listed as the number one concern through a needs assessment conducted by United Way. Gang activity in Wayne County is a concern and is being addressed by local law enforcement officials.

**Discussion:**

There is a strong association between socioeconomic status and health status. Poverty accounts for many of the health disparities observed in this assessment. Adults living at or below the poverty level most likely will be uninsured and not have access to a regular source of medical care. The threshold for measuring poverty level for a family of four with no children in 2010 is a yearly income of \$22, 541.00 (Census Bureau (census.com)). A positive influence on the economy of Wayne County is WAGES (Wayne Action Group for Economic Solvency). This agency assists the community with a variety of programs designed to promote self-sufficiency. WAGES programs span administration of the Head Start program to offering a pharmacy assistance program for senior citizens – this program has since been eliminated due to budget cuts that occurred after the initial 2008 Community Health Assessment process.

Seymour Johnson Air Force Base located in Goldsboro, NC is home to the world's largest F-15E wing and the only F-15E Demonstration Team. The base occupies over 3,300 acres in the southeast section of Goldsboro. Seymour Johnson AFB is home to the 4th Fighter Wing and a tenant Reservist wing, the 916th Air Refueling Wing. The 4th Fighter Wing maintains support for 96 F-15E Strike Eagles valued at approximately \$50 million dollars per jet. The wing is part of the 9th Air Force, Air Combat Command. The fourth has a long, distinguished history supporting numerous aircraft platforms and conflicts and was the first operational F-15E Strike Eagle Wing in the Air Force. Seymour Johnson AFB has a population of more than 11,800 active duty, Reservists and civilian employees. According to the FY09 economic impact analysis, Seymour Johnson Air Force Base contributed \$592 million to Wayne County. For more information about the 4th FW and the 916th ARW, visit [www.seymourjohnson.af.mil](http://www.seymourjohnson.af.mil) and [www.916arw.afrc.af.mil](http://www.916arw.afrc.af.mil) (updated 12/10)

The following comments are from Joanna Helms, President, Wayne County Development Alliance, Inc. "Our efforts at the Development Alliance are very focused on recruiting industries that will pay at or above the average manufacturing wage (about \$14.50/hour). The last several years we have done that. We want to get real living wages...not just jobs. As far as future employment opportunities, the best chances lay with existing industry that will grow and expand...that's where 80% of new jobs come from. In 2010 we had several companies that expanded their workforce or announced plans to do so in 2011. We anticipate this will add a net increase of about 230 jobs. We had one plant closure announced for mid 2011 which will result in the loss of about 40 jobs. In general prospects for 2011 look conservative as far as new job growth in that we are still weathering a slow economic recovery from the 2008 recession." (updated 12/10)

Wayne County ranks fourth in the state in regards to agriculture cash receipts. Agriculture alone has a significant impact on our local economy, totaling over \$373 million annually from direct farm income. When you combine agriculture and agribusiness together they bring in over \$763 million of income into the county which represents 22.4% of the county's income

and 20.7 of the county's employment. Wayne County ranks 3<sup>rd</sup> in the state in turkeys, 4<sup>th</sup> in swine and 5<sup>th</sup> in flue-cured tobacco, wheat and corn. In 2005, *Farm Futures Magazine* identified Wayne County as the 5<sup>th</sup> best place in the country to farm. This ranking was based on the Census of Agriculture data from 1987 through 2002 and measured return on assets, net profits per farm, sales growth, asset growth and profit growth. (updated 12/10)



# Health Insurance

## Public & Private



**Table 5: Number and Percent of Population (ages 0-64) Without Health Insurance**  
 (Wayne County and North Carolina)

| YEAR | BELOW AGE 18 |      | AGES 18-64 |       | TOTAL (<65 YRS) |      | STATE<br>(TOTAL <65 YRS) |
|------|--------------|------|------------|-------|-----------------|------|--------------------------|
|      | Number       | %    | Number     | %     | Number          | %    | %                        |
| 1999 | 3,339        | 11.8 | 16,768     | 22.71 | 20,107          | 19.7 | 17.3                     |
| 2000 | n/a          | n/a  | n/a        | n/a   | n/a             | n/a  | 14.6                     |
| 2001 | 3,160        | 10.7 | 16183      | 23.0  | 19344           | 19.4 | 16.3                     |
| 2002 | 4,057        | 13.1 | 16,518     | 24.0  | 20,575          | 20.6 | 19.0                     |
| 2003 | 3,519        | 11.9 | 16,358     | 23.7  | 19,877          | 20.1 | 19.4                     |
| 2004 | 3,605        | 12.1 | 14,922     | 21.1  | 18,527          | 18.4 | 17.5                     |
| 2005 | 3,819        | 12.8 | 14,759     | 20.9  | 18,578          | 18.5 | 17.2                     |

Source: <http://www.shepscenter.unc.edu/publications.html>

Table 5 shows the estimated number and percent of the total of uninsured people in Wayne County for the years 1999-2005. Out of 100 counties in North Carolina, Wayne County ranked 47<sup>th</sup> in the state for percent population without health insurance in the age group 18-64. In looking at our rank statewide for children below age 18 Wayne County ranked 73<sup>rd</sup> which means that Wayne County is almost in the bottom 25<sup>th</sup> percentile. As a result of updating data in 2010 there were 5,000 children in 2007 in Wayne County without health insurance (note that 2007 data is not reflected in the chart above). Data Source: kidscount.org.

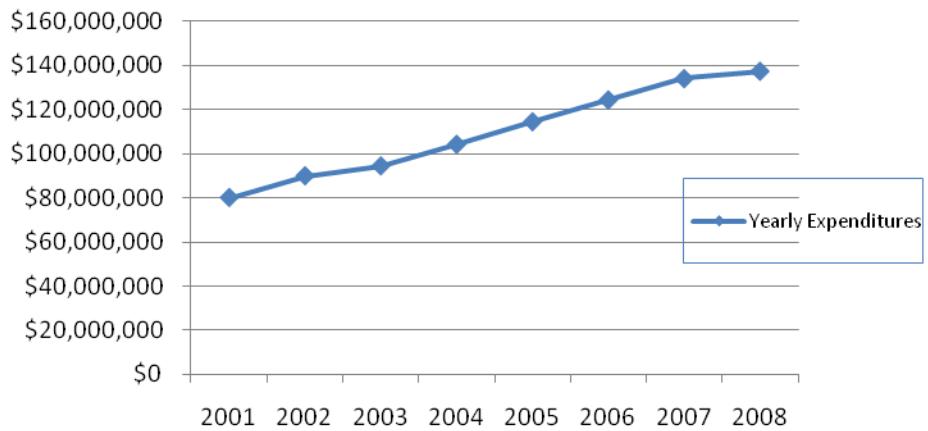
In most cases access to health insurance is either a privilege through employment, or a right as a result of qualifying for public insurance such as Medicaid, Health Choice or Medicare. Unless indigent adults are over age 64, they most likely will not have health insurance. The lack of health insurance further contributes to health disparities, and certainly is a factor in an individual's health.

**Table 6: Medicaid**  
 Stats for Wayne Co.

| Year | Number of Eligible | Eligible 0-19 yrs | Total Expend. | Expend per Eligible | %Mcaid Eligible | Number of Mcaid Births | Hlth Choice Enrollment |
|------|--------------------|-------------------|---------------|---------------------|-----------------|------------------------|------------------------|
| 2001 | 23,849             | 13,285            | \$79,995,632  | \$3,354             | 21.04%          | 1,116                  | 765                    |
| 2002 | 23,839             | 13,399            | \$89,885,496  | \$3,771             | 21.06%          | 1,071                  | 1,067                  |
| 2003 | 24,544             | 13,916            | \$94,369,663  | \$3,845             | 21.56%          | 1,038                  | 1,181                  |
| 2004 | 24,986             | 14,162            | \$104,202,946 | \$4,170             | 21.92%          | 1,126                  | 1,333                  |
| 2005 | 25,358             | 15,583            | \$114,468,551 | \$4,514             | 22.03%          | 1,100                  | 1,471                  |
| 2006 | 26,573             | n/a               | \$124,387,615 | \$4,681             | 22.96%          | n/a                    | 1,211                  |
| 2007 | 26,897             | 15,585            | \$134,087,543 | \$4,985             | 23.40%          | 1,062                  | n/a                    |
| 2008 | 27,504             | n/a               | \$137,481,246 | \$4,999             | 23.87%          | n/a                    | 1,980                  |

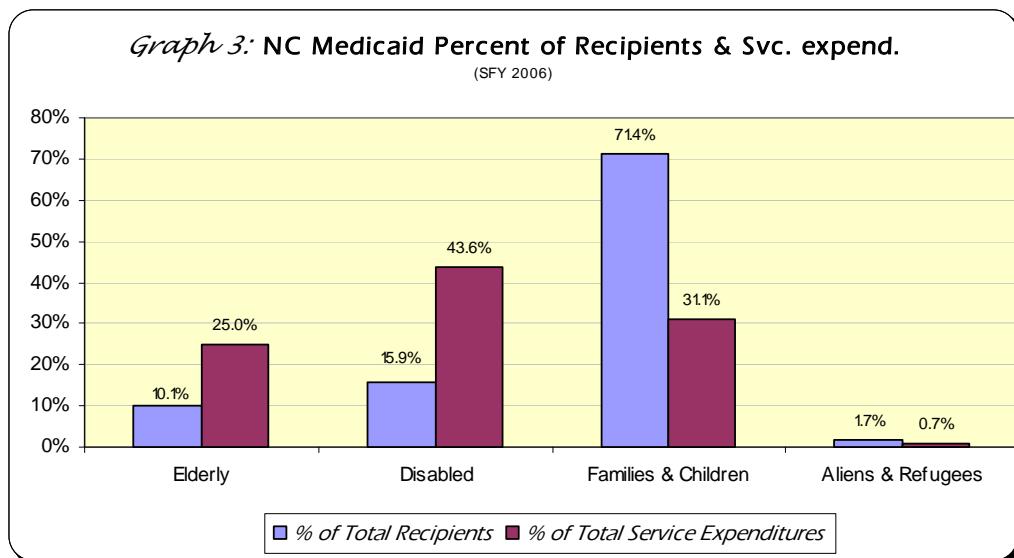
Source: NC Division of Medical Assistance  
<http://www.ncdhs.gov/dma/publications.htm>

*Graph 2: Wayne County Medicaid Expenditures  
(2001-2008)*



*Graph 3: NC Medicaid Percent of Recipients & Svc. expend.  
(SFY 2006)*

**Graph 3:** Medicaid Stats for NC



### Observations:

- Medicaid spending in Wayne County has increased by a little over 70% during the period of 2001-2008.
- The Elderly and Disabled population account for 29% of the Medicaid recipients and 69% of the expenditures. Families and Children make up 69% of the Medicaid population, but only 30% of the expenditures.
- Wayne County Government has \$8.4 million budgeted for Medicaid expenditures for Fiscal Year (FY) 2007-2008.
- Most children enrolled in Health Choice ages 0-5 were transferred to Medicaid, January of 2006.
- Without Medicaid and Health Choice many residents of Wayne County would be uninsured.

## Discussion:

Medicaid provides public medical insurance primarily to children, pregnant women, the disabled and the elderly. Medicaid expense is a major financial commitment for counties. Medicaid reform enacted October of 2007 is expected to take most of the financial burden of Medicaid off local government. Reform will be accomplished by the counties in NC relinquishing part of the local sales tax to the state. The sales tax give back to the state will be phased in over a four year period.

Medically, Medicaid is vitally important in reducing infant mortality, reducing out of wedlock births, reducing hospitalizations and ensuring a high standard of health among children. Economically, Medicaid brings in two federal dollars for every state dollar spent. Businesses and individuals who earn Medicaid dollars impact local economies by spending these dollars locally. A pregnant woman, in a family of four, qualifies for Medicaid if the monthly household income is \$2,984 or less.

In North Carolina, elderly and disabled individuals account for 69% of expenditures (fiscal year 2003), with women and children accounting for the remaining expenditures. Stated another way, pregnant women and children comprise two-thirds of recipients, but less than 27% of total costs. Statewide, approximately \$7 billion was spent for more than 1.3 million people.

## Medicaid Expenditures

In Table 7, seen below, statewide Medicaid expenditures for each type of service are shown. Inpatient hospitalization and other non-long term services are the biggest Medicaid expenses, but has had small increases in spending for the time period shown.

**Table 7: Comparison of Statewide (North Carolina) Medicaid Expenditures and Category of Expenditures**  
(State Fiscal Year – 2007 vs. 2008)

| Type of service               | 2007 Expenditures  | 2008 Expenditures  | % Change |
|-------------------------------|--------------------|--------------------|----------|
| Prescription Drugs            | \$922,328,332.00   | \$973,762,882.00   | 5.60%    |
| Inpatient Hospital            | \$1,018,765,315.00 | \$1,073,691,222.00 | 5.40%    |
| Physician                     | \$853,548,695.00   | \$903,005,553.00   | 5.80%    |
| Mental Hospitals              | \$7,749,981.00     | \$3,689,306.00     | -52.40%  |
| Outpatient Hospital – general | \$624,208,200.00   | \$657,311,343.00   | 5.30%    |
| Medicare Part B Premiums      | \$301,106,491.00   | \$318,382,153.00   | 5.70%    |
| Dental                        | \$240,226,701.00   | \$269,692,850.00   | 12.30%   |

Note: all expenses are not shown

Source: <http://www.ncdhhs.gov/dma/publications.htm>

### Observations:

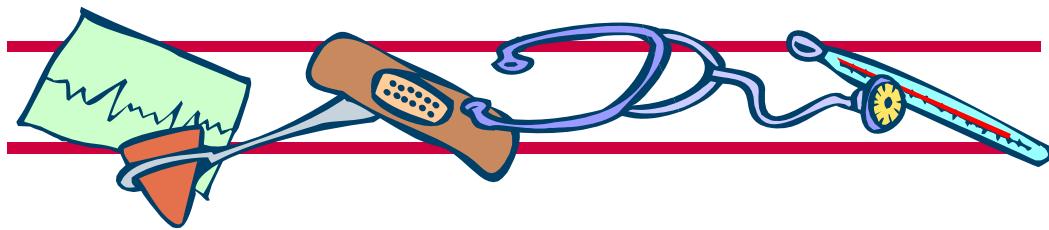
- Inpatient Hospital service represents the largest category of Medicaid costs.
- The total statewide Medicaid expense for 2008 was \$9.085 billion compared to \$9.012 billion for 2007, an increase of 0.8%.

**Table 8: Annual Change in National Health Care Spending, 1995-2006**

| Year | Increase (%) |
|------|--------------|
| 1995 | 2.2          |
| 1996 | 2            |
| 1997 | 3.3          |
| 1998 | 5.3          |
| 1999 | 7.1          |
| 2000 | 7.8          |
| 2001 | 10           |
| 2002 | 9.6          |
| 2003 | 7.4          |
| 2004 | 8.2          |
| 2005 | 7.4          |
| 2006 | 7.4          |

Health care spending per privately insured American increased 8.2% in 2004; growing nearly four times faster than the overall economy. The rate of growth has slowed slightly from 2001 when spending increased by 10%. Strategies such as higher co-pays and using generic drugs may slow the rate of growth, but Americans demand the best health care and the best technology; both of which drive the price of health care upwards.

*Source:* <http://www.hschange.org/>



# Health Care Environment



## Wayne County Health Care Environment

**Table 9:** Health Professionals in Wayne County, (2008)  
*Source:* UNC Sheps Center, 2010

The table to the right shows the number of persons credentialed in several health professions residing in Wayne County. There are a total of 80 primary care physicians reported in 2008.

There are 6.9 primary care physicians per 10,000 population, compared to the state average of 9.0 primary care physicians per 10,000. Wayne County has approximately 4.0 dentists per 10,000 population, compared to the state average of 4.3 dentists per 10,000 population.

The Health Department has a dental program targeted at providing care to Medicaid & Health Choice patients and to a limited number of uninsured as a means of meeting dental care needs in Wayne County.

Wayne Initiative for School Health (WISH) program:

| Encounter Description | Number | Encounter Description | Number |
|-----------------------|--------|-----------------------|--------|
| Vaccinations          | 297    | Mental Health         | 977    |
| Audio Screen          | 218    | Spirometry            | 35     |
| Health Education      | 821    | Vision Screening      | 449    |
| Visit to RN or FNP    | 10,121 | Diet/Nutrition        | 670    |

Table 10 shows encounter information for the WISH program. (Information presented in the above table is based on information from the four middle school WISH centers.) WISH is a school based health clinic started in 1997 to address five specific health problems; asthma, mental health, lack of well care/ dental care, teen pregnancy and attention deficit disorders. WISH is beneficial in terms of providing easy access for children to a medical provider. WISH centers are based in four middle schools: Goldsboro Intermediate, Mt. Olive Middle, Brogden Middle, Dillard Middle, and two high schools: Goldsboro High School and Southern Wayne High School. The rate of emergency room visits and the number of school suspensions have declined in the schools housing WISH centers. Each center has a part time mid-level provider (PA or FNP) and a full time RN. The Health Department contributes registered dieticians and health educators. Mental health services are provided in kind by Wellsprings, P.A., and Linda Newsome & Associates. The goal of the WISH Health Centers is to help students succeed in school by promoting healthy lifestyles and providing comprehensive health care services.

| Provider Type             | No.  |
|---------------------------|------|
| Primary Care MDs          | 80   |
| FP                        | 30   |
| GP                        | 5    |
| Internal Med              | 23   |
| OBGYN                     | 7    |
| Pediatrics                | 15   |
| Other Specialties         | 96   |
| Dentists                  | 46   |
| Dental Hygienists         | 85   |
| Registered Nurses         | 1029 |
| Nurse Practitioners       | 31   |
| Certified Nurse Midwives  | 0    |
| Licensed Practical Nurses | 287  |
| Chiropractors             | 11   |
| Optometrists              | 10   |
| Pharmacists               | 86   |
| Physical Therapists       | 38   |
| Physician Assistants      | 33   |
| Podiatrists               | 2    |
| Practicing Psychologists  | 15   |
| Respiratory Therapists    | 43   |

**Table 10: WISH Encounter Information**  
*August 2004 to May 2005*

## Wayne County School Health Program:

**Table 11:** School Health Program

| YEAR          | # of Students w/<br>Chronic Health<br>Problems | # of Students Requiring<br>Invasive Procedures at<br>School | # of Students Requiring Daily<br>Medications at School |
|---------------|------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------|
| 2005-<br>2006 | 4,856 (26%) NC: 15%                            | 254                                                         | 1,350 (7%) NC: 1%                                      |
| 2006-<br>2007 | 4,322 (26%) NC: 17%                            | 378                                                         | 2,047 (11%) NC: 2%                                     |
| 2007-<br>2008 | 5,575 (28%) NC: 15%                            | 454                                                         | 2,008 (10%) NC: 2%                                     |
| 2008-<br>2009 | 5,753 (30%) NC: 17%                            | 410                                                         | 1,871 (10%) NC: 2%                                     |
| 2009-<br>2010 | 3729 (20%) NC: *                               | 478                                                         | 1,989 (10%) NC: *                                      |

\* 2009-2010 data unavailable

*Sources:* School Health End of Year Report for Wayne County  
North Carolina Annual School Health Services Report for Public Schools 2007-2008  
NCDHHS Division of Public Health (Women's & Children's Health Section).

Wayne County Public Schools employs school nurses through Wayne Memorial Hospital. There are a total of 17 full time school nurses. One of these school nurses serves Edgewood Developmental School full time. Nine school nurses are funded by the State of North Carolina, three of which are through the School Nurse Funding Initiative. Six are Child and Family Support Team (CFST) Nurses. The CFST Nurses are teamed with Social Workers to identify students at risk of academic failure and out of home placement. Each team serves one school. The remaining schools have a school nurse available to provide services to students up to three days per week. All school nurses must become nationally certified within three years of employment. The school nurses will assess any student for any reason free of charge and without an appointment. The program's main purpose is to ensure that students with health problems are able to attend school, and that staff members are able to safely manage their care. School nurses provide a variety of trainings for employees including medication, blood borne pathogen, CPR/First Aid and diabetes trainings. Asthma is the most frequent health problem of students; however, the number of students with diabetes and other chronic health conditions requiring invasive procedures (ex. EpiPens, tube feedings, catheterizations, injections) increases each school year.

- The percentage of students with chronic health conditions is higher in Wayne County in comparison with the state of NC in 2008-2009.

## Wayne Action Teams for Community Health Program:

Table 12: W.A.T.C.H. (Wayne Action Teams for Community Health) Mobile Unit Stats:

| Yearly Totals       | # of sites visited | # hours seeing patients | # volunteer hours | # of new patients | Cumulative registered patients | Patient visits |
|---------------------|--------------------|-------------------------|-------------------|-------------------|--------------------------------|----------------|
| 2000-2001 (Year 1)  | 183                | 1,057.50                | 647.75            | 1,127             | 1,127                          | 2,051          |
| 2001-2002 (Year 2)  | 217                | 1,261                   | 1,239             | 1,550             | 2,677                          | 4,788          |
| 2002-2003 (Year 3)  | 241                | 1,511                   | 1,917.50          | 1,660             | 4,337                          | 6,633          |
| 2003-2004 (Year 4)  | 246                | 1,501                   | 1,791             | 1,161             | 5,498                          | 7,026          |
| 2004-2005 (Year 5)  | 254                | 1,540                   | 1,168             | 1,070             | 6,568                          | 7,677          |
| 2005-2006 (Year 6)  | 132                | 1500                    | 1,168             | 723               | 7,291                          | 7,529          |
| 2006-2007(Year 7)   | 235                | 1,559.50                | 1,458.25          | 309               | 7,600                          | 5,745          |
| 2007-2008 (Year 8)  | 225                | 1,549.25                | 1,629.25          | 495               | 8,095                          | 5,372          |
| 2008-2009 (Year 9)  | 232                | 1,570                   | 1,085             | 1,604             | 8,699                          | 6,913          |
| 2009-2010 (Year 10) | 444                | 2,944                   | 771.75            | 1,259             | 9,958                          | 11,343         |
| <b>TOTALS</b>       | <b>2,531</b>       | <b>15,993.25</b>        | <b>12,842.85</b>  | <b>9,958</b>      | <b>9,958</b>                   | <b>65,077</b>  |

Table 12 documents services provided by the free Mobile Medical Unit operated by W.A.T.C.H.. The forty-foot mobile medical unit travels the county on a monthly basis to 20 predetermined sites and provides free basic and acute healthcare to the uninsured population of Wayne County. Care is provided for patients who do **not** have Medicaid, Medicare or private insurance coverage. Free laboratory services are also provided. The WATCH Mobile Unit employs a full-time nurse practitioner and utilizes volunteer physicians from the community. An experienced health educator works with this patient population and affected family members. There are 2 pharmaceutical agents who seek free pharmaceuticals. Over 4.2 million worth of medications have been ordered in the past eight years. Table 12 on the previous page documents the ever increasing need of those who lack health insurance in Wayne County.

W.A.T.C.H. (Wayne Action Teams for Community Health ) was organized as the first step in a venture for a healthier Wayne County. WATCH has used the Wayne Memorial Hospital Foundation as it's 501C (3) vehicle (Wayne Health Foundation doing business as WATCH). WATCH also serves as the *Healthy Carolinians Task Force* for Wayne County. Four priorities were established to target the identified priorities as noted through a prior community health survey. Priorities are as follows (1) **Access to Care** (WATCH Mobile Unit ) (2) **Teen Pregnancy Prevention**(3) **Substance Abuse** and (4) **Healthy Behaviors**. The Teen Pregnancy Prevention Program began in 2000. One health educator works in a local inner city high school and provides group and one –on –one education to students. According to WATCH data the number of pregnancies at this high school have been reduced by 50% when compared to the initial year's data. The Substance Abuse Take Force published the first ever Substance Abuse Resource Guide on treatment options within a 50-mile radius of Wayne County. The guide is given to lawyers, clergy, physicians, business and industry HR departments, and community leaders. The Healthy Behaviors Task Force is committed to teaching and assisting

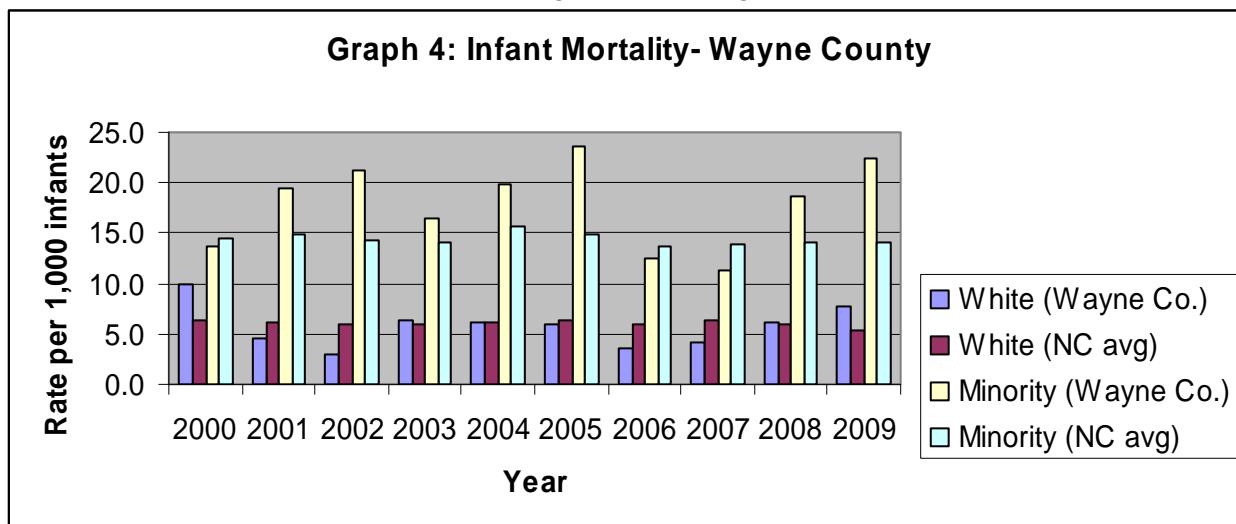
people to develop healthy behaviors. This group has been instrumental in the expansion of the Meals on Wheels Program, lower fat milk options in Wayne County Public Schools and several members of this task force presently serve on the Stoney Creek Park Alliance. The Stoney Creek Park Alliance is involved in developing a 32 acre park in Goldsboro. The Healthy Behaviors Task Force is also working with the Wayne County Partnership for Children to reduce the incidence of obesity of children in Wayne County.



# Infant Mortality & Maternal Health



# Infant Mortality and Maternal Health Indicators (Wayne County)



★ Note: Infant death is defined as the death of a live-born child less than one year of age.

Table 13: Infant Mortality 2000-2009, Wayne County

| YEAR | WHITE  |      |              | MINORITY |      |              | TOTAL # OF DEATHS |
|------|--------|------|--------------|----------|------|--------------|-------------------|
|      | Number | Rate | NC Avg. Rate | Number   | Rate | NC Avg. Rate |                   |
| 2000 | 11     | 10.0 | 6.3          | 9        | 13.7 | 14.4         | 20                |
| 2001 | 5      | 4.5  | 6.1          | 12       | 19.4 | 14.8         | 17                |
| 2002 | 3      | 2.9  | 5.9          | 13       | 21.2 | 14.2         | 16                |
| 2003 | 7      | 6.4  | 5.9          | 10       | 16.5 | 14.0         | 17                |
| 2004 | 7      | 6.1  | 6.2          | 12       | 19.8 | 15.6         | 19                |
| 2005 | 7      | 5.9  | 6.4          | 15       | 23.7 | 14.9         | 22                |
| 2006 | 4      | 3.5  | 6            | 8        | 12.5 | 13.6         | 12                |
| 2007 | 5      | 4.2  | 6.3          | 7        | 11.4 | 13.9         | 12                |
| 2008 | 7      | 6.2  | 6            | 12       | 18.6 | 14.1         | 19                |
| 2009 | 8      | 7.7  | 5.4          | 14       | 22.4 | 14.1         | 22                |

Note: Rates are per 1,000 births

Source: <http://www.schs.state.nc.us/SCHS/deaths/ims/2009/>

## Observations:

- As stated earlier, any results based on less than 10-20 events must be interpreted with caution.
- In reviewing the above data for 2000 to 2009, Wayne County has seen an overall increase in infant mortality. In 2000 there were 20 deaths as compared to 22 in 2009.
- Since 2000, in Wayne County, 64 white babies died compared to 112 minority babies. Infant mortality continues to be a major concern for Wayne County. Entrance into early and consistent prenatal care is crucial to the health and well-being of mother and baby.
- In 2008 & 2009 the infant mortality rate for whites and minorities in Wayne County was higher than the state rate. (continued on page 28)

## Discussion:

Infant death rates are prone to fluctuation because of the small number of events as mentioned earlier. (Rates based on small numbers (fewer than 20 cases) are unstable and should be interpreted with caution). It appears that minorities are affected by a higher rate of infant mortality than whites; also the number of minority infant deaths has remained relatively the same from 2000 to 2009. Overall infant mortality in Wayne County for 2000 to 2009 has seen a slight increase.

Table 14: Maternal Health Indicators: Wayne County and State Averages

| <u>Indicator</u>                                              | Wayne Co.<br>(Rate) |             |             | State<br>(Rate) |             |             | Wayne Rate | State Rate |
|---------------------------------------------------------------|---------------------|-------------|-------------|-----------------|-------------|-------------|------------|------------|
|                                                               | Yr.<br>2004         | Yr.<br>2005 | Yr.<br>2006 | Yr.<br>2004     | Yr.<br>2005 | Yr.<br>2006 | 2002-2006  | 2002-2006  |
| Percent of High Parity Births<br><i>(4 or more)</i>           | 9.6                 | n/a         | n/a         | 8.3             | n/a         | n/a         | 20.7       | 18.1       |
| Age of Mother < 30 yrs.                                       |                     |             |             |                 |             |             |            |            |
| Percent of High Parity Births<br><i>(4 or more)</i>           | 8.5                 | n/a         | n/a         | 9.3             | n/a         | n/a         | 19.5       | 19.1       |
| Age of Mother > 30 yrs.                                       |                     |             |             |                 |             |             |            |            |
| Percent Receiving Care - 1 <sup>st</sup> Trimester (Total)    | 12.6                | 68.9        | 70.3        | 83.3            | 82.7        | 81.9        | 71.6       | 83.0       |
| Percent Receiving Care - 1 <sup>st</sup> Trimester (Minority) | 65.2                | 66.3        | 63.2        | 76.8            | 76.6        | 76.1        | 64.5       | 75.4       |
| Percent Low Birth Weight Births (Total)                       | 7.7                 | 10.0        | 8.7         | 7.1             | 9.2         | 9.1         | 9.4        | 9.1        |
| Percent Low Birth Weight Births (Minority)                    | 10.1                | 12.9        | 12.6        | 10.0            | 13.7        | 13.4        | 13.7       | 13.5       |
| Percent of Very Low Birth Weight Births (Total)               | 2.1                 | 1.9         | 1.9         | 1.9             | 1.9         | 1.8         | 2.0        | 1.9        |
| Percent of Very Low Birth Weight Births (Minority)            | 3.3                 | 3.2         | 3.6         | 3.4             | 3.4         | 3.1         | 3.4        | 3.6        |
| Weight Gain of Mother < 20 lbs. (Total)                       | 20.1                | 20.1        | 22.0        | 17.9            | 17.5        | 17.6        |            |            |
| Weight Gain of Mother < 20 lbs. (Minority)                    | 23.6                | 24.1        | 27.1        | 23.0            | 22.3        | 22.0        |            |            |

★ Note: The above rates are reported as percentages (%).

Source: NC State Center for Health Statistics

## Observation:

- Women in Wayne County enter into pre-natal care at a later stage than the state average.

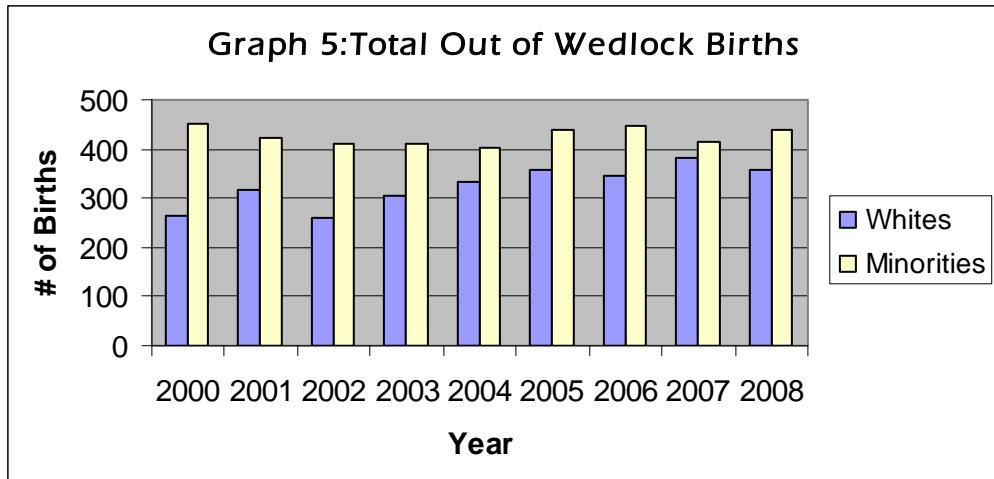
## Discussion:

Table 14 compares maternal health indicators for Wayne County with the state average. This data can help identify factors leading to poor birth outcomes. Wayne County appears to have a low percentage of pregnant women receiving adequate prenatal care during the first trimester. Most of the indicators shown for Wayne County seem to mirror the state average. Overall, the maternal health indicators listed have remained consistent across the time period listed. Outreach efforts to minorities may ensure that women are receiving support services such as Medicaid, prenatal care, and WIC to reduce infant mortality among minorities.

### Total Out-of-Wedlock Births: Wayne County

| Table 15: Number/Rate Out-of-Wedlock Births<br>(by Race) |        |      |          |      |
|----------------------------------------------------------|--------|------|----------|------|
| Year                                                     | White  |      | Minority |      |
|                                                          | Number | Rate | Number   | Rate |
| 2000                                                     | 264    | 23.9 | 450      | 68.3 |
| 2001                                                     | 317    | 28.3 | 424      | 68.5 |
| 2002                                                     | 260    | 24.8 | 411      | 67.2 |
| 2003                                                     | 303    | 27.5 | 412      | 68.1 |
| 2004                                                     | 333    | 28.9 | 404      | 66.7 |
| 2005                                                     | 359    | 30.4 | 438      | 69.2 |
| 2006                                                     | 346    | 30.6 | 448      | 69.8 |
| 2007                                                     | 383    | 32.0 | 416      | 68.0 |
| 2008                                                     | 358    | 31.7 | 441      | 68.4 |

Source: <http://www.schs.state.nc.us/SCHS/vitalstats/volume1/2008/wayne.html>



## Observations:

- In 2008 the total number of out of wedlock births in Wayne accounted for 50% of the total births (1,661) as compared to the state average of 42%.
- The number and rate of total white out of wedlock births decreased while the number and rate of total minority out-of-wedlock total births increased from 2007 to 2008. The rate for out-of-wedlock births for minorities is twice that of whites. However, the trend for out of wedlock births for whites has increased since 2000 whereas the out of wedlock trends for nonwhites has remained about the same.
- The total number of out-of-wedlock births in Wayne County in 2008 was 799, the same number in 2007. This is an indicator of need for family planning services in Wayne County and easier access to those services (satellite clinics).

## Discussion:

The high number of out-of-wedlock births may indicate the need for enhanced marketing and promotion of family planning services to sexually active women. It would be interesting to know the number of out of wedlock births that were the result of an unintended pregnancy.

## SELECTED HEALTH INDICATORS:

Table 16: 2008 Selected Health Indicators for Women; Whites & Minorities; in North Carolina

| Selected Health Indicators for Women                |              |                 |
|-----------------------------------------------------|--------------|-----------------|
|                                                     | <u>White</u> | <u>Minority</u> |
| % Low Birth Weight                                  | 7.5%         | 11.8%           |
| % Smoked During Pregnancy                           | 11.9%        | 11.8%           |
| Prenatal Care Began After 1 <sup>st</sup> Trimester | 24.0%        | 27.0%           |
| Infant Deaths (per 1,000 births)                    | 6.20         | 18.60           |
| Number of Live Births                               | 1,111        | 637             |

Source: NC State Center for Health Statistics  
(*Vital Statistics, Volume I*)

Table 17:  
2009 Reported  
Pregnancies  
(per 1,000 Females)

### 2009 Wayne County Reported Pregnancies (numbers and rates)

| Age   | White # | White Rate | Hispanic # | Hispanic Rate | Black # | Black Rate |
|-------|---------|------------|------------|---------------|---------|------------|
| 15-17 | 24      | 16.82      | 12         | 57.14         | 48      | 55.3       |
| 18-19 | 104     | 108.79     | 31         | 244.09        | 88      | 152.78     |

Source: NC State Center for Health Statistics

See Table on next page for 2009 N.C. reported pregnancies for comparison to the above table.

### 2009 North Carolina Reported Pregnancies (numbers & rates)

**Table 17:**  
(continued)  
2009  
Reported  
Pregnancies  
(per 1,000)

| Age   | White # | White Rate | Hispanic # | Hispanic Rate | Black # | Black Rate |
|-------|---------|------------|------------|---------------|---------|------------|
| 15-17 | 2,922   | 23.85      | 1,032      | 70.18         | 2,262   | 45.03      |
| 18-19 | 7,019   | 72.84      | 1,833      | 193.21        | 4,894   | 128.85     |

Females)

Source: NC State Center for Health Statistics

### Observations:

- Table 16 above, breaks down maternal health indicators between whites and minority women.
- Tables 17 (Wayne & NC) compares 2009 Wayne County teen pregnancy rates to the state of North Carolina based on age and race. The rates for 15 to 17 year olds in Wayne County is lower for both white and Hispanic as compared to the state; however the rate for African Americans is higher (55.3 as compared to the state rate of 45.03). However we have to keep in mind that we are dealing with small numbers for both the white and Hispanic 15 to 17 year old group – therefore caution has to be used when interpreting this data.
- When comparing Wayne with NC where the 18 to 19 year old group is concerned we have a much different picture. Across the board for White, Hispanic and African Americans our rates are higher than rates for N.C. (for 2009)
- However it must be noted that the teen pregnancy rates for 2009 for 15 to 19 year olds for Wayne did decrease from 2008 - see Table 20 in the next section for a comparison.
- Repeat teen pregnancy rates also dropped from 2008 to 2009 for Wayne teens 15 to 19 years of age (2008: 33.4 as compared to 2009 with a rate of 28.7 – there were 78 teens in 2009 that had a repeat pregnancy as compared to 98 in 2008. In the field of teen pregnancy prevention you have to look for positives wherever you can – this is definitely a positive.
- Outreach opportunities to the Latina population may improve entry into family planning, especially for teens. This is a population whose culture accepts early childbearing as the norm and therefore outreach may assist with helping this population understand that here in the United States early childbearing is often linked to poverty and dependence on public assistance. It also becomes a very costly tab for the taxpayer.

### Discussion:

Maternal health indicators show that minority women could benefit from outreach that would encourage early entry into prenatal care and also family planning. Currently, 26% of family planning patients at the health department are Latina and 43% are African American. Postpartum outreach to these women may assist with reducing the high pregnancy rates. Hispanics account for about 16 % of births in Wayne County, and the number of Hispanics in Wayne County has increased by 313% since 1990.

Over the past decade, the North Carolina Latino population has grown by almost 400% (from the 2000 Census). Latinos are more likely to live in poverty (estimated at 27% in North Carolina, by the US Census) and have difficulty gaining access to health care. It is interesting

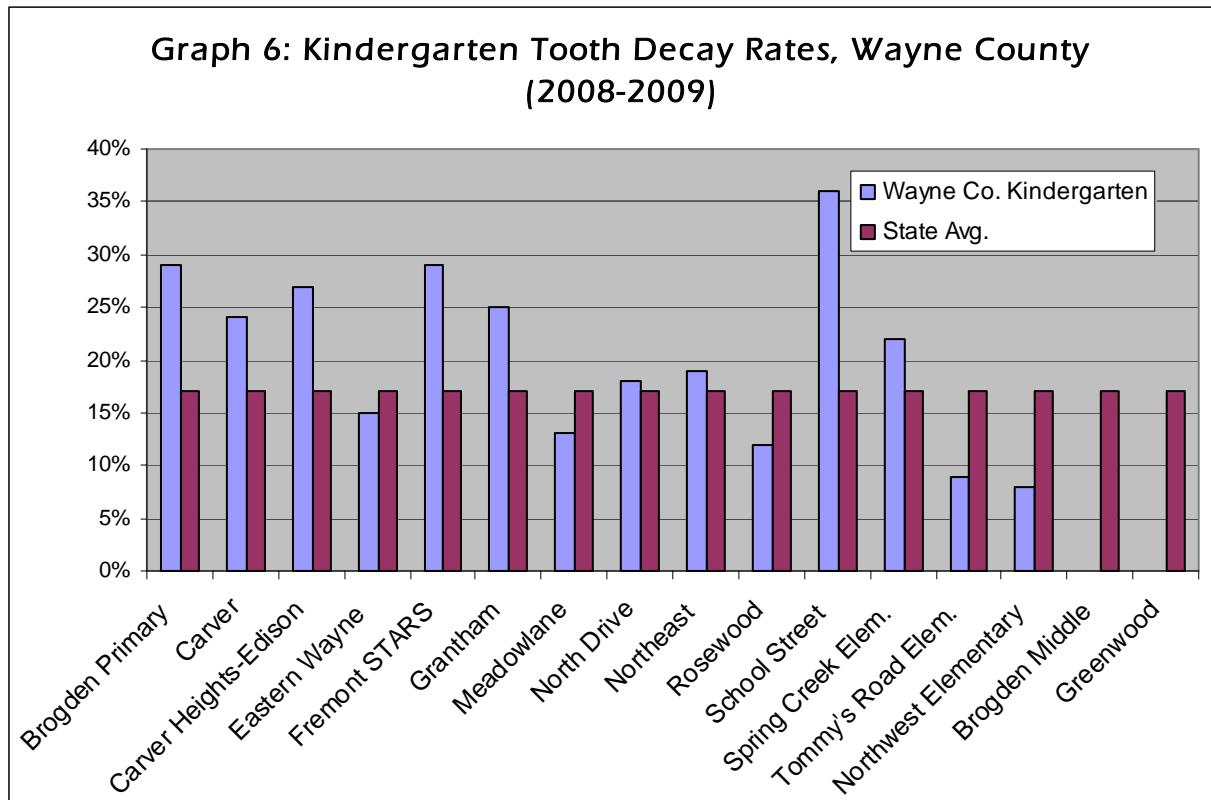
to note that even though several indicators would predict poor postpartum outcomes, Latinas have the best birth outcomes as a racial group in North Carolina. Approximately 70% of the Hispanics living in North Carolina are from Mexico.



# Child and Adolescent Health



## Dental:



**Table 18:** Kindergarten/Fifth Grade Tooth Decay Rates, Wayne County (2008-2009)

| School                | Children With Untreated Decay |            |             |            | Fifth Graders<br>with Sealants (%) | State Average |
|-----------------------|-------------------------------|------------|-------------|------------|------------------------------------|---------------|
|                       | Kindergarten                  | State Avg. | Fifth Grade | State Avg. |                                    |               |
| Brogden Primary       | 29%                           | 17%        | 0%          | 4%         | 0%                                 | 44%           |
| Carver                | 24%                           | 17%        | 5%          | 4%         | 60%                                | 44%           |
| Carver Heights-Edison | 27%                           | 17%        | 0%          | 4%         | 0%                                 | 44%           |
| Eastern Wayne         | 15%                           | 17%        | 0%          | 4%         | 49%                                | 44%           |
| Fremont STARS         | 29%                           | 17%        | 5%          | 4%         | 50%                                | 44%           |
| Grantham              | 25%                           | 17%        | 3%          | 4%         | 55%                                | 44%           |
| Meadowlane            | 13%                           | 17%        | 0%          | 4%         | 0%                                 | 44%           |
| North Drive           | 18%                           | 17%        | 0%          | 4%         | 0%                                 | 44%           |
| Northeast             | 19%                           | 17%        | 5%          | 4%         | 49%                                | 44%           |
| Rosewood              | 12%                           | 17%        | 4%          | 4%         | 54%                                | 44%           |
| School Street         | 36%                           | 17%        | 0%          | 4%         | 0%                                 | 44%           |
| Spring Creek Elem.    | 22%                           | 17%        | 5%          | 4%         | 50%                                | 44%           |
| Tommy's Road Elem.    | 9%                            | 17%        | 4%          | 4%         | 60%                                | 44%           |
| Northwest Elementary  | 8%                            | 17%        | 3%          | 4%         | 53%                                | 44%           |
| Brogden Middle        | 0%                            | 17%        | 5%          | 4%         | 45%                                | 44%           |
| Greenwood             | 0%                            | 17%        | 6%          | 4%         | 53%                                | 44%           |

Source: NC Oral Health Section

### **Observations:**

- School Street, Brogden Primary, Fremont STARS, Carver Heights, Grantham School, Carver, and Spring Creek Elementary appear to be schools with kindergarten populations where pediatric dental education and treatment may be of value.
- The average rate of dental decay among kindergarten children in Wayne County is slightly higher than the state average of 17%.
- Rates of decay for fifth graders are much less because these rates are for permanent teeth only, which mean baby teeth that are decayed, are not counted.
- The percentage of Wayne County children with sealants in the 5<sup>th</sup> grade is approximately 36.1%, significantly lower than the state average (44%).

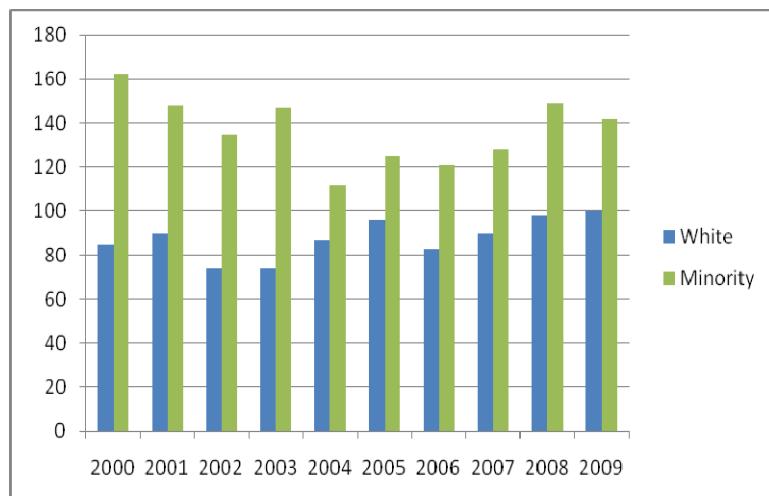
### **Discussion:**

The data for dental assessments is collected every year throughout schools in North Carolina by the state dental hygienists. This data is the result of examining each child in kindergarten and the fifth grade and counting the number of decayed, missing and filled teeth. Decay rates are expected to come down since fluoride varnish is now routinely applied to Medicaid children with erupted teeth up to 36 months of age. Dental sealants prevent decay by forming an impervious surface on teeth resistant to decay. The decision to seal a child's teeth is a financial issue with parents as sealants cost approximately \$35.00 per tooth. The rate of children with sealants may be higher than stated as clear sealants are not readily detected during the assessment.

Follow-up with high risk children and children in high risk schools is done through education, referral and parent contact.

**Table 19:**  
Number of Births to Unwed Teenage Mothers in Wayne County (ages 10-19)

| Year | White  |              | Minority |              |
|------|--------|--------------|----------|--------------|
|      | Number | % Out of Wed | Number   | % Out of Wed |
| 2000 | 85     | 65%          | 162      | 95%          |
| 2001 | 90     | 63%          | 148      | 93%          |
| 2002 | 74     | 73%          | 135      | 94%          |
| 2003 | 74     | 60%          | 147      | 94%          |
| 2004 | 87     | 66%          | 112      | 93%          |
| 2005 | 96     | 74%          | 125      | 96%          |
| 2006 | 83     | 72%          | 121      | 96%          |
| 2007 | 90     | 73%          | 128      | 99%          |
| 2008 | 98     | 71%          | 149      | 97%          |
| 2009 | 100    | 77%          | 142      | 96%          |

**Graph 7: Number of Out-of-Wedlock Births to Wayne Co. Teens (ages 10-19)****Observations:**

- Table 21 on the previous page shows minority teens with a higher number and percentage of out-of-wedlock births as compared to white teens. Graph 7 above also depicts this in the form of a bar graph.
- The percentages of out-of-wedlock births to white teens reflect a gradual increase whereas the percentages of out-of-wedlock births to African American teens have remained the same for most years.
- In reviewing 5 year trend data from 2005 - 2009 there has been a 12% increase in the number of out-of-wedlock births to African American teens 15-19 years of age as compared to an increase of 4% of out -of-wedlock births to white teens 15-19 years of age for the same 5 year time frame. This is based on the last five years from 05-09.

**Discussion:**

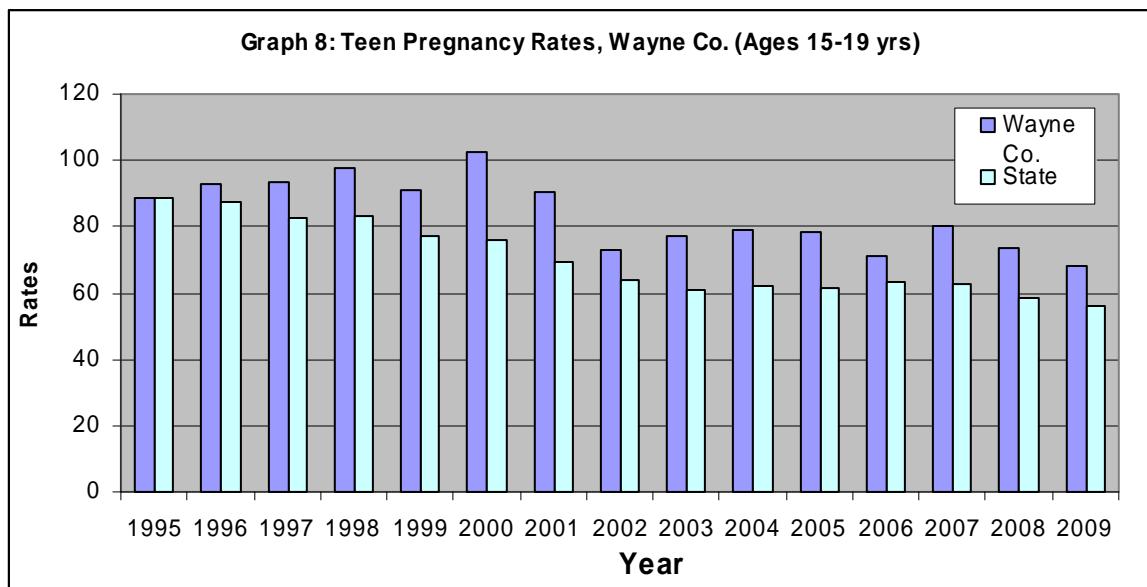
Many studies have shown negative social, health and economic consequences to communities as a result of births to teenage women. Teen parents are more likely to drop out of school, thus decreasing their chances of gainful employment as well as earning adequate wages. Many will live in poverty. Children born to teen parents are more at risk for abuse due to the immaturity of most teens and the lack of adequate parenting skills. Abusive parents often produce children who become abusive parents. Teens and their children are more likely to become dependents of the state welfare system. Unfortunately this cycle seems to continuously repeat itself, as children of teen parents are more at risk for becoming teen parents themselves. Economically, this becomes very expensive for the community and the taxpayer. Single parent teen Moms without adequate support from family members and friends often struggle to meet the needs of their children thus placing their children and themselves in a much more difficult situation.

**Table 20: Teen Pregnancy Rates, Wayne County, ( Ages 15-19 yrs.)**

| <u>Year</u> | Rates/1,000 females |              |                  |                           | NUMBER OF PREGNANCIES |              |                  |
|-------------|---------------------|--------------|------------------|---------------------------|-----------------------|--------------|------------------|
|             | <u>Total</u>        | <u>White</u> | <u>Non-White</u> | <u>State Rate (Total)</u> | <u>Total</u>          | <u>White</u> | <u>Non-White</u> |
| <b>1999</b> | 90.8                | 66.6         | 123.3            | 77.4                      | 355                   | 153          | 199              |
| <b>2000</b> | 102.8               | 75.1         | 140              | 76.1                      | 375                   | 158          | 216              |
| <b>2001</b> | 90.5                | 72.3         | 114.5            | 69.3                      | 366                   | 170          | 194              |
| <b>2002</b> | 72.7                | 52.8         | 99.3             | 64.1                      | 295                   | 125          | 168              |
| <b>2003</b> | 77.1                | 59.9         | 101              | 61                        | 312                   | 143          | 168              |
| <b>2004</b> | 79.1                | 65.2         | 92.1             | 62.4                      | 325                   | 158          | 155              |
| <b>2005</b> | 78.2                | 58.4         | 105.1            | 61.7                      | 326                   | 145          | 177              |
| <b>2006</b> | 71.2                | 53.1         | 93.5             | 63.1                      | 293                   | 129          | 158              |
| <b>2007</b> | 79.9                | 63           | 110.7            | 63                        | 330                   | 161          | 169              |
| <b>2008</b> | 73.5                | 59.7         | 87.3             | 58.6                      | 294                   | 138          | 149              |
| <b>2009</b> | 68.2                | 53.7         | 87.2             | 56                        | 272                   | 128          | 140              |

**Note:** Rates are per 1,000 females

Source: NC State Center for Health Statistics



#### Observations:

- Since the year 2000, teen pregnancy rates have fluctuated somewhat but overall a downward trend has been observed. However, from 2006 to 2007 there was an increase in the number of teen pregnancies. In 2007, Wayne County ranked number 21 out of 100 counties for teen pregnancies to teens 15 to 19 years of age (with number 1 representing the highest rate in North Carolina). In 2009 Wayne County ranks number 27 out of 100 counties for teen pregnancies to 15 to 19 year olds. (Source: Adolescent Pregnancy Prevention Campaign of NC)
- When comparing teen pregnancy rates for the year 2009 for ages 15 – 19 for Wayne County as compared to North Carolina the following data is revealed: Wayne White Teens: 53.71, NC White Teens: 45.42, Wayne Black teens: 94.18 NC Black Teens: 100.00

81.12, Wayne Hispanic Teens: 127.60 NC Hispanic Teens: 118.4 (Source: North Carolina State Center for Health Statistics)

- In terms of the Hispanic teen population in 2007 Wayne County ranked 4<sup>th</sup> in the state for pregnancies to Hispanic teens and 11<sup>th</sup> in the state for teen pregnancies to African Americans. (Source: Adolescent Pregnancy Prevention Campaign of NC)
- In 2009 Wayne ranks 11<sup>th</sup> in the state for pregnancies to Hispanic teens (Source: Adolescent Pregnancy Prevention Campaign of NC) and ranks 22<sup>nd</sup> in the state for pregnancies to African American teens and 33<sup>rd</sup> in the state for pregnancies to white teens. (Source: WCHD based on teen pregnancy rate data for 2009)
- Historically, Wayne County has experienced teen pregnancy rates above the state average. Overall, the teen pregnancy rate in Wayne County has decreased by 25% while the State's rate has decreased by 28% based on observation of rates from 1999 to 2009.
- North Carolina has the 14<sup>th</sup> highest teen pregnancy rate in the nation. Wayne County ranks number 27 out of 100 counties in 2009 meaning there are 26 other counties in the state having higher teen pregnancy rates for 15-19 year olds. Wayne has ranked as high as # 21 in past years so ranking # 27 is an improvement.

#### **Discussion:**

In looking at data provided by the Adolescent Pregnancy Prevention Campaign of N.C. the Hispanic teen population presents a challenge due to culture differences in child bearing. The Wayne County Health Department and others working in the field of teenage pregnancy will need to search and prepare for a better way to reach these youth. It will require a community effort to meet this challenge.

#### **Teen Abortions:**

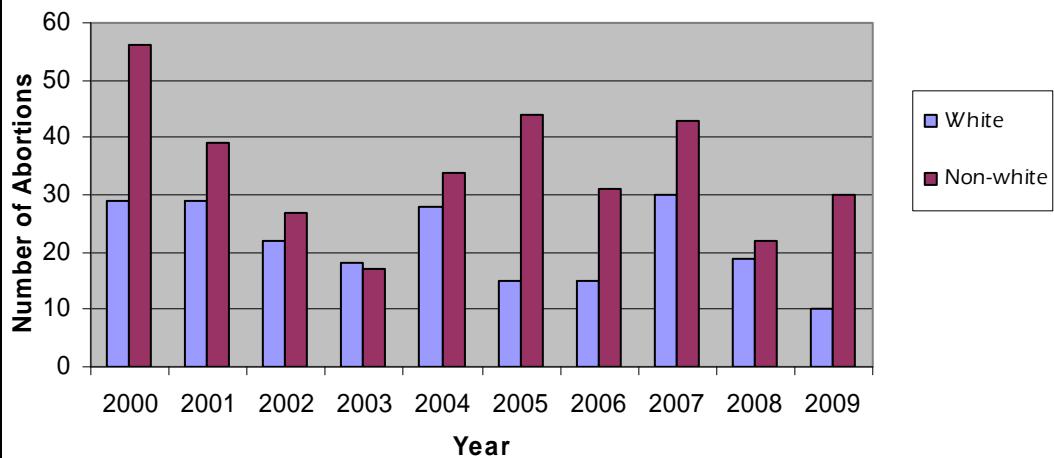
**Table 21: Teen Abortion Rates & Numbers, Wayne County, *(Ages 15-19 yrs.)***

| <b><i>Year</i></b> | <b>Rates</b>        |                     |                         |                                  | <b>Number of Abortions</b> |                     |                         |
|--------------------|---------------------|---------------------|-------------------------|----------------------------------|----------------------------|---------------------|-------------------------|
|                    | <b><i>Total</i></b> | <b><i>White</i></b> | <b><i>Non-White</i></b> | <b><i>State Rate (Total)</i></b> | <b><i>Total</i></b>        | <b><i>White</i></b> | <b><i>Non-White</i></b> |
| <b>2000</b>        | 20.5                | 12.2                | 31.3                    | 17.0                             | 85                         | 29                  | 56                      |
| <b>2001</b>        | 17.1                | 12.3                | 22.6                    | 16.4                             | 68                         | 29                  | 39                      |
| <b>2002</b>        | 12.6                | 9.3                 | 16.0                    | 14.6                             | 49                         | 22                  | 27                      |
| <b>2003</b>        | 8.9                 | 7.5                 | 10.2                    | 14.4                             | 36                         | 18                  | 17                      |
| <b>2004</b>        | 18.0                | 11.6                | 20.2                    | 15.4                             | 74                         | 28                  | 34                      |
| <b>2005</b>        | 15.1                | 6                   | 26.1                    | 14.3                             | 63                         | 15                  | 44                      |
| <b>2006</b>        | 12.6                | 6.2                 | 18.4                    | 14.5                             | 52                         | 15                  | 31                      |
| <b>2007</b>        | 18.6                | 12.3                | 25.5                    | 14.3                             | 77                         | 30                  | 43                      |
| <b>2008</b>        | 11.9                | 8.2                 | 12.9                    | 12.5                             | 48                         | 19                  | 22                      |
| <b>2009</b>        | 11.0                | 4.2                 | 18.7                    | 12.2                             | 44                         | 10                  | 30                      |

★ **Note:** Rates are per 1,000 females

*Source:* NC State Center for Health Statistics

*Chart 9: Number of Abortions to Wayne Co. Teens (Ages 15-19 yrs.)*



#### **Observations:**

- From 2007 to 2009, the number of teens receiving abortions in Wayne County has decreased by 43% for ages 15-19 years.
- Historically, Wayne County has experienced higher teen pregnancy rates than the state.. However, in 2009 the abortion rate for 15-19 yr olds in Wayne County was lower (11.0) as compared to the state abortion rate (12.2).
- For the year 2009, there were 128 pregnancies to white teens 15 -19 yrs. of age with 10 (7.8%) of those ending in abortion and 140 pregnancies to non-white teens 15 – 19 yrs. of age with 30(21.4%) of those ending in abortion.

#### **Discussion:**

Pregnancy rates for 10-14 yr. olds (not shown) in Wayne County have decreased 31% between 2000 and 2009. In 2000, 13 teen girls ages 10-14 became pregnant, compared to nine in 2009. Rates are not calculated any longer for ages 10-14 due to the numbers now being so low. (NOTE: rates based on small numbers (fewer than 20 cases) are unstable.

Teen pregnancy prevention in most areas of the United States is a vexing and politically charged issue. Although rates are on a downward trend both nationally, statewide and in some counties the issues of teen pregnancy remains one of concern for public health. Teen pregnancy for many young people places huge barriers along the path to reaching their optimal potential.

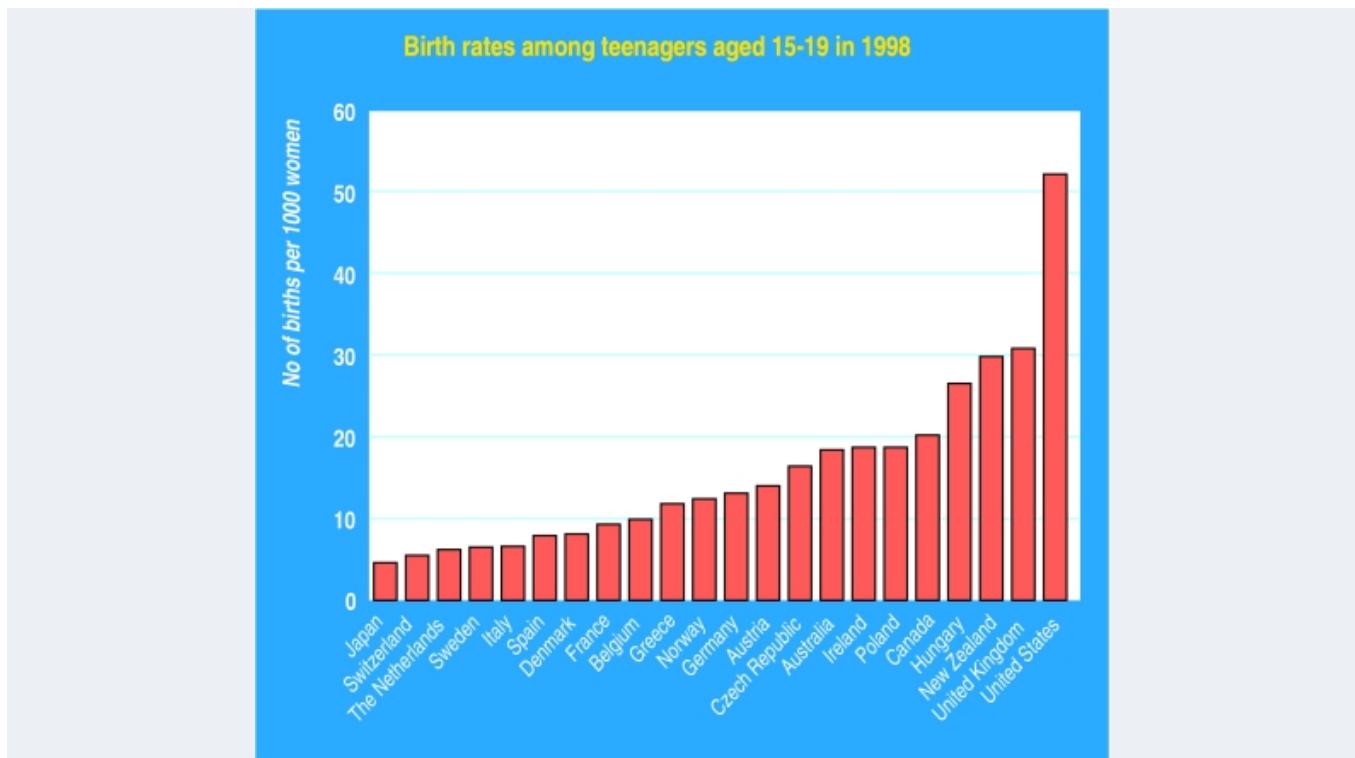
(Source: <http://www.teenpregnancy.org/resources/data/prates.asp.>)

Several initiatives have been developed in Wayne County to prevent teen pregnancy. The Wayne County Health Department and WATCH each contribute health educators who provide outreach in the schools for pregnancy prevention based on abstinence and access to health care. The Wayne Initiative for School Health (WISH) Program operates six school based health centers that provide education and clinical services for teens in four Middle Schools and

two High Schools. None of the school based health centers provide onsite birth control services. Communities in Schools, an initiative started in 1994, receives funding from the United Way and the Juvenile Crime Prevention Council for teen pregnancy prevention and to keep kids in school. Smart Choices for Youth, and the ADLA, Inc program provide programs focused on at-risk youth in an effort to encourage positive decision making skills along with positive role modeling.

**Table 22 Teen Pregnancy Rates Worldwide,**

★ Note: Country rates are per 1,000 females



Source: [www.unicef-icdc.org](http://www.unicef-icdc.org)

## Pregnancy

In the United States, the **teen pregnancy rate** is more than nine times higher than that in the Netherlands, nearly four times higher than the rate in France, and nearly five times higher than that in Germany.

<http://www.advocatesforyouth.org/european.htm> discusses policies that have helped address the issue of adolescent health in Europe.

## Selected Child Health Indicators:

**Table 23: Child Fatalities, Wayne County**

| Cause                  | 2002-2006  | 2006      | 2003-2007  | 2007      | 2004-2008  | 2008      | 2005-2009  | 2009      |
|------------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
| <i>Birth Defects</i>   | 15         | 2         | 12         | 1         | 12         | 1         | 13         | 4         |
| <i>Perinatal Cond.</i> | 49         | 7         | 49         | 7         | 53         | 13        | 53         | 12        |
| <i>SIDS</i>            | 7          | 1         | 7          | 2         | 10         | 5         | 12         | 3         |
| <i>Illnesses</i>       | 29         | 6         | 27         | 5         | 23         | 2         | 23         | 7         |
| <i>Motor vehicle</i>   | 15         | 2         | 12         | 2         | 11         | 1         | 12         | 3         |
| <i>Bicycle</i>         | 0          | 0         | 0          | 0         | 0          | 0         | 0          | 0         |
| <i>Fire</i>            | 2          | 0         | 2          | 0         | 1          | 0         | 0          | 0         |
| <i>Drowning</i>        | 2          | 0         | 2          | 0         | 2          | 0         | 2          | 1         |
| <i>Other Injuries</i>  | 2          | 0         | 3          | 2         | 3          | 0         | 4          | 2         |
| <i>Homicide</i>        | 8          | 1         | 7          | 0         | 7          | 0         | 4          | 1         |
| <i>Suicide</i>         | 0          | 0         | 2          | 2         | 2          | 0         | 3          | 1         |
| <i>All Other</i>       | 4          | 0         | 4          | 1         | 2          | 1         | 3          | 1         |
| <b>Total</b>           | <b>133</b> | <b>19</b> | <b>127</b> | <b>22</b> | <b>126</b> | <b>23</b> | <b>129</b> | <b>35</b> |
| <i>Under 1</i>         | 86         | 12        | 82         | 12        | 84         | 19        | 87         | 22        |
| <i>Ages 1-4</i>        | 9          | 1         | 10         | 2         | 12         | 3         | 10         | 3         |
| <i>Ages 5-9</i>        | 9          | 2         | 11         | 3         | 10         | 0         | 9          | 3         |
| <i>Ages 10-14</i>      | 11         | 1         | 8          | 1         | 8          | 1         | 7          | 3         |
| <i>Ages 15-17</i>      | 18         | 3         | 16         | 4         | 12         | 0         | 16         | 4         |

Table 23 compares the number of deaths and causes of death among children (0-17 years) in Wayne County

Source: <http://www.schs.state.nc.us/SCHS/data/county.cfm>

### Observations:

- Death from perinatal conditions has remained the same based on trend data for 2004-2008 as compared to 2005-2009.
- Total number of deaths has increased by 3 or about 2.3%.
- Deaths from motor vehicle accidents, suicide & other injuries have increased by a total of 1 from 2004-2008 data to 2005-2009. Deaths from Homicide have decreased by 3 from 2004 – 2008 as compared to data from 2005-2009.
- For 2005-2009, 129 children died in Wayne County up from 125 reported for 2004-2008.
- Deaths in the 15-17 age group increased from 12 in 2004-2008 to 16 in 2005-2009

## Trends in Child Well Being:

**Table 24: Selected Trends in Child Well-Being, Wayne County**

| Trend                                 | Wayne County | State Average | Year      |
|---------------------------------------|--------------|---------------|-----------|
| <b>Economic</b>                       |              |               |           |
| TANF Children                         | 695          | 42120         | 2007      |
| Children on Food Stamps               | 23.10%       | 19.50%        | 2006      |
| Children in Subsidized Child Care     | 35%          | 36%           | 2005      |
| <b>Education</b>                      |              |               |           |
| Children in Regulated Child Care      | 22.00%       | 17.00%        | 2005      |
| EOG 3rd Grade Proficiency             | 75.30%       | n/a           | 2006-2007 |
| EOG 8 <sup>th</sup> Grade Proficiency | 74.90%       | n/a           | 2006-2007 |
| Four Year High School Completion Rate | 72.1         | 70.0          | 2008      |
| <b>Social</b>                         |              |               |           |
| Abuse/Neglect reports Substantiated   | 29%          | 22%           | 2005-2006 |
| Children in Foster Care               | 4.00%        | 4.7%          | 2005      |
| Youth (10-17 yrs) in Juvenile Justice | 14           | 473           | 2004      |
| Children in Single Parent Households  | 40.30%       | 35.50%        | 2000      |

★ Note: Rates are per 1,000 children, unless followed by a % sign.

Source: <http://www.ncchild.org/data.htm#1>

### Observations:

- The percentage of children in Wayne County on food stamps (23.1%) in 2006 is slightly higher than the state percentage of children on food stamps (19.5%).
- The percentage of children in subsidized child care in Wayne County (35%) is just below the state percentage of 36%. (2005).
- The four year high school completion rate for Wayne (61.5%) for 2006 is lower than the state rate. (68.1%). These numbers are of great concern when compared to the late 1980's with a completion rate of around 72%. However based on 2008 data the four-year high school completion rate has improved for Wayne County and is back up to 72.1% as compared to 70. % for the state. High School graduation rates are of concern as low rates negatively impacts the future of these students. Additionally low rates impact our ability to provide a prepared work force for business and industry in Wayne County.
- The percentage of substantiated abuse and neglect reports for Wayne (29%) are higher as compared to the substantiated state percentage of 22%.
- The percentage of children living in single parent households is higher (40.3%) than the state average.

| INDICATOR                                                             | WAYNE | STATE | YEAR  |
|-----------------------------------------------------------------------|-------|-------|-------|
| Medicaid Participation Ratio (Health Check)                           | 87.4% | 75.8  | 2007  |
| % Children Ages 1-2 yrs. Screened For Lead                            | 77.0% | 44.9% | 2007  |
| % Children With Elevated Blood Lead                                   | 0.5%  | 0.6%  | 2007  |
| Diagnosed Asthma ~ ages 0-14 yrs ( <i>per 100,000 population</i> )    | 175.9 | 166.2 | 2007  |
| Children Ages 0-17 Fatality Rate ( <i>per 100,000 population</i> )    | 63.3  | 73.9  | 2006  |
| Total Infant Mortality Rate for 2005-2009 ( <i>per 1,000 births</i> ) | 9.9   | 8.3   | 05-09 |

Sources: NC State Center for Health Statistics,  
NC Child Fatality Task Force

**Table 25:**  
Health Indicators for  
Children, Wayne Co.

### Observations:

Medicaid participation ratios (Health Check utilization) measure the rate of age appropriate health screenings that Medicaid children receive during the year. Wayne County is doing well in that almost 90% of Medicaid children received an age appropriate screening for the year and 74.2% of children were screened for lead. Elevated blood lead can impair the mental development of children.

The child fatality rate in Wayne County decreased from 97.9 in 2005 to 63.3 in 2006 putting Wayne lower than the state rate of 73.9 (2006).

In reviewing trend data for 2005-2009 the infant mortality rate for Wayne was 9.9 as compared to the state rate of 8.3. It is also noteworthy that the infant mortality rate in 2009 for minorities in Wayne is three times higher (22.4) when compared to the white infant mortality rate (7.7). The state rate for whites in 2009 is 5.4 as compared to the minority rate of 14.1. Racial disparities continue to exist at the county and state level and must be addressed. (Infant mortality is defined as the death of a child before their first birthday).

**Table 26: SAT Scores for Wayne County and State**

| Year | % of students who took SAT |             | Math SAT score |             | Verbal SAT score |             | Total SAT score |             |
|------|----------------------------|-------------|----------------|-------------|------------------|-------------|-----------------|-------------|
|      | <i>Wayne</i>               | <i>N.C.</i> | <i>Wayne</i>   | <i>N.C.</i> | <i>Wayne</i>     | <i>N.C.</i> | <i>Wayne</i>    | <i>N.C.</i> |
| 2001 | 49.4                       | 65          | 477            | 499         | 473              | 493         | 950             | 992         |
| 2002 | 52.6                       | 67          | 480            | 505         | 471              | 493         | 951             | 998         |
| 2003 | 49.9                       | 68          | 479            | 506         | 472              | 495         | 951             | 1001        |
| 2004 | 49.4                       | 70          | 494            | 507         | 477              | 499         | 971             | 1006        |
| 2005 | 50.5                       | 74          | 494            | 511         | 474              | 499         | 968             | 1010        |
| 2006 | 47.6                       | 71          | 489            | 513         | 472              | 495         | 961             | 1008        |
| 2007 | 52.7                       | 71          | 489            | 509         | 472              | 495         | 961             | 1004        |

Source: Public Schools of North Carolina

### Observations:

- Average SAT scores for the State and for Wayne County have remained relatively constant through the years of 2001-2007. Although not shown in the above chart the most up to date scores reveal the following: 2008: Wayne: Total SAT score of 979 as compared to the State Total score of 1007. The data for 2009 Total SAT scores reveal the following: Wayne: 972, NC: 1006.
- The Wayne County average for SAT scores is slightly below the average for the state.

- In 2006, a writing component was added to the SAT. Scores for Wayne were as follows: Math score 489, Verbal 472, and Writing 459 as compared to the State scores of Math: 513, Verbal 495, and Writing 485. Including the Writing score, the total score for 2006 for Wayne was 1420 as compared to the state score of 1493. (The writing score data was omitted in the above chart as it is a newly added component to the SAT.)  
[www.dpi.state.nc.us](http://www.dpi.state.nc.us)





# Mortality & Other Health Indicators



## Mortality Worldwide Compared to USA:

**Table 27:** Life Expectancies around the World (yrs. 1999 & 2008)

| Country        | Life Expectancy Rank |       | Life Expectancy |       | Infant Mortality Rate |       | GDP/ Capita |          |
|----------------|----------------------|-------|-----------------|-------|-----------------------|-------|-------------|----------|
|                | -1999                | -2008 | -1999           | -2008 | -1999                 | -2008 | -1999       | -2008    |
| Andorra        | 1                    | 1     | 83.55           | 83.52 | 4.1                   | 4.03  | \$18,000    | \$38,800 |
| Macau          | 2                    | 2     | 81.96           | 82.27 | 4.2                   | 4.33  | \$16,000    | \$24,300 |
| Singapore      | 13                   | 4     | 78.97           | 81.8  | 3.8                   | 2.3   | \$26,300    | \$48,900 |
| San Marino     | 3                    | 4     | 81.47           | 81.8  | 5.4                   | 5.53  | \$20,000    | \$34,100 |
| Hong Kong      | 11                   | 5     | 79              | 81.68 | 5.2                   | 2.94  | \$25,100    | \$42,000 |
| Japan          | 5                    | 3     | 80.19           | 82.02 | 4.1                   | 2.8   | \$23,100    | \$33,800 |
| Sweden         | 7                    | 6     | 79.36           | 80.63 | 3.9                   | 2.76  | \$19,700    | \$36,900 |
| Australia      | 4                    | 7     | 80.23           | 80.62 | 5.1                   | 4.57  | \$21,200    | \$37,500 |
| Switzerland    | 9                    | 7     | 79.08           | 80.62 | 4.9                   | 4.28  | \$26,400    | \$39,800 |
| Guernsey       | 14                   | 9     | 78.78           | 80.53 | 8.4                   | 4.59  | N/A         | \$44,600 |
| Iceland        | 10                   | 10    | 79.02           | 80.43 | 5.2                   | 3.27  | \$22,400    | \$39,400 |
| Canada         | 6                    | 11    | 79.46           | 80.34 | 5.5                   | 4.63  | \$22,400    | \$38,200 |
| France         | 15                   | 8     | 78.74           | 80.59 | 5.6                   | 3.41  | \$22,600    | \$33,800 |
| Spain          | 31                   | 17    | 77.84           | 79.78 | 6.4                   | 4.31  | \$16,500    | \$33,700 |
| Germany        | 41                   | 30    | 77.26           | 78.95 | 5.1                   | 4.08  | \$22,100    | \$34,400 |
| United Kingdom | 38                   | 33    | 77.44           | 78.7  | 5.8                   | 5.01  | \$21,200    | \$35,300 |
| USA            | 52                   | 41    | 76.31           | 78    | 6.3                   | 6.37  | \$31,500    | \$46,000 |
| Mexico         | 98                   | 68    | 72.08           | 75.63 | 24.6                  | 19.63 | \$8,300     | \$12,500 |
| China          | 105                  | 96    | 70.03           | 72.88 | 43.3                  | 22.12 | \$3,600     | \$5,300  |

**Note:** Infant Mortality rates are per 1,000 population

Life Expectancy rates are calculated ages from birth.

★ Source: [www.geographic.org](http://www.geographic.org)

### Observations:

- The United States continues to rank first in Gross Domestic Product per capita, but has a lower ranking for life expectancy than forty-one other countries.
- The majority of the countries in Table 27 have had decreases in 2005 infant mortality rates. Mexico and China have extremely high infant mortality rates (approximately 3½ times higher than infant mortality rates in the United States).
- For the year 2008, infant mortality in the United States is twice that of Japan. Singapore has the lowest reported infant mortality rates (based on table 27 above).
- All the countries shown above had increases in life expectancy years, from previous year shown.
- The difference between the country with the highest life expectancy in 2008 (Andorra) and the lowest (China) is a little over 11 years.

## Discussion:

Life expectancies vary around the world according to socioeconomic conditions, absence or presence of war, absence or presence of communicable diseases, and the availability of food. Life expectancy in the United States at the turn of the century was around 46 years of age. The same factors which contributed to a short life in the United States in 1900, affect most third world countries today; lack of clean water, malnutrition, communicable disease and death from injury.

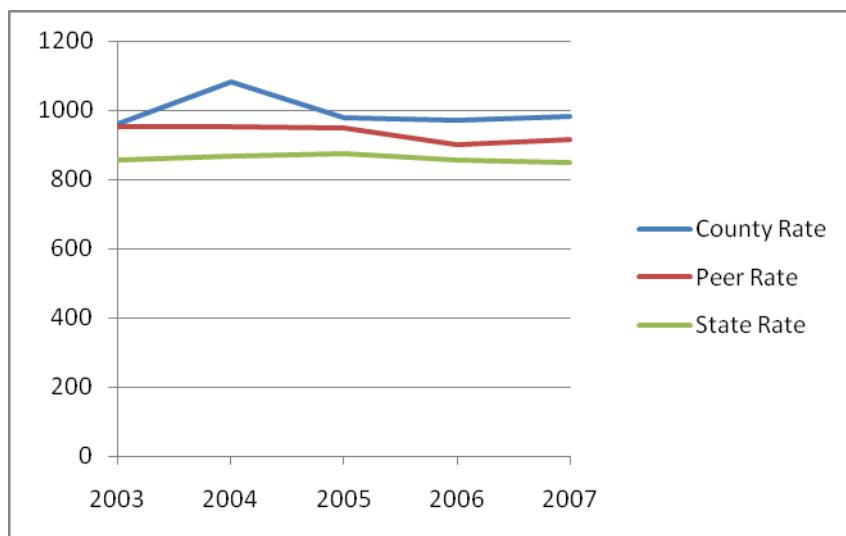
In the United States today, some groups, such as Native Americans, rural African Americans and the inner city poor, have extremely poor health, more characteristic of a poor developing country rather than a rich industrialized one. The HIV epidemic causes a higher proportion of death and disability to U.S. young and middle-aged than in most other advanced countries.

According to the World Health Organization:

- The U.S. is one of the leading countries for cancers relating to tobacco, especially lung cancer.
- The death rate from heart disease in the U.S has dropped in recent years, but remains high relative to other countries.
- Death rates from violence, especially of homicides, remain high in the U.S. when compared to other industrialized countries.
- Contributing factors to Americans' high mortality rate include: consumption of food high in fat and sedentary lifestyles.

Graph 12 (A)

Comparison of Death Rates: Wayne County & N.C. 2003-2007



**Note:** Death rates are per 100,000 population

Source: N.C. Public Health Catch

## Observations:

- Graph 12 (A) shows that total deaths per 100,000 are higher for Wayne as compared to the state for 2003 – 2007.
- Graph 12 (A) also demonstrates that death rates for Wayne are also higher than peer counties (Duplin, Nash, Pitt, and Sampson) for 2003 – 2007.
- Age-adjusted death rates (not shown in graph 12) reveal that the age-adjusted death rate for 2007 is 847.2 per 100,000 for North Carolina as compared to 982.1 per 100,000 for Wayne County.

## Discussion:

Death rates statewide are declining for two significant reasons: advances in medical science, and a better understanding by our population of lifestyle changes that lead to good health. An individual's decision to exercise, eat a reasonable diet, not smoke, avoid drug use and moderate to no alcohol consumption, are lifestyle decisions that dramatically affect health.

Among the leading causes of preventable death of North Carolinians were tobacco use, unhealthy diet/physical inactivity, alcohol misuse, firearms, risky sexual behavior, motor vehicles, and illicit drug use. The two most pervasive factors that contribute to mortality in North Carolina are cigarette smoking and high blood pressure. (Source: *North Carolina Leading Causes of Death*, SCHS).

Approximately 30% of all cancer deaths are attributable to cigarettes. High blood pressure is associated with death from all cardiovascular diseases, diabetes, renal failure and stroke.

Both of these factors are controllable either through abstinence from tobacco or controlling hypertension with lifestyle changes or drugs.

## N.C. and Wayne County Leading Causes of Death (2002-2006) Table 28

| Cause                   | White Males |       | Minority Males |       | White Females |       | Minority Female |       | NC Rate | Wayne Co. Rate |
|-------------------------|-------------|-------|----------------|-------|---------------|-------|-----------------|-------|---------|----------------|
|                         | Wayne       | NC    | Wayne          | NC    | Wayne         | NC    | Wayne           | NC    |         |                |
| Total Heart Disease     | 323.8       | 266   | 338.2          | 314   | 191.2         | 166.7 | 212.6           | 205.0 | 217.9   | 250            |
| Total Cancer            | 269.3       | 238.5 | 319            | 304.6 | 162.5         | 157.7 | 207.3           | 172.6 | 196.4   | 217            |
| Cerebrovascular Disease | 75.1        | 57    | 87.9           | 85.8  | 67.7          | 55.3  | 80.6            | 75.5  | 61.1    | 74.8           |
| Diabetes                | 33.4        | 25.2  | 62.6           | 54.4  | 23.1          | 18.3  | 63              | 50.7  | 27.1    | 39             |
| Motor Vehicle Accidents | 35.8        | 26.6  | 19.8           | 29.7  | 17.7          | 12.0  | 13.6            | 10.3  | 19.1    | 23             |
| Homicide                | 5.8         | 6     | 28.1           | 26    | 2.8           | 2.5   | 12.2            | 5.4   | 7.2     | 10             |
| Unintentional Injury    | 25.8        | 37.2  | 20.9           | 32.4  | 15.4          | 20.4  | 8.4             | 13.8  | 27      | 18.3           |
| Pneumonia/Flu           | 22.9        | 26.3  | 23.8           | 27.5  | 17.2          | 20.6  | 10.5            | 17.2  | 22.5    | 18.1           |
| <b>Cancer By Site</b>   |             |       |                |       |               |       |                 |       |         |                |
| Trachea/Lung Cancer     | 104.3       | 82.5  | 109.7          | 91.7  | 42.1          | 44.2  | 34.6            | 33.7  | 59.8    | 65.5           |
| Prostate Cancer         | 24.7        | 23.2  | 77.9           | 60.3  | 0             | 0     | 0               | 0     | 29.1    | 39.9           |
| Breast Cancer           | 0           | 0     | 0              | 0     | 30            | 23.5  | 36              | 32.1  | 25.7    | 32.2           |

Note: Death rates are per 100,000. Source: <http://www.schs.state.nc.us/SCHS/data/databook/>

Graph 12 (B) Wayne County Leading Causes of Mortality for 2004-2008

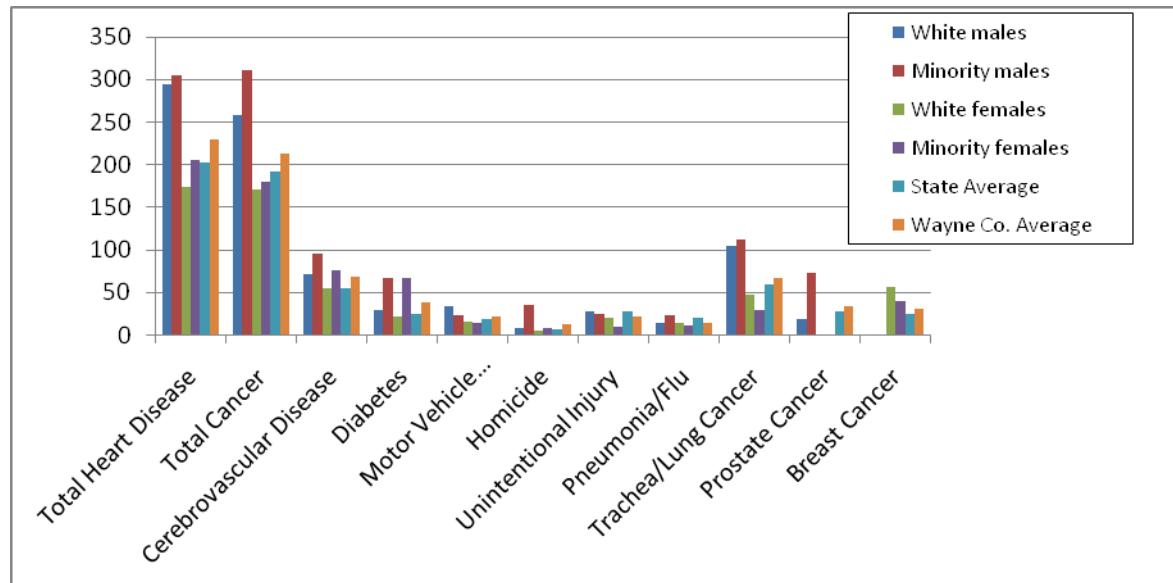


Table 29: 2004-2008 Death Rates comparing Wayne Co. & NC

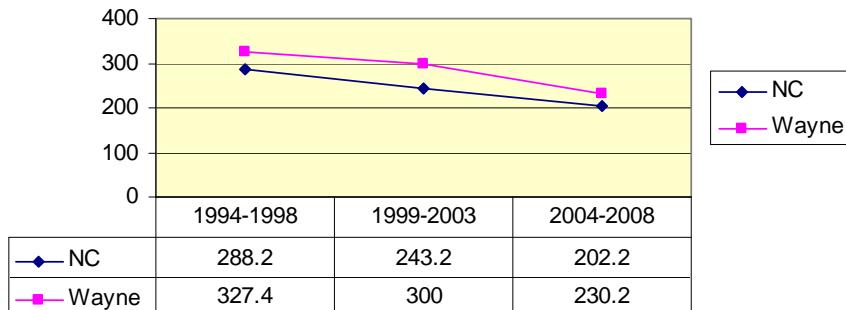
| Cause                   | Wayne | NC    |
|-------------------------|-------|-------|
| Total Heart Disease     | 230   | 202.2 |
| Total Cancer            | 213   | 192.5 |
| Cerebrovascular Disease | 68.6  | 54.4  |
| Diabetes                | 37.8  | 25.2  |
| Motor Vehicle Accidents | 22.1  | 18.6  |
| Homicide                | 12    | 7.3   |
| Unintentional Injury    | 21.1  | 28.4  |
| Pneumonia/Flu           | 14.6  | 20.3  |
| <b>Cancer By Site</b>   |       |       |
| Trachea/Lung Cancer     | 67    | 59.1  |
| Prostate Cancer         | 33.6  | 27.3  |
| Breast Cancer           | 31.1  | 25    |

**Observations:**

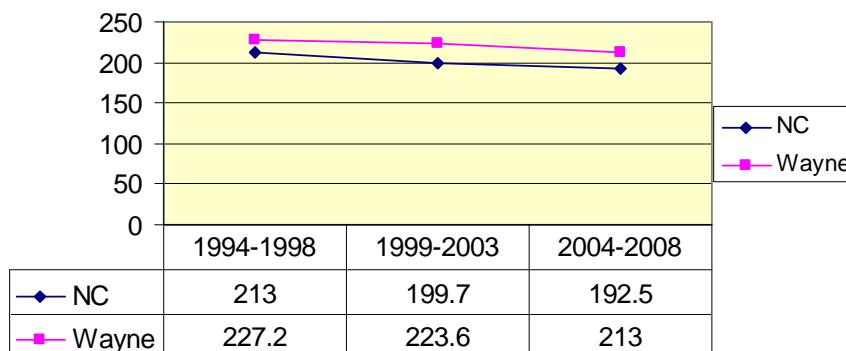
- Heart disease is the most common cause of death in Wayne County and North Carolina. Wayne County death rates significantly exceed the state average.
- Wayne County flu and pneumonia death rates are lower than the state.
- The number of white females who died from heart disease in Wayne County is greater than the state average.
- The death rate for diabetes among Wayne County minority males is over 2 times higher than for Wayne County White males. The homicide rate for Wayne County minority females is almost 2 times higher than for White females.
- In Table 29, the death rate for trachea/lung cancer in Wayne County is higher than for the rest of the state.
- The three leading causes of death in Wayne County are: Heart Disease (total heart disease), Cancer (total cancer deaths) and Cerebrovascular Disease, respectively. They have been Wayne County's leading causes for some time.

- Heart Disease Death rates are on a downward trend for N.C. and Wayne County (see graph 14 below).
- The death rate for diabetes among Wayne County minorities is almost twice the rate for Whites and is an area where increased education and monitoring is needed for individuals with diabetes. Poor blood sugar control contributes to increased risk for heart disease, cerebrovascular disease, kidney failure, amputations and blindness.

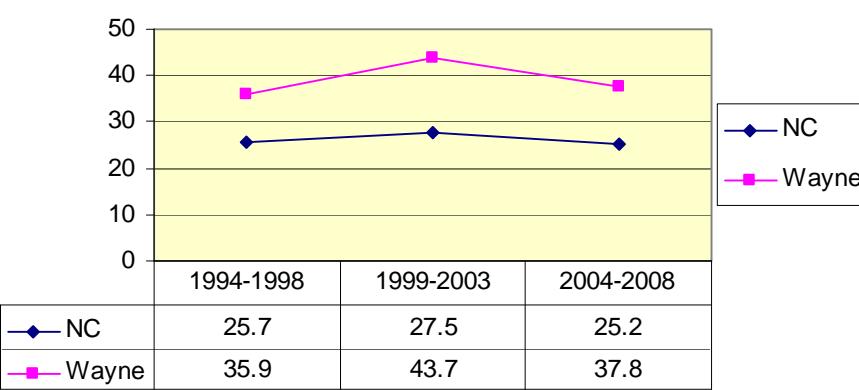
**Graph 14: Heart Disease Death Rates  
(Age-Adjusted per 100,000 population)**



**Graph 15: Total Cancer Death Rates  
(Age Adjusted per 100,000 population)**



**Graph 16: Diabetes Death Rates  
(Age Adjusted per 100,000 population)**



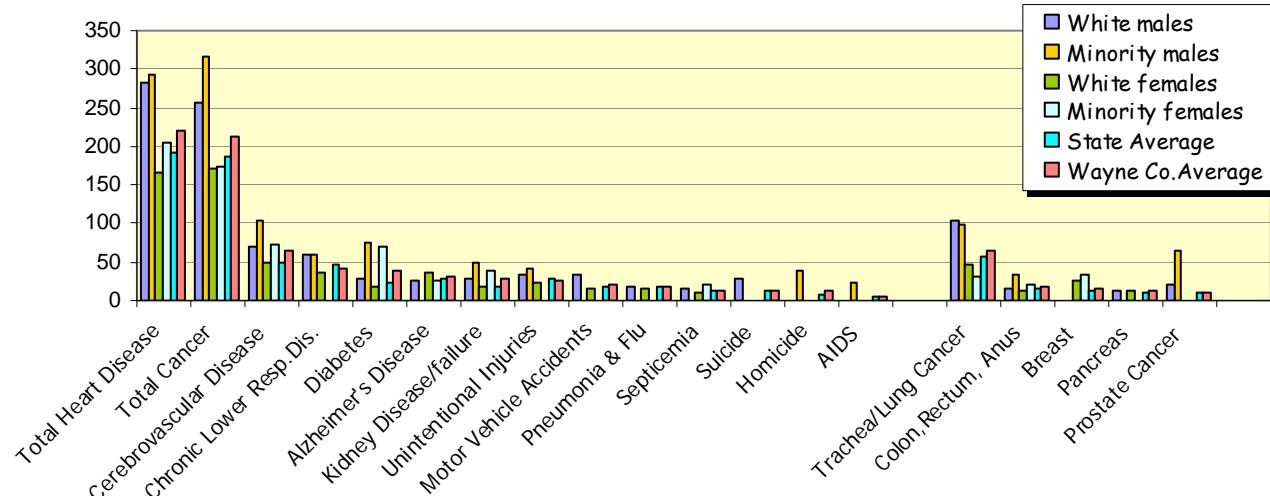
Source: <http://www.schs.state.nc.us/SCHS/data/trends/pdf/>

**Wayne County Leading Causes of Death for Whites & African Americans (A.A.) as compared to North Carolina rates for Whites & African Americans for 2005 – 2009  
(Age Adjusted Death Rates Per 100,000 Population)**

| Cause                    | White Males |       | A.A. Males |      | White Females |       | A.A. Females |       | NC Rate | Wayne Co. Rate |
|--------------------------|-------------|-------|------------|------|---------------|-------|--------------|-------|---------|----------------|
|                          | Wayne       | NC    | Wayne      | NC   | Wayne         | NC    | Wayne        | NC    |         |                |
| Total Heart Disease      | 283.3       | 236.2 | 294        | 294  | 166.4         | 144.2 | 204.7        | 186.0 | 191.7   | 221            |
| Total Cancer             | 256.3       | 224.4 | 315.4      | 304  | 170           | 149.4 | 173          | 168.8 | 185.6   | 211            |
| Cerebrovascular Disease  | 69.1        | 47.1  | 103.3      | 77.1 | 48.7          | 45.1  | 73           | 63.8  | 50.5    | 64.6           |
| Chronic Lower Resp. Dis. | 58.9        | 59.1  | 59.2       | 47.4 | 36.3          | 45.5  | N/A          | 21.0  | 47      | 40.4           |
| Diabetes                 | 28.2        | 22.6  | 75.6       | 53.3 | 19.4          | 15.1  | 69.6         | 45.5  | 23.6    | 37.6           |
| Alzheimer's Disease      | 27.2        | 22.7  | N/A        | 20.1 | 36.6          | 32.3  | 26.2         | 27    | 28.3    | 30.4           |
| Kidney Disease/failure   | 29.2        | 19    | 50.4       | 41.6 | 17.6          | 12.5  | 37.9         | 34    | 18.7    | 28.8           |
| Unintentional Injuries   | 33.7        | 40.5  | 42.6       | 32.6 | 22.8          | 21.9  | N/A          | 13.9  | 28.6    | 26.1           |
| Motor Vehicle Accidents  | 34.5        | 25.3  | N/A        | 27.4 | 15.4          | 10.5  | N/A          | 8.5   | 17.6    | 21.5           |
| Pneumonia & Flu          | 16.9        | 22.2  | N/A        | 25   | 14.6          | 17.7  | N/A          | 16.1  | 19.4    | 16.9           |
| Septicemia               | 14.7        | 13.4  | N/A        | 24.4 | 9.3           | 11.4  | 20.6         | 19.5  | 13.8    | 14             |
| Suicide                  | 29.8        | 22.3  | N/A        | 8.7  | N/A           | 6.4   | N/A          | 1.6   | 12      | 13.8           |
| Homicide                 | N/A         | 5.8   | 37.6       | 27   | N/A           | 2.4   | N/A          | 5.4   | 7       | 11.8           |
| AIDS                     | N/A         | 2     | 24         | 21.9 | N/A           | 0.5   | N/A          | 10.2  | 4.2     | 5.8            |
| <b>Cancer By Site</b>    |             |       |            |      |               |       |              |       |         |                |
| Trachea/Lung Cancer      | 103.9       | 76.9  | 98.9       | 90.3 | 46.9          | 43.7  | 30.2         | 33    | 57      | 66.1           |
| Colon, Rectum, Anus      | 15          | 18.4  | 32.6       | 29.5 | 12.8          | 12.8  | 20.4         | 18.8  | 16.5    | 17.7           |
| Breast                   | N/A         | 0.3   | N/A        | N/A  | 27            | 21.8  | 34           | 31.3  | 13.4    | 16.7           |
| Pancreas                 | 13.3        | 11.4  | N/A        | 16.1 | 13.4          | 8.9   | N/A          | 13.6  | 10.8    | 13.5           |
| Prostate Cancer          | 19.6        | 20.5  | 65.8       | 58.4 | 0             | 0     | 0            | 0     | 9.6     | 11             |

**Technical Note:** Rates based on fewer than 20 cases (indicated by "N/A") are unstable and have been suppressed – Source: State Center for Health Statistics, N.C. Department of Health and Human Services.

**Graph 13: Wayne/NC Leading Causes of Mortality 2005-2009**



**Wayne County Leading Causes of Death for Other Races as compared to North Carolina  
rates for Other Races for 2005-2009  
(Age Adjusted Death Rates, per 100,000 Population)**

| Cause                    | *Other Males |       | *Other Females |       | NC<br>Rate | Wayne<br>Co. Rate |
|--------------------------|--------------|-------|----------------|-------|------------|-------------------|
|                          | Wayne        | NC    | Wayne          | NC    |            |                   |
| Total Heart Disease      | N/A          | 156.6 | N/A            | 106.6 | 191.7      | 221               |
| Total Cancer             | N/A          | 146.4 | N/A            | 106.9 | 185.6      | 211               |
| Cerebrovascular Disease  | N/A          | 45.6  | N/A            | 34.7  | 50.5       | 64.6              |
| Chronic Lower Resp. Dis. | N/A          | 28    | N/A            | 15.5  | 47         | 40.4              |
| Diabetes                 | N/A          | 23.9  | N/A            | 28.6  | 23.6       | 37.6              |
| Alzheimer's Disease      | N/A          | 15.9  | N/A            | 20.8  | 28.3       | 30.4              |
| Kidney Disease/failure   | N/A          | 17.5  | N/A            | 15.4  | 18.7       | 28.8              |
| Unintentional Injuries   | N/A          | 21.9  | N/A            | 11    | 28.6       | 26.1              |
| Motor Vehicle Accidents  | N/A          | 27.7  | N/A            | 11.4  | 17.6       | 21.5              |
| Pneumonia & Flu          | N/A          | 11.9  | N/A            | 8.9   | 19.4       | 16.9              |
| Septicemia               | N/A          | 11    | N/A            | 9.4   | 13.8       | 14                |
| Suicide                  | N/A          | 11    | N/A            | 4.8   | 12         | 13.8              |
| Homicide                 | N/A          | 15.4  | N/A            | 3.9   | 7          | 11.8              |
| AIDS                     | N/A          | N/A   | N/A            | N/A   | 4.2        | 5.8               |
| <b>Cancer By Site</b>    |              |       |                |       |            |                   |
| Trachea/Lung Cancer      | N/A          | 45.8  | N/A            | 26.1  | 57         | 66.1              |
| Colon,Rectum, Anus       | N/A          | 7.9   | N/A            | 9.8   | 16.5       | 17.7              |
| Breast                   | N/A          | N/A   | N/A            | 13.1  | 13.4       | 16.7              |
| Pancreas                 | N/A          | 5     | N/A            | 6.3   | 10.8       | 13.5              |
| Prostate Cancer          | N/A          | 18.3  | N/A            | N/A   | 9.6        | 11                |

**Technical Note:** Rates based on fewer than 20 cases (indicated by "N/A") are unstable and have been suppressed – **Source:** State Center for Health Statistics, N.C. Department of Health and Human Services.

**\*Other:** Defined as including American Indian & Asian Pacific Islander. (State Center for Health Statistics)

## Discussion:

Historically, death rates from heart disease, diabetes, and cancer in Wayne County have been higher than the state average. The fact that death rates in Wayne County exceed the state average is a public health concern. Based on graph 14 it does appear that heart disease death rates are on a downward trend; Graph 15 & 16 however show that we continue to still have much work to do where Cancer and Diabetes are concerned. Heart disease, diabetes, and cancer are to a large extent, controllable through lifestyle modifications (healthier diet, physical activity and avoiding smoking). Other factors that may contribute to these diseases are heredity, and delays in diagnoses and treatment. It appears that educational interventions could have a significant impact on death rates from these three causes in Wayne County.

In reviewing the most up to date data for 2005-2009 cerebrovascular disease, chronic lower respiratory disease and Alzheimer's are also leading killers in Wayne as shown graphically on page 49. Flu & Pneumonia deaths while lower than state rates are also higher for whites than nonwhites.

## Blood Alcohol Levels & Causes of Death:

**Table 30:** shows the percentages of individual blood alcohol levels (BAL) at time of death, for non-natural causes.

| Blood Alcohol Levels at Time of Death,<br>North Carolina,<br>(1997 – 2001) |           |                   |                   |                |
|----------------------------------------------------------------------------|-----------|-------------------|-------------------|----------------|
| Motor Vehicle/<br>★Unintentional Injuries                                  | % BAL .00 | % BAL .01-<br>.07 | % BAL .08-<br>.15 | % BAL<br>> .16 |
| Latino                                                                     | 57.3      | 6.5               | 12.6              | 23.6           |
| White                                                                      | 79.7      | 4.1               | 5.9               | 10.4           |
| African-American                                                           | 72.0      | 6.1               | 7.3               | 14.6           |

| Homicide         |      |      |      |      |
|------------------|------|------|------|------|
| Latino           | 47.3 | 13.8 | 16.4 | 22.5 |
| White            | 65.3 | 9.1  | 12.3 | 13.3 |
| African American | 65.1 | 12.4 | 12.4 | 10.1 |

| Suicide          |      |       |       |       |
|------------------|------|-------|-------|-------|
| Latino           | 54.9 | 11.0* | 15.4* | 18.7* |
| White            | 75.0 | 6.2   | 8.4   | 10.4  |
| African American | 77.4 | 9.8   | 6.1   | 6.7   |

Source: <http://www.ncmedicaljournal.com/may-jun-03/toc0503.shtml>

Note: Percentage is based on less than 20 events in the numerator

### Observations:

- At the time of death for the three causes shown in Table 30, a greater percentage of Hispanics had elevated blood alcohol levels than Whites and African American.
- More than 36% of Hispanics killed in motor vehicle or from unintentional injuries had a blood alcohol level of .08% or higher.
- 39% of Hispanics who died from homicide and 34% who committed suicide during 1997-2001 had a blood alcohol level of .08% or higher.
- Alcohol abuse prevention may be an important public health intervention among Hispanics.

### Discussion:

Table 30 shows the percentage of decedents with various levels of blood alcohol and causes of death. It is obvious that alcohol is an important contributing factor in the accidental and intentional death of Hispanics in North Carolina. It is important to note that the leading cause of death among Hispanics in North Carolina is motor vehicle accidents. The age adjusted death rates for Hispanics in North Carolina are much lower than that for whites and blacks in North Carolina (*NC Medical J., May-June 2003*). This finding is consistent with a population that is relatively young and has recently immigrated into the country.

See next page for updated Blood Alcohol Levels for 2005-2009

| Blood Alcohol Levels at Time of Death       |                         |              |                  |                  |               |
|---------------------------------------------|-------------------------|--------------|------------------|------------------|---------------|
| North Carolina by Race & Ethnicity          |                         |              |                  |                  |               |
| 2005 - 2009 (ages 15 and older only)        |                         |              |                  |                  |               |
| Motor Vehicle/<br>Unintentional<br>Injuries | # Tested<br>for Alcohol | % BAL<br>0.0 | % BAL<br>.01-.07 | % BAL<br>.08-.15 | % BAL<br>>.16 |
| White                                       | 10,123                  | 73.9         | 6.1              | 6.8              | 13.2          |
| African-American                            | 2,320                   | 67.5         | 7                | 8.8              | 16.8          |
| American Indian                             | 256                     | 61.7         | 5.5*             | 12.5             | 20.3          |
| Asian                                       | 73                      | 80.8         | 5.5*             | 4.1*             | 9.6*          |
| Total                                       | 13,391                  | 71.7         | 6.2              | 7.3              | 14.8          |
| Hispanic/ Latino                            | 607                     | 52.9         | 4                | 9.7              | 33.4          |

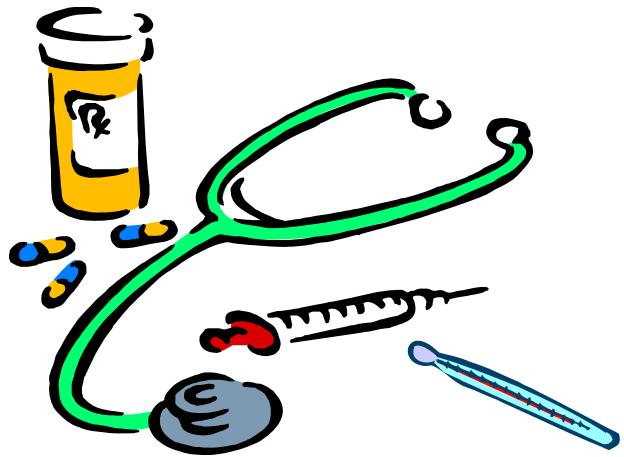
| Homicide         | # Tested<br>for Alcohol | % BAL<br>0.0 | % BAL<br>.01-.07 | % BAL<br>.08-.15 | % BAL<br>>.16 |
|------------------|-------------------------|--------------|------------------|------------------|---------------|
| White            | 937                     | 63.1         | 10.7             | 10               | 16.2          |
| African-American | 1,467                   | 64.8         | 11.6             | 13.3             | 10.4          |
| American Indian  | 98                      | 61.2         | 15.3*            | 9.2*             | 14.3*         |
| Asian            | 32                      | 87.5         | 9.4*             | 3.1*             | 0*            |
| Total            | 2,806                   | 63.3         | 11.3             | 12               | 13.4          |
| Hispanic/ Latino | 266                     | 53           | 11.3             | 12.8             | 22.9          |

| Suicide          | # Tested<br>for Alcohol | % BAL<br>0.0 | % BAL<br>.01-.07 | % BAL<br>.08-.15 | % BAL<br>>.16 |
|------------------|-------------------------|--------------|------------------|------------------|---------------|
| White            | 3,978                   | 70.1         | 8                | 9.4              | 12.6          |
| African-American | 408                     | 76           | 7.8              | 7.8              | 8.3           |
| American Indian  | 55                      | 67.3         | 7.3*             | 12.7*            | 12.7*         |
| Asian            | 40                      | 92.5         | 2.5*             | 2.5*             | 2.5*          |
| Total            | 4,594                   | 70.6         | 7.9              | 9.3              | 12.3          |
| Hispanic/ Latino | 109                     | 64.2         | 6.4*             | 11*              | 18.3          |

**Note:** Data are from the North Carolina Medical Examiner's Office. The numbers by race add to less than the Total.

\*Percentage is based on less than 20 events in the numerator.

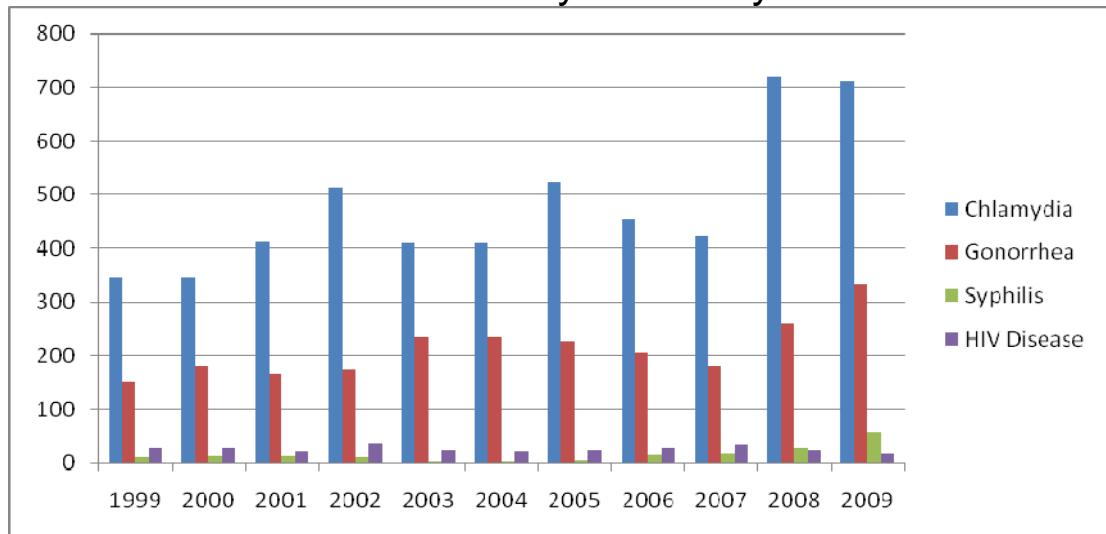




# Sexually Transmitted Diseases & Other Communicable Diseases



## Number of STD Cases in Wayne County from 1999-2009



Graph 17:  
Number of  
STD Cases in  
Wayne County  
for selected  
infection years  
1999-2009

Source: <http://www.epi.state.nc.us/epi/hiv/surveillance.html>

| Wayne County STD Cases<br>(by # of cases) |           |           |          |             |
|-------------------------------------------|-----------|-----------|----------|-------------|
| Year                                      | Chlamydia | Gonorrhea | Syphilis | HIV Disease |
| 1999                                      | 345       | 150       | 10       | 27          |
| 2000                                      | 346       | 180       | 12       | 27          |
| 2001                                      | 411       | 166       | 13       | 22          |
| 2002                                      | 513       | 173       | 11       | 36          |
| 2003                                      | 409       | 234       | 3        | 23          |
| 2004                                      | 409       | 234       | 3        | 22          |
| 2005                                      | 524       | 228       | 5        | 18          |
| 2006                                      | 455       | 207       | 15       | 11          |
| 2007                                      | 423       | 181       | 17       | 16          |
| 2008                                      | 718       | 259       | 28       | 14          |
| 2009                                      | 712       | 332       | 59       | 16          |

Source: NC 2009 HIV/STD Surveillance Report (numbers corrected for 2005-2009 for HIV)

### Observations:

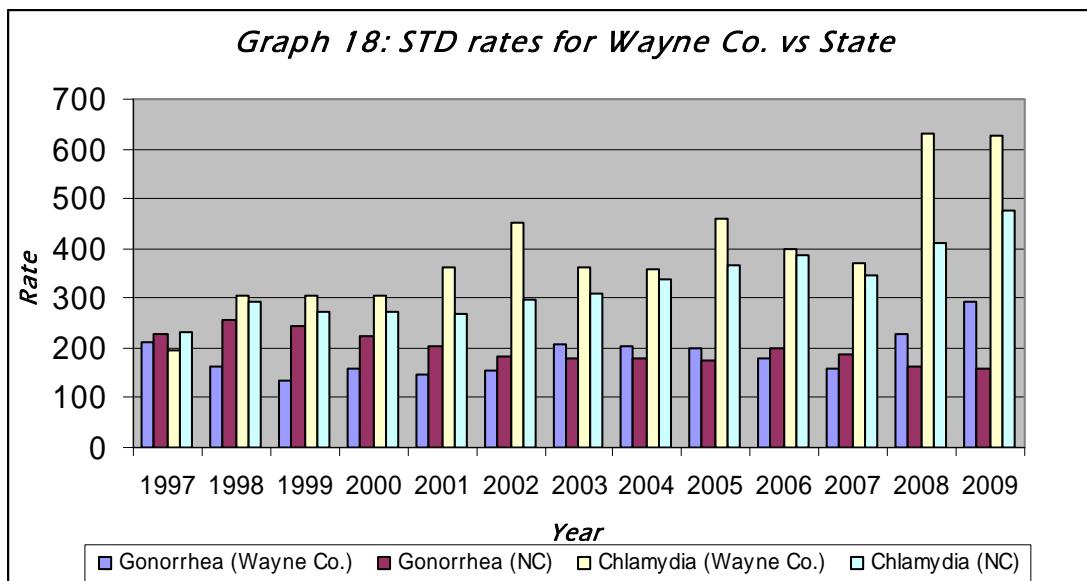
- The number of Chlamydia cases has increased by 52% over the ten-year period of 1999-2009.
- The number of Gonorrhea cases has increased by 55% over the last ten years.
- The number of Syphilis cases has dramatically increased by 83% from 1999 to 2009. Reviewing data from 2005 to 2009 in the chart above shows how syphilis has dramatically increased in Wayne County – this may possibly be due to increased efforts to provide better access to screening. The Health Department in conjunction with the state has sponsored Get Real Get Tested Campaigns as an extra effort to reach out to the community. Other risky behavior such as drug abuse, prostitution, multiple sex partners and men having sex with men may have also contributed to the increase.
- The number of people infected with the HIV virus is at its lowest since 2004. A concern here in Wayne County is making sure people with HIV disease are being case managed in order to receive early and consistent care. Ironically it would appear that the number of cases of HIV would have increased with the number of syphilis but thus far that has

not shown up in our latest 2008 & 2009 data. However we may see HIV cases increase in the future due to increased numbers of syphilis cases.

| <b>Table 32: Sexually Transmitted Disease Rates</b> |                 |              |                  |              |                  |              |                    |              |
|-----------------------------------------------------|-----------------|--------------|------------------|--------------|------------------|--------------|--------------------|--------------|
|                                                     | <b>Syphilis</b> |              | <b>Gonorrhea</b> |              | <b>Chlamydia</b> |              | <b>HIV Disease</b> |              |
| <b>Year</b>                                         | <i>Wayne</i>    | <i>State</i> | <i>Wayne</i>     | <i>State</i> | <i>Wayne</i>     | <i>State</i> | <i>Wayne</i>       | <i>State</i> |
| 1997                                                | 48.6            | 21.8         | 212              | 227.3        | 196.1            | 230          | 19.4               | 22.4         |
| 1998                                                | 66.2            | 20.8         | 162.4            | 254.7        | 305.1            | 294          | 19.4               | 19.7         |
| 1999                                                | 8.8             | 15.1         | 132.5            | 244.4        | 304.8            | 274          | 23.9               | 19.3         |
| 2000                                                | 10.6            | 13.6         | 158.8            | 222.8        | 305.3            | 275          | 23.8               | 17.2         |
| 2001                                                | 11.5            | 11.5         | 146.6            | 204.1        | 363.0            | 271          | 19.4               | 18.6         |
| 2002                                                | 9.7             | 7.4          | 152.9            | 184.7        | 453.3            | 298          | 31.8               | 20.3         |
| 2003                                                | 2.6             | 4.7          | 206.4            | 179.1        | 360.7            | 310          | 20.3               | 24.6         |
| 2004                                                | 2.6             | 5.3          | 204.8            | 177.9        | 358.0            | 340          | 19.3               | 19.2         |
| 2005                                                | 4.4             | 5.7          | 199.6            | 176.5        | 458.7            | 365          | 15.9               | 21.1         |
| 2006                                                | 13.1            | 7            | 180.9            | 199.3        | 397.6            | 387          | 9.8                | 23.3         |
| 2007                                                | 14.9            | 6.4          | 159              | 188.2        | 371.6            | 346          | 14.1               | 21.9         |
| 2008                                                | 24.6            | 5.5          | 227.9            | 162.8        | 631.6            | 411          | 12.3               | 19.3         |
| 2009                                                | 51.9            | 10.2         | 292.1            | 160.6        | 626.4            | 474          | 14.1               | 18.5         |

Source: <http://www.epi.state.nc.us/epi/hiv/stats.html>

NC 2009 HIV/STD Surveillance Report (data for 2005-2007 has been corrected for HIV for Wayne)



## Observations:

- In Table 32 Wayne County's Gonorrhea rates are higher than the state average, for years 2008 and 2009. Chlamydia, in Wayne County, is on the rise, and trends show this rate is higher than the state average. In fact this is true for all the STD's as shown in Table 32 with the exception of HIV Disease.
- Detection, treatment and prevention of sexually transmitted diseases is a mandate of public health.
- See next page for further discussion of various sexually transmitted diseases.

## **Discussion:**

Chlamydia (*Chlamydia trachomatis*) infections are the most prevalent of all sexually transmitted diseases. In women, these infections often result in pelvic inflammatory disease (PID), which can cause infertility, an ectopic pregnancy, and chronic pelvic pain. The vast majority of Chlamydia cases (over 80%) are among females due to screening bias. The rate of positive tests increased after May of 2004 because the State Lab changed to a more sensitive test. Wayne County's rates are much higher than the state rate.

Gonorrhea (*Nesseria gonorrhea*) may cause Pelvic Inflammatory Disease (PID), and increases the risk of infertility and ectopic (tubal) pregnancy. Infection with Gonorrhea facilitates HIV transmission. Wayne County's rates are much higher than the state rate.

Syphilis (*Treponema pallidum*) is an acute and chronic disease that can facilitate HIV transmission 2 to 5 fold. Syphilis can cause many complications ranging from stillborn births to nerve damage and death in adults. Wayne County's rates are much higher than the state rate. The top five counties in N.C. reporting most early syphilis cases in 2009 were Forsyth (195), Mecklenburg (174), Wake (115), Guildford (68), and Wayne (59). (NC 2009 HIV/STD Surveillance Report).

**HIV/AIDS:** Infection with the human immunodeficiency virus (HIV) generally causes progressive damage to the immune and organ systems, including the central nervous system, and leads to a more severe, life-threatening clinical condition called AIDS. The State's HIV rate (per 100,000 population), for the year 2005 is almost 7 times higher in African Americans versus White population (*data not shown*). In 2006, there were 2,022 reports of HIV disease in North Carolina. Nationally, in 2003, NC reported the 2<sup>nd</sup> highest number of AIDS cases among non-metropolitan areas. Since 1983, there have been 496 cases of HIV infection in Wayne County. Currently (as of December 2007), there are 303 known individuals who are HIV+ in Wayne County. HIV/AIDS is a leading cause of death in Wayne County for African American men based on 2005-2009 trend data for leading causes of death. (State Center for Health Statistics)

The state of North Carolina had experienced an epidemic of HIV infection among college students. Between January of 2000 to December 2003, 84 college students in North Carolina were diagnosed with HIV infection. Of these 84, 73 (88%) were AA and 92% were either Men Having Sex with Men or Men Having Sex with Men & Women.. To this day, North Carolina college students continue to represent an at-risk, assessable population, which deserves further HIV prevention interventions. It should be emphasized however, that anyone of any age participating in risky sexual behaviors can be at risk for HIV/AIDS.

As of December 31, 2009, the estimated number of living HIV disease cases diagnosed and reported in NC was 24,248.

For 2009 in NC, 957 new diagnoses of AIDS were reported.

## Sexually Transmitted Diseases in Teens:

### Gonorrhea Cases and Rates, Wayne County Teens

**Table 33** No. & Rates  
of Gonorrhea Infection, Wayne Co.

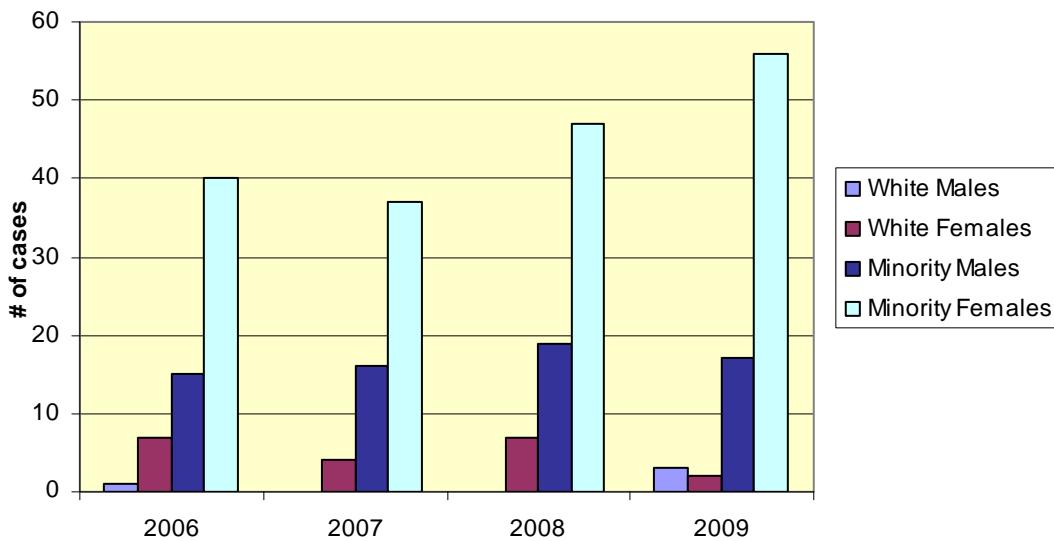
| Year        | Age      | White   |       |         |       | Minority |        |         |        |
|-------------|----------|---------|-------|---------|-------|----------|--------|---------|--------|
|             |          | Male    |       | Female  |       | Male     |        | Female  |        |
|             |          | # Cases | Rate  | # Cases | Rate  | # Cases  | Rate   | # Cases | Rate   |
| <b>2001</b> | <14yrs   | 1       | 13.1  | 0       | 0.0   | 1        | 19.5   | 4       | 83.5   |
|             | 15-19yrs | 6       | 244.8 | 6       | 255.3 | 16       | 955.8  | 32      | 1887.9 |
| <b>2002</b> | <14yrs   | 0       | 0.0   | 0       | 0.0   | 0        | 0.0    | 2       | 42.0   |
|             | 15-19yrs | 1       | 40.4  | 3       | 126.7 | 17       | 1018.6 | 43      | 2541.4 |
| <b>2003</b> | <14yrs   | 0       | 0.0   | 1       | 14.2  | 1        | 19.6   | 2       | 42.3   |
|             | 15-19yrs | 1       | 40.9  | 5       | 209.3 | 21       | 1258.2 | 40      | 2411.1 |
| <b>2004</b> | <14yrs   | 0       | 0.0   | 1       | 14.2  | 0        | 0.0    | 9       | 190.6  |
|             | 15-19yrs | 0       | 0.0   | 3       | 123.8 | 16       | 949.6  | 25      | 1485.4 |
| <b>2005</b> | <14yrs   | 0       | 0.0   | 0       | 0.0   | 1        | 19.6   | 2       | 42.7   |
|             | 15-19yrs | 1       | 39.9  | 4       | 161.0 | 18       | 1096.2 | 60      | 3562.9 |
| <b>2006</b> | <14yrs   | 0       | 0.0   | 0       | 0.0   | 0        | 0.0    | 0       | 0.0    |
|             | 15-19yrs | 1       | 40.8  | 7       | 288.2 | 15       | 870.1  | 40      | 2368.3 |
| <b>2007</b> | <14yrs   | 0       | 0.0   | 0       | 0.0   | 1        | 18.6   | 1       | 21.4   |
|             | 15-19yrs | 0       | 0.0   | 4       | 163.5 | 16       | 902.9  | 37      | 2197.1 |
| <b>2008</b> | <14yrs   | 0       | 0.0   | 0       | 0.0   | <5       | *      | 0       | 0.0    |
|             | 15-19yrs | 0       | 0.0   | 7       | 334.5 | 19       | 1204.8 | 47      | 3284.4 |
| <b>2009</b> | <14yrs   | 0       | 0.0   | <5      | *     | 0        | 0.0    | <5      | *      |
|             | 15-19yrs | <5      | *     | <5      | *     | 17       | 1078.0 | 56      | 3913.4 |

- <5 - cells have been suppressed due to low numbers – thus no rate is calculated

- Source: State Center for Health Statistics

See Bar Graph - Next Page

**Graph 19: Cases of Gonorrhea in Wayne County  
(Ages 15-19)**



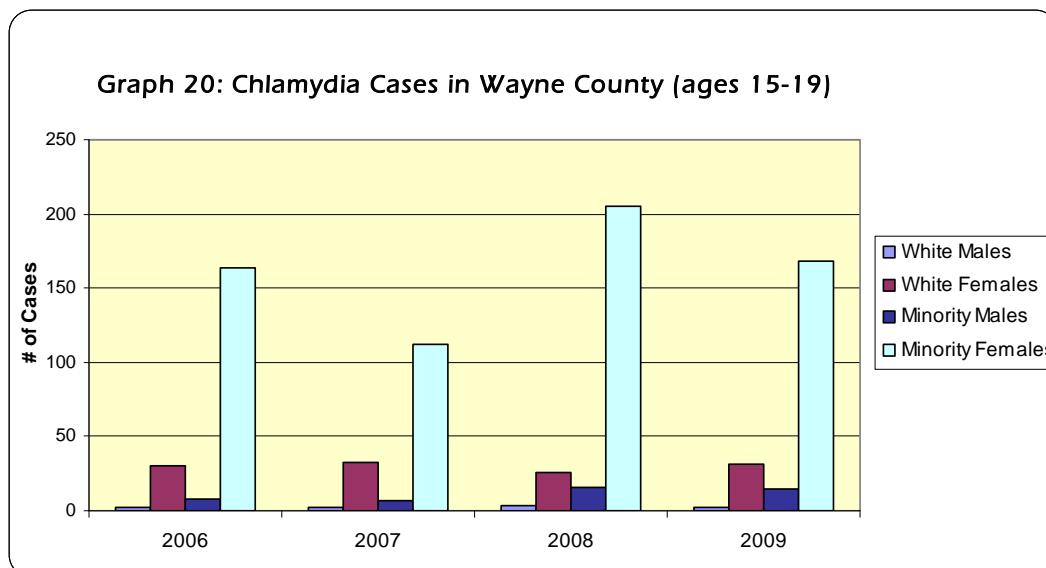
**Observations:**

- Minority teen females and minority teen males are affected disproportionately by Gonorrhea infection, when compared to white teens.
- Minority teens accounted for 90% of the total Gonorrheal infections among teens, for the years shown (2006-2009).
- Minority teen females account for 66% of all Gonorrhea infections, for the 4-year trend shown.
- White teens (male and female) account for 9.5% of the total Gonorrheal infections, during the years 2006 – 2009.

**Table 34** Number & Rates of Chlamydia Infection in Wayne County Teens

| Year | Age      | White   |        |         |         | Minority |        |         |          |
|------|----------|---------|--------|---------|---------|----------|--------|---------|----------|
|      |          | Male    |        | Female  |         | Male     |        | Female  |          |
|      |          | # Cases | Rate   | # Cases | Rate    | # Cases  | Rate   | # Cases | Rate     |
| 2001 | <14yrs   | 1       | 13.10  | 1       | 14.10   | 3        | 58.5   | 4       | 83.50    |
|      | 15-19yrs | 1       | 40.80  | 38      | 1617.00 | 4        | 239.0  | 149     | 8791.00  |
| 2002 | <14yrs   | 0       | 0.00   | 1       | 14.10   | 2        | 39.0   | 14      | 294.00   |
|      | 15-19yrs | 2       | 81.00  | 44      | 1858.00 | 18       | 1079.0 | 170     | 10047.0  |
| 2003 | <14yrs   | 0       | 0.00   | 1       | 14.20   | 0        | 0.0    | 12      | 254.00   |
|      | 15-19yrs | 2       | 82.00  | 24      | 1004.00 | 13       | 779.0  | 134     | 8077.00  |
| 2004 | <14yrs   | 0       | 0.00   | 1       | 14.20   | 0        | 0.0    | 9       | 191.00   |
|      | 15-19yrs | 3       | 120.00 | 33      | 1361.00 | 16       | 950.0  | 132     | 7843.00  |
| 2005 | <14yrs   | 0       | 0.00   | 0       | 0.00    | 1        | 19.6   | 8       | 170.60   |
|      | 15-19yrs | 3       | 119.70 | 41      | 1650.60 | 17       | 1035.3 | 164     | 9738.70  |
| 2006 | <14yrs   | 0       | 0.00   | 0       | 0.00    | 1        | 19.5   | 6       | 127.90   |
|      | 15-19yrs | 2       | 81.70  | 30      | 1235.10 | 8        | 464.0  | 164     | 9709.1   |
| 2007 | <14yrs   | 0       | 0.00   | 0       | 0.00    | 2        | 39.2   | 4       | 85.60    |
|      | 15-19yrs | 2       | 81.70  | 32      | 1308.30 | 7        | 395.0  | 112     | 6650.80  |
| 2008 | <14yrs   | 0       | 0.00   | 0       | 0.00    | 0        | 0.0    | 6       | 150.30   |
|      | 15-19yrs | <5*     | *      | 26      | 1242.24 | 16       | 1014.5 | 205     | 14325.65 |
| 2009 | <14yrs   | 0       | 0.00   | 0       | 0.00    | 0        | 0.0    | 6       | 150.30   |
|      | 15-19yrs | <5*     | *      | 31      | 1481.13 | 15       | 951.2  | 168     | 11740.04 |

\* <5 cells have been suppressed source: North Carolina State Center for Health Statistics



## Observations:

- The data presented here shows that minority teen females are affected disproportionately by Chlamydia infection, when compared to white teen females.
- Overall, females tend to account for the majority of the Chlamydia infections, when compared to teen male Chlamydia infections.
- Minority females account for 79% of all Chlamydia infections.

## Discussion:

It may be that Sexually Transmitted Diseases (STDs) go un-reported if seen by private physicians. Many STDs are disproportionately represented among African Americans, American Indians, Hispanics and Women. One reason for this disparity is the fact that minorities are more likely to seek care in public clinics that report STDs more completely than private physicians. In addition, women are tested for STDs much more frequently because of Family Planning services, prenatal care, and regular OB-GYN visits.

Current research literature states minority male and females tend to have an increased risk for early sexual involvement; based on this information, teens who engage in early sexual relationships, have an increased risk to have an overall higher number of sexual partners. This in turn, increases their risk of contracting sexually transmitted diseases. (Source: National Youth Risk Behavior Surveillance Survey (YRBSS)).

Due to the trend of youth engaging in early sexual involvement, there is a pressing need to understand and explore the protective and risk factors leading to early and risky sexual behavior and contraceptive use among youth (not only in Wayne County, or North Carolina, but nationwide).

## Communicable Diseases in Wayne County:

**Table 35:** Communicable Diseases in Wayne County, by the number of cases reported for the 2000 - 2009

| Wayne County Communicable Diseases    |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|
| 2000-2008                             |      |      |      |      |      |      |      |      |      |
| Disease                               | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| <i>Campylobacter</i>                  | 1    | 4    | 0    | 0    | 0    | 1    | 0    | 0    | 1    |
| <i>Hepatitis A</i>                    | 4    | 1    | 0    | 0    | 0    | 1    | 2    | 3    | 0    |
| <i>Hepatitis B</i>                    | 4    | 3    | 0    | 0    | 0    | 11   | 5    | 7    | 0    |
| <i>R.M. Spotted Fever</i>             | 0    | 1    | 0    | 0    | 0    | 1    | 1    | 0    | 1    |
| <i>Salmonella</i>                     | 13   | 8    | 0    | 0    | 0    | 2    | 8    | 4    | 6    |
| <i>Shigellosis</i>                    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1    |
| <i>Tuberculosis</i>                   | 7    | 9    | 8    | 5    | 9    | 16   | 8    | 9    | 3    |
| <i>Whooping Cough<br/>(pertussis)</i> | 0    | 4    | 0    | 0    | 0    | 0    | 0    | 1    | 0    |

## **Observations:**

- The incidence of Campylobacter, Shigellosis and Salmonella has fluctuated in Wayne County, possibly due to outbreaks involving people from a common source.
- Hepatitis A and Hepatitis B have seen a decrease from 2006 to 2008 - although data is not shown in the above table the number of Hepatitis B cases increased in Wayne in 2010 due to an outbreak at a local health care facility.
- Rocky Mountain spotted fever saw one case in 2008 this can be fatal and is a concern.
- Salmonella saw numbers increase in 2008
- Tuberculosis continues to be a concern for Wayne County with numbers being at their highest in 2005 and their lowest in 2008.

## **Discussion:**

Campylobacter, Shigellosis, and Salmonella are bacteria that cause infection in humans and animals. Symptoms of infection may include diarrhea, abdominal pain, fever, nausea and vomiting. Transmission can be through eating the living bacteria in food; the most common route is ingestion of food or water that has been contaminated with human or animal feces. These diseases, along with Hepatitis A, are termed “fecal-oral” because transmission frequently is from the ingestion of minute amounts of feces through food, or from hand to mouth contact.

A Shigellosis outbreak occurred in a daycare center in 1998, in Wayne County.

Hepatitis A is a viral infection of the liver. Symptoms usually include an abrupt onset of fever, anorexia, nausea, diarrhea, yellowing of the skin and whites of the eyes and dark urine. Transmission is primarily fecal-oral. An outbreak of hepatitis A in Johnston County during the year 2000 affected Wayne County residents.

Hepatitis B is a viral infection of the liver, transmitted by direct contact with blood or body fluids from an infected person, while having sex or sharing needles. In 2010 Wayne County experienced an outbreak of Hepatitis B in a local health care facility.

Tuberculosis is a potentially life threatening disease, if untreated. Tuberculosis (TB) is spread through person-to-person contact. Tuberculosis can affect all organs of the body, but is most prevalent in the lungs. The influx of foreign-born individuals from TB endemic countries has contributed to the cases of TB disease in Wayne County and N.C. The 1999 increase was due to an entire family contracting the disease.



# Primary & Secondary Data Collection & Reporting



## **Collection & Reporting of Data**

### **I. Collection of Primary Data:**

- **Youth Risk Behavior Survey (889 students polled)**

Conducted through all 6 Wayne County High Schools-  
April 2008

- **Community Health Behavior Survey/ Opinion Survey**

Time Span for Collection of data: July 7 – October 23, 2008

#### Avenues for collection of feedback from the community

- American Red Cross (Blood Donors) (99)
- Wayne County Clerk of Court (Juror Pool) (193)
- Local Health Fairs (24)
- 1 received through mail
- Wal-Mart sites (Mt. Olive, Goldsboro-Spence Avenue, Goldsboro – Hwy 70 West (89)
- Online at [www.waynegov.com](http://www.waynegov.com) ( Survey Monkey): 204  
Advertised through radio, newspaper article, local library and  
online to Wayne County Government Employees  
Total Participation in Community survey: 610

### **II. Collection of Secondary Data: Sources**

- See Resources Section for listing

### **III. Reporting Data Results to the Community:**

December 17, 2008 – Wayne County Board of Health Meeting

January 21, 2009 – Strategic Planning/Community Partners Meeting

Media: January, 2009

- Goldsboro News Argus – (Interview with Health Director regarding priorities set)
- WFMC Radio (Interview with Health Director regarding priorities set)

## **Significant Findings YRBS (Youth Risk Behavior Survey)**

As of January, 2008 Wayne County was only one of five NC counties not participating in the YRBS. Reasons given by the school administration for not participating in the survey were:

1. Some questions on the YRBS were sexual in nature and would be offensive
2. The fact that the survey results are pooled into regions which means the results may not be an accurate picture for Wayne County.

School administrators requested and received permission from the board of education to conduct the survey of high school children. During the month of April, 2008 all Wayne County High Schools participated in the survey and 889 children were polled during the month of April, 2008.

The survey and the results can be viewed here:

<http://www.waynegov.com/165810410142431703/site/default.asp>

Findings are as follows:

Personal safety:

1. 40% of kids who rode a bicycle during the last year never wore a helmet.
2. 50% of kids said they always wore a seatbelt when riding in a car. 30% said most of the time and about 24% said either sometimes, rarely or never.
3. About 20% of kids said that they had ridden in a car during the last 30 days driven by someone who had consumed alcohol. About 7% reported that they had consumed alcohol and drove.

Violence related behavior:

1. 8.1% of students said they had missed one or more days of school during the past 30 days because they felt unsafe at school or on the way to school.
2. 22% of kids said they have had property stolen or damaged on school grounds during the last year.
3. 31% of kids said they had been involved in a physical fight during the past 12 months. 3% reported they were injured during the fight to the extent that medical care was needed. 10% reported the fight occurred on school property.
4. 7.2% of students reported being physically forced to have sex against their will.

Tobacco use:

1. 18% of kids reported they had smoked cigarettes within the last 20 days.

Alcohol use:

1. 35% of kids reported they had at least one or more drinks containing alcohol in the past 30 days.
2. 18% of kids stated they had drunk five or more drinks in a row within a couple of hours on one or more of the past 30 days.

Other drug use:

1. 32% of Wayne County HS kids said they had used marihuana one or more times in their lives and 17% said they had used it within the last 30 days.
2. 5% said they had tried cocaine.

Weight management:

1. 25% of kids reported they were overweight.

Physical Health

1. 60% of kids have seen a doctor in the last 12 months. 40% have not seen a dentist.

Sexual Behavior

1. 59.4% of kids said that they have had sexual intercourse. 8.6% reported they experienced intercourse before age 13.

Nutrition

1. 88% of kids said they ate at least one vegetable per day
2. 23% of kids reported they ate French fries five or more times during the last seven days
3. 92% drank a soft drink or sweetened beverage one or more times daily. 60% said they drink three or more per day.
4. 31% of kids said they ate breakfast on seven of the previous seven days.

Physical Activity

1. 24% of kids said they were not physically active on a typical school day (no activity or less than 20 minutes)
2. 42% said they were active at least 60 minutes on five of the previous seven days.
3. Only 29% of kids stated they attend a PE class one or more days in an average week. Note: the state average is 50%.
4. 37% report they watch TV three or more hours per day with 16% stating they watch five or more hours per day

Psychological Health

1. 28.7% of children said they felt sad or hopeless for everyday for two weeks or More to the point that they stopped doing usual activities during the last 12 months and about 13% of kids said they had seriously considered suicide..

School Environment

1. 32.6% of kids said that bullying and harassment by other students was a problem at their school.

General

1. 37.1% of kids said they were left alone after school unsupervised for three or more hours on an average school day.
2. 79.7% of kids said they agree or strongly agree that they feel good about themselves.

## **Executive Summary: Community Survey, Wayne County**

The Wayne County Health Department chose to conduct a paper/online survey with citizens in Wayne County in order to gather feedback regarding **health behaviors** as well as **opinions regarding health needs and issues**. The following groups/sites participated in the survey:

- American Red Cross – Blood Donors (99)
- Juror Pool through the Wayne County Clerk of Court's Office (193)
- Local Health Fairs (24)
- Wal-Mart Sites: Mt. Olive, Spence Avenue in Goldsboro and Highway 70 West located west of Goldsboro. (89)
- Online survey was posted at [www.waynegov.com](http://www.waynegov.com) – advertised through radio, newspaper article, local library and online to Wayne County Government employees (204)
- 1 survey mailed to Health Department
- Total Surveyed: 610
- Tool used to tally survey: Survey Monkey

**Demographics of those responding:** 568 answered the question regarding age:

|       |                           |
|-------|---------------------------|
| 2.6%  | 18 years of age and under |
| 5.9%  | 19 to 24 years of age     |
| 18.4% | 25 to 34 years of age     |
| 19.5% | 35 to 44 years of age     |
| 26.0% | 45 to 54 years of age     |
| 19.7% | 55 to 64 years of age     |
| 7.5%  | 65 and older              |

**Gender:** 29.2% Male  
70.7% Female

### **Race/Ethnicity:**

|      |                  |
|------|------------------|
| 70%  | Caucasian        |
| 23%  | African American |
| 4.7% | Hispanic         |
| 0.3% | Asian American   |
| 1.0  | Other            |

### **Educational Status:**

|                                            |       |
|--------------------------------------------|-------|
| Never attended school or kindergarten only | 0.2%  |
| Grades 1 – 8                               | 1.4%  |
| Grades 9 – 11                              | 4.1%  |
| Grade 12 or GED                            | 19.4% |
| Technical school or business college       | 12.1% |
| Some College                               | 30.7% |
| College Graduate (Bachelor's Degree)       | 22.8% |
| Postgraduate (Master's, M.D., Ph.D)        | 9.5%  |

**Overview of questions related to health and health behaviors:**

76.2% described their health as either good or very good.  
85. 9% reported having a doctor or clinic for medical care  
79.6% had visited a doctor in the last year for a routine check-up.  
86.4% reported having a doctor in Wayne County.  
62.2% reported trying to lose weight.  
43% had obtained a mammogram within the last 12 months while 31.3% had never had a mammogram.  
95.3% reported if they had a teenager who was sexually active they would encourage them to use a condom.  
67.6% describe their diet as being medium in terms of low fat while 11.9% describe it as being high in fat.  
33.4% reported they had experienced two or more years in their life feeling depressed.  
59.9% described their stress level as being moderate while 15.0% described it as being high.  
66.3% do not believe there are enough parks and recreational facilities in Wayne County.  
60.9% of those with children reported their child had seen a dentist in the last 6 months while 9.6% had never been to a dentist.  
55.8% of those with children reported their child had visited a doctor for a routine checkup in the last 6 months.  
79.4% reported that they did not smoke – of those who did smoke, 71.6% wanted to quit. Main reasons described as to why they or someone in their household could not receive medical care were as follows: (1) too expensive (2) they do not accept my insurance (3) have trouble knowing where to get medical care (4) not taking new patients

**Opinion Portion of Survey:**

**(1) Health issues most concerned about in Wayne County:**

- Violence (68.9%)
- Teen Pregnancy (52.5%)
- Obesity (52.5%)
- Cancer (52.3%)
- Alcohol Abuse (50.6%)
- Domestic Violence (48.4%)
- Sexually Transmitted Diseases (46.5%)
- Diabetes (41.8%)

**(2) Top 3 behaviors keeping Wayne County unhealthy;**

- (1) Alcohol Abuse
- (2) Lack of exercise
- (3) poor eating habits

**(3) What specific things do you think can be done to improve health in Wayne County:**

- (1) More affordable medicines (70.5%)
- (2) More places to walk or exercise (59.7%)
- (3) More education on how to be healthy (54.4%)
- (4) Being able to see a doctor (43.4%)
- (5) Increasing public transportation ( 28.8%)



# Resources



- **Advocates for Youth**  
<http://www.advocatesforyouth.org>
- **Cecil G. Sheps Center for Health Services Research** – University of North Carolina, Chapel Hill  
<http://www.shepscenter.unc.edu/Data.html>  
<http://www.shepscenter.unc.edu/hp/prof04.htm>
- **CLIKS: Community-Level Information on Kids**  
<http://www.aecf.org/cgi-bin/cliks.cgi>
- **Employment Security Commission of North Carolina** – Labor & Wage Unit, Labor Market Information Division  
<http://eslmi23.esc.state.nc.us/ew/>
- **Geographic.org**  
<http://www.geographic.org>
- **Guttmacher Institute**  
[http://www.guttmacher.org/pubs/fb\\_teens.html](http://www.guttmacher.org/pubs/fb_teens.html)
- **Log into North Carolina (LINC)**  
[http://data.osbm.state.nc.us/pls/linc/dyn\\_linc\\_main.show](http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show)
- **North Carolina Child Advocacy Institute**  
<http://www.ncchild.org>
- **North Carolina Child Fatality Task Force**  
[www.preventchildabuseenc.org/publications/press\\_releases/cftf](http://www.preventchildabuseenc.org/publications/press_releases/cftf)
- **North Carolina Communicable Disease Control**  
<http://www.epi.state.nc.us/epi/gcdc.html>
- **North Carolina Crime Statistics**  
<http://sbi2.jus.state.nc.us/crp/public/Default.htm>
- **North Carolina Department of Health & Human Services** – Division of Medical Assistance

<http://www.dhhs.state.nc.us/dma/>

- **North Carolina Department of Health & Human Services** – HIV/STD Prevention & Care Branch

<http://www.epi.state.nc.us/epi/hiv/surveillance.html>

- **North Carolina Division of Public Health** – Oral Health Section

<http://www.communityhealth.dhhs.state.nc.us/dental/>

- **North Carolina Division of Public Health** – Women's & Children's Health Section

<http://wch.dhhs.state.nc.us/>

- **North Carolina State Center for Health Statistics (NC-SCHS)**

<http://www.schs.state.nc.us/SCHS/index.html>

- **Public Schools of North Carolina**

<http://www.ncpublicschools.org/accountability/reporting/sat/2005>

- **Strunk, B.C., & Ginsburg, P.B.** (2003 June 11). *MARKET WATCH- Tracking Health Care Costs: Trends Stabilize But Remain High in 2002*. [Health Tracking](#).

Available [on-line]: <http://www.healthaffairs.org/>