A Picture of our Health
Community Health Plan

Hamilton County, Tennessee
2006
EXECUTIVE SUMMARY

The Chattanooga-Hamilton County Regional Health Council has responsibility for monitoring the health status of the residents of Hamilton County, Tennessee. We work closely with our partner, the Chattanooga-Hamilton County Health Department, which provides staff resources. Through this partnership the Council conducts on-going health assessment activities which include the collection and analysis of primary and secondary data. Also, we analyze and review other information which may impact or contribute to the understanding of the health status of local residents. Important research findings presented in this report underscore the major health and health-related issues of Hamilton County.

Included in the report is a summary of demographic findings regarding the population of Hamilton County which provides insights into variables, i.e., education, income, etc., that impact the determinants of health. The Regional Health Council must voice concern regarding these variables, critical in their underlying influence on the health status of the population.

The leading causes of death are then presented for all residents of Hamilton County using age-adjusted data for the period 2001-2003. As the report presents a review of age specific mortality and morbidity data, real concerns emerge about several indicators wherein Hamilton County’s findings exceed those of the State. Specifically, Hamilton County leads the state in low birthweight infants and chronic lower respiratory disease deaths – health problems that cover the age spectrum from the very young to the very old.

As referenced in the body of the full report, the recommendations of Healthy People (HP) 2010 “Systematic Approach to Health Improvements” were used to guide the Council and researchers in the identification and review of a number of determinants of health. In this regard HP 2010’s ten leading health indicators for current behavior, social/physical, environmental, and access to quality care matters are presented. Important information and insights on the ten leading health indicators along with their impact on the health of residents are discussed.

To summarize the significant findings referenced in the report, six observations are critical: (1) Black infant mortality in Hamilton County is about 50% higher than Black infant mortality in the State of Tennessee. (2) Premature deaths from cancer are higher among black persons in most age-specific groups less than 65 years. (3) Among the 65 and older populations, all age-race-sex groups had higher rates of death from Chronic Lower Respiratory Disease than their counterparts state-wide. (4) Significant health disparities exist in many of the mortality and morbidity data, which reflects the need for more review and study, and consequently proven strategies, and targeted programs and services. (5) Among the leading health indicators, the behavior risks of obesity and tobacco use impact high proportions of Hamilton County adults. (6) Data on
communicable diseases, including HIV/AIDS, also reflect patterns among population subgroups that generate concerns.

It is important to note that the findings throughout the document continue to support the Regional Health Council’s focus on health risk behaviors which are a primary contributor to the causes of death among Hamilton County’s residents and a significant determinant of health status. Five behavior related areas continue to be confirmed since 1999 as priority areas which reflect on Hamilton County’s most significant health problem categories. They continue to be: Obesity, Diet and Exercise; Tobacco Use; Addictions and Dependencies; Risky Sexual Behaviors; and Lack of Health Screenings.

The Community Health Plan provides a review of the status of the work of most of the health priority subcommittees and other work groups of the Regional Health Council. Special attention is given to the Step ONE (Optimize with Nutrition and Exercise) obesity initiative and the Low Birth Weight Task Force. Both of these work groups have been the focus of much attention among Council members and staff of the Health Department over the last three years. As significant progress has been made in studying issues related to the work of both of these groups, much more in the way of developing and implementing strategies will need to be forth-coming.

As the Council prepares to move forward, it has identified three strategy areas that will capture all of its work. In this regard, the Council will study and address: (1.) Underlying Causes and Determinants of Health; (2.) Behaviors and Health Outcomes; and (3.) Disease Patterns in the Population.

In the future the Hamilton County Regional Health Council and the Chattanooga-Hamilton County Health Department will continue to monitor the health status of residents. We will explore and develop plans and strategies based on the findings and information included in this report. Additionally, we will work with other community partners to finalize and to implement various strategies, programs and activities which will direct us to a healthier community.

Dr. Ronald Blankenbaker, Chairman
Chattanooga-Hamilton County Regional Health Council
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ACKNOWLEDGEMENTS

Hamilton County’s Community Health Plan, *A Picture of Our Health*, was developed and written from the summer of 2005 to the spring of 2006, and published in July 2006 by the Chattanooga-Hamilton County Regional Health Council and the Community Health Services Office of the Chattanooga-Hamilton County Health Department. The report was published under the leadership of Ronald Blankenbaker, M.D., Chair, and Deborah Poteet-Johnson, M.D., Vice-Chair of the Chattanooga-Hamilton County Regional Health Council. Barbara Laymon, Program Manager for Community Health Assessment and Planning, was the principal researcher and author of the report.

Editing of the report was led by Bill Ulmer, Director of the Community Health Services Office of the Chattanooga-Hamilton County Health Department, with editorial assistance from Meredith Tomblin, Health Department Epidemiologist, and Dawn Ford, Health Department Emergency Response Coordinator and Environmental Scientist.

Appreciation is expressed to Viston Taylor, Chair of the Council’s Health Futures and Planning Committee, along with the members of the Committee for their insights and guidance in developing the report. Their experience and wisdom was very valuable in the preparation of this document.

Gathering and analyzing the very relevant data which is at the heart of this report, and upon which important findings rest, was a shared and collaborative process that involved several persons who made significant contributions. Susan Pollock, Research Consultant, chaired the Information Development Committee of the Regional Health Council. Her committee was responsible for planning local research efforts for the Council and for overseeing the use of research instruments for gathering data. Ione Farrar, Senior Research Analyst for the Community Research Council, and Rae Bond, Executive Director of the Medical Society Foundation, and Acting Director of the Chattanooga-Hamilton County Medical Society, along with Information Development Committee members, worked extensively to launch and analyze data from the Youth Behavior Risk Factor Surveillance Surveys (YBRFSS) and the Adult Behavior Risk Factor Surveillance Surveys (ABRFSS) referenced in the report. Through efforts arranged by Rae Bond, major funding support for the 2004 ABRFSS was generated by the Chattanooga-Hamilton County Medical Society Foundation, while Irvin Overton, retired Vice President, Erlanger Health System, was instrumental in creating funding partnerships in support of the ABRFSS and the YBRFSS. Both of these survey efforts were critically important in providing key primary data on the behaviors of Hamilton County residents.

Meredith Tomblin, who was referenced earlier, is also thanked for her role in writing the environmental section of the report, while Dawn Ford, also referenced earlier, penned the section on the pandemic flu plan and the avian flu summary. Appreciation is also offered to Therese Yeiser Smith, CDC Public Health Specialist on loan to the Health Department, who wrote the section on Hispanic health. Tom Rucci, Coordinator of HIV
Outreach at the Health Department, provided data and assistance with the HIV/AIDS section. Significant contributions were also provided by Donna Needham, Program Manager, Communicable Diseases, who provided data and assistance with the section that references childhood immunizations, and Margaret Zylstra, Program Manager, Epidemiology, who penned the section on Hepatitis.

A special thanks is offered to Becky Barnes, Administrator of the Chattanooga-Hamilton County Health Department and Valerie Boaz, M.D., Health Officer for the Health Department for their oversight for the community health plan project. A thank you is also extended to Tammy Burke, Marti Smith, Kaye Greer, and Bonnie Deakins, who are Health Department Directors, for their input in finalizing the community health plan document. Much appreciation is likewise extended to Keena Mundy and Judy Pratt, Health Department support staff, for their clerical and technical assistance.

Lastly, a special thank you is offered to Marguerite Lewis, Teresa Hendricks, Tom Spillman and others at the Tennessee Department of Health for the vital statistics data that proved very valuable in defining the health status of residents of Hamilton County.
Chattanooga-Hamilton County Regional Health Council

MISSION

To serve as the lead community-based organization designated by the Tennessee Department of Health to be responsible for community health assessment, regional health planning, and the provision of input regarding funding decisions for health and health-related initiatives which result in the improvement of community health. (Rev. 02/06/06)

VISION

Every person will have the opportunity to experience optimal health as a result of renewing our commitment to redesign our community, one person, one neighborhood, one institution, and one system at a time through the cooperation of all people. (Rev. 02/06/06)

VALUES

Spiritual Well-being
Strong Families and Neighborhoods
Economic Prosperity
Cultural Diversity and Inclusiveness
Emotional and Physical Well-being
Educational Opportunities and Achievements
Safe and Healthy Environment with Supportive Institutions
Chattanooga-Hamilton County Regional Health Council

Responsibilities

The responsibility of the Council is to monitor the health status of residents and recommend strategies, with the involvement of physicians, hospital managers, mental health providers, allied health professionals and others, to assure the health of persons residing in Hamilton County. Specific responsibilities include:

1. Assessing the health status of the community, through the collection and analysis of secondary epidemiological data, and primary data sources, such as behavior risk surveys and stakeholder surveys.

2. Prioritizing the health needs identified from data and information collection efforts.

3. Developing a community health plan which includes recommendations for strategies that address community health needs. This includes the enumeration of goals, objectives and outcome measures, as well as recommendations for interventions.

4. Identifying key resources and the development of partnerships to foster collaborative efforts at addressing the needs of community residents, including sub-population groups, such as children, the elderly, minorities, or groups suffering from specific diseases or conditions.

5. The provision of local input in decision-making processes regarding the allocation of state and federal funding to area agencies and institutions, and the evaluation of programs and services supported by such state and federal funding.
A. Executive Committee

This Committee is composed of all officers and all committee chairpersons. This committee is charged with reviewing issues that are important to the Council by providing initial insight prior to presentation to the full Council. The Council must subsequently ratify decisions made by this committee.

B. By-Laws Committee

This Committee is responsible for developing and facilitating modifications to the By-Laws and for submitting recommendations for changes to the Council for consideration.

C. Nominating Committee

This Committee is responsible for recommending a slate of officers to the Council for an election. Should a Council officer be unable to complete the elected term, the Nominating Committee shall recommend to the Council someone to fill the unexpired term.

D. Health Futures and Health Planning Committee

This Committee is responsible for initiating and maintaining an on-going community diagnosis process whereby the health and health related needs of the residents of Hamilton County are assessed. This Committee is also responsible for recommending health priorities and strategies that can address the priority areas. The work of this Committee is recorded in a “Community Health Plan Document” which is revised every three years.

This Committee is also responsible for up-dating the vision statement for the health of Hamilton County residents when needed. This committee conducts its work by engaging in a series of activities that bring together groups of residents who broadly represent cross sections of the city and county, in order to craft or refine a health vision statement for adoption by the Council, and for subsequent adoption by residents, businesses, community organizations, the faith community, and government entities throughout Chattanooga and Hamilton County.
E. Health Priority Subcommittees

The following subcommittees to the larger planning committee referenced above, were established to address each of the health priorities identified as a result of needs assessment processes engaged from the Fall of 1995 through June of 1999. Each subcommittee is to identify a set of ideas, strategies and action steps for addressing the particular priority throughout Hamilton County. The health priority areas and subcommittees are as follows:

- Obesity, Diet and Lack of Exercise Subcommittee
- Tobacco Use Subcommittee
- Risky Sexual Behavior Subcommittee
- Alcohol and Drug Use Subcommittee
- Health Screenings & Other Preventive Measures Subcommittee

F. Information Development Committee

This Committee is responsible for planning and implementing community-based surveys and other data/information gathering activities. It also has responsibility for reviewing and analyzing the results of the community-wide behavior risk surveys conducted by the Council in concert with other community agencies and technical resources. The typical surveys conducted include the Adult Behavior Risk Factor Survey and the Youth Behavior Risk Factor Survey using Centers for Disease Control and Prevention survey instruments. This committee assists with interpreting the survey results and findings in preparation for public release.

G. Communications Committee

This Committee is responsible for planning, preparing and facilitating the release of findings and related information from various studies and other data gathering processes. This committee appropriately packages information for public release. This Committee is also responsible for assisting with the development and implantation of community health information strategies and prevention campaigns as vehicles to promote community-wide statements adopted by the Council.

H. Project Review Committee

This Committee is responsible for reviewing and monitoring health programs and services as requested by the Council and/or the Tennessee Department of Health. It may also provide input into program evaluation processes. Increasingly, this committee will be asked to make recommendations to the Council and to the State regarding the local use of state, federal and or other public funds for health related programs and services.
I. Dental Care Committee

This Committee is responsible for examining dental care needs within Hamilton County. It may partner with various other organizations that have as their focus dental care and services. It may also engage in activities designed to promote collaboration and coordination of services and may assist in processes designed to procure funds in support of dental care and services, particularly those that target disparate populations.

J. Low Birth Weight Births Task Force

This Task Force was created to review and research the problem of the high rate of low birth weight births occurring in Hamilton County. The Committee is charged with determining recommendations regarding the causative factors for this urgent finding in Hamilton County. They are also charged with recommending strategies and interventions that will ultimately lead to a reduction in low birth weight births in this County. It is envisioned that the work of this committee may be transitioned to a community resource to assure the sustainability of the efforts to implement lasting strategies.

K. Operations Committee for the Step ONE: Optimize with Nutrition and Exercise” Initiative

The Step ONE Initiative is a county-wide effort to address the problem of obesity in our community and promote physical fitness and healthy lifestyles. The Hamilton County Health Department has partnered with the Mayor of Hamilton County, and the Hamilton County Regional Health Council to launch this initiative. The Operations Committee is responsible for all program planning and implementation activities.
Brief History of Community Health Planning in Hamilton County

1994 Leaders in the health field in Hamilton County began openly to discuss the many changes that were becoming evident in the health indicators for the population of Hamilton County regarding health care financing, health and health-related resources. During the last quarter of the year, community leaders and several executives from local hospitals and the health department began to meet on regular occasions to talk about the health status of the community.

1995 Before formal “community development” initiatives were launched statewide by the Bureau of Health, key players representing the business community, higher education, health insurer groups, and others joined the small group of leaders who had been convened earlier to review and discuss the health status of the community. Their discussions were motivated by a growing interest in determining the health needs of our County residents and the need to identify resources that are required to address those needs.

The Metropolitan Council for Community Services convened the necessary groups to move forward the review of health needs and the identification of resources. This agency is recognized locally as the primary technical resource for facilitating community-wide research initiatives and planning in areas inclusive of social and community services, health, and economic and community development.

The Metropolitan Council (referred to herein after as the Community Health Task Force or Task Force) organized the Greater Chattanooga Community Health Task Force. The purpose of this task force was to initiate efforts that would result in an improvement in the health of the residents of Hamilton County.

An assessment process conducted by the Community Health Task force included the analysis of data and information gathered from three sources: (1) a community profile analysis as documented by Metropolitan Council for Community Services in their research report entitled “Life in Hamilton County: Indicators of Community Well-Being,” (2) an inventory of health resources and services, and (3) a telephone survey of 816 adults, age 18 and over, from randomly selected households in Hamilton County.

The findings that emerged from the analysis of data and information led the Task Force to conclude that **personal choices and decisions, and the behavior of people** are the primary determinants of premature death among residents of Hamilton County. These conclusions prompted the Task Force to establish a two-fold strategy to improve health among area residents: (1) **reduce risks**, and (2) **expand opportunities**.
1996 In October the Advisory Board of the Chattanooga-Hamilton County Health Department was reorganized. The duties and responsibilities of the board were expanded and assigned to the newly established Chattanooga-Hamilton County Regional Health Council, (herein after referred to as the Regional Health Council).

1997 The Community Health Task Force assumed a lead role in planning a data collection project that would yield the identification of important issues and the needs of youth residing in Hamilton County.

1998 The Regional Health Council and the Health Department gave support to the Community Health Task Force for their lead role in conducting a survey of all Hamilton County public high school students. A survey instrument developed by the Centers for Disease Control and Prevention was used. The survey was conducted during the Spring of 1998. In August, 1998, the Task Force published a report on the findings of the youth survey, entitled A Report on Risky Behaviors Among Teens in Hamilton county’s Public High Schools.

1999 In May the Board of Directors for the Metropolitan Council for Community Services dissolved the Community Health Task Force, in recognition of the mission and scope of work of the newly established local Regional Health Council.

The newly formed Regional Health Council subsequently established a Community Health Planning Committee. This Committee initiated processes and work that furthered the efforts already begun by the Community Health Task Force and the Metropolitan Council for Community Services.

Many members of the Task Force were integrated into the Regional Health Council, either as Council members or as members of the Council’s Planning Committee. The role of the Community Health Planning Committee was determined to be to engage in an on-going community diagnosis process with respect to assessing the health status of residents in Hamilton County, and to recommend strategies for addressing the needs that emerged from the on-going community diagnosis process.

The Regional Health Council established five health priorities based on the findings from research conducted in 1995 by the Metropolitan Council for Community Services and the Community Health Task Force. These findings (which emerged from primary and secondary data) were included in a Community Health Plan Document that was developed and printed in June 1999.
The Council began the process for a reassessment of the Hamilton County population. The Council partnered with the Metropolitan Council for Community Services to conduct an Adult Risk Behavior Survey using a Centers for Disease Control and Prevention instrument. A network of organizations, institutions and agencies funded this project. The survey was administered in the Fall of 1999.

2000 The Regional Health Council formed subcommittees around each of the five health priority areas. Each subcommittee consisted of representatives from other organizations, and the lay community. Each developed strategies for reducing risky behaviors that contribute to premature death or disability.

The findings of the Adult Risk Behavior Survey were released through a series of ten health briefings and press conferences throughout the year, beginning in February 2000.

2001 The Regional Health Council Health Priority Subcommittees continued to implement their respective community strategies through awareness, education, and advocacy initiatives.

The Regional Health Council initiated planning for a repeat survey of Hamilton County public high school students in the Spring 2002. Efforts were initiated to include private high schools also. A major fund raising strategy was developed and implemented by the Council to generate funds to support the proposed survey project.

2002 The Regional Health Council under an arrangement with the Community Research Council (formerly the Metropolitan Council for Community Services) administered the Youth Survey in March and April 2002. The survey was administered in all Hamilton County public high school and in three private high schools. The findings were made public in October 2002 in a report entitled Choices: A report on Risky Behaviors among Hamilton County Teens.

The Community Health Plan for Hamilton County was also revised in 2002, and released to the public in January 2003.

2003 Data revealed that Hamilton County has been experiencing a disproportionately high rate of low birth weight births and infants deaths among its population. A Low Birth Weight Task Force was created to study the local problem and to attempt to determine the causes of this phenomenon.
“Obesity, Diet and Exercise” has been the #1 health priority of the Regional Health Council since 1999. A Health Priority Committee that had been meeting since 1999 explored the development of strategies that could be launched for programs of various magnitudes. In the fall of 2003, the Health Futures Committee conceived the idea of a county-wide initiative that would target all residents in order to promote positive lifestyle changes and healthy living practices. With an eye on the Council’s #1 health priority area, along with a commitment from County Mayor Claude Ramsey out of a genuine concern for the health of County residents, and a commitment from the Hamilton County Health Department, it was determined that a County-wide obesity initiative would be launched. Plans were initiated to organize this major initiative.

2004 The Council adopted a “Consensus Message”, as recommended by its Addictions and Dependency Subcommittee, which recognizes alcohol and drug addiction as a disease. This action supports the public health approach to addressing these conditions locally which are prevalent within our population.

The Adult Behavior Risk Factor Surveillance Survey was conducted after the Information Development Committee of the Council completed its work in determining appropriate survey questions for inclusion in the CDC survey instrument, and after sufficient funding had been secured.

Kenneth Robinson, M.D., Commissioner of the Tennessee Department of Health, while visiting the Chattanooga-Hamilton County Health Department for Public Health Week, attended a Hamilton County Regional Health council meeting. He praised the organization for its work and pledged support for its planning processes and efforts to develop strategies to address local health concerns.

The county-wide obesity initiative was formally named “Step ONE: Optimize with Nutrition and Exercise”. Several public events were held to acquaint the public with the project and the behavior changes advocated by the initiative.

The Council’s Low Birth Weight (LBW) Task Force continued to study the suspected causative factors for LBW in Hamilton County. A multi-agency coalition, with all local hospitals represented, along with the Health Department, the March of Dimes, and other organizations continued to intensely explore this health problem.

2005 The Regional Health Council’s membership completed a self-assessment to determine its strengths and weaknesses. The Council received high marks for having a clear mission, progress on meeting its goals and objectives as an organization, and for having a consensus among its members for having clearly defined priority areas. The lowest scores were in areas associated with Council members’ active and consistent involvement at the committee and subcommittee level. Health Department staff initiated the planning process for updating the Community Health Plan document for Hamilton County. The Council’s Health
Futures and Planning Committee provided input and oversight for this process. As it relates to the ABRFSS findings, the Communications Committee sanctioned Health Department staff to release findings on selected topics, such as race and obesity. Planning for the overall general release continues.

Acting upon a recommendation from the Council’s Addiction and Dependency Subcommittee, the Council went on record in support of the creation of a Drug Court in Hamilton County. A great deal of local planning was engaged by judiciary leaders and others. With federal funding support, an Adult Drug Court was ultimately created in Hamilton County to divert those charged with simple drug offenses only might be given the opportunity for treatment and rehabilitation.

Planning and information gathering continued with the implementation of the Step ONE Initiative, as surveys of area restaurants, faith-based institutions and other groups were completed in an attempt to gather baseline data. In yet another area of interest to the Council, a new work group entitled “Health Care Task Force for the Hispanic and Latino Populations” was created. This body was organized to identify, study and address the issues associated with the availability of healthcare providers to serve local Spanish speaking residents in Hamilton County.

After the Regional Health Council’s Risky Sexual Behavior Subcommittee researched issues associated with the high incidence of teen pregnancy in Hamilton County, along with the high incidence of some sexually transmitted diseases, the committee collaborated with public school officials to plan for a pilot health education program that would supplement the current curriculum and provide more beneficial age-specific information to students around sexuality issues in hopes of reversing undesirable trends. A change in key school personnel and the resources sought to support this initiative however caused the project to be postponed.

The Health Department received a grant for approximately $18,000 from the March of Dimes, to establish consumer listening and focus groups to identify and review the issues associated with low birthweight from a community perspective. Later in 2005, at the recommendation of the Low Birth Weight Task Force, the Council transitioned this working group to the auspices of the March of Dimes as a way of sustaining the efforts at developing and implementing strategies to address the problems locally.
Approach to Community Health Planning

The community diagnosis approach to health planning used here is modeled on the Healthy People 2010 “Systematic Approach to Health Improvement.” (Please see schematic on following page.) In this approach, health status is seen as the outcome of a number of determinants of health. As HP 2010 states:

Individual behaviors and environmental factors are responsible for about 70 percent of all premature deaths in the United States. Developing and implementing policies and preventive interventions that effectively address these determinants of health can reduce the burden of illness, enhance quality of life, and increase longevity. Individual biology and behaviors influence health through their interaction with each other and with the individual’s social and physical environments. In addition, policies and interventions can improve health by targeting factors related to individuals and their environments, including access to quality health care.

Accordingly, this document begins with a demographic description of the population, an assessment of its health status, and turns next to the underlying determinants of health. Strategic interventions of the Regional Health Council conclude the document.

- After a description of general demographics for Hamilton County, the health status of the community is considered through a look at age-race-sex specific mortality data, communicable disease patterns, and special needs populations.

- Determinants of health are considered within HP 2010’s ten leading health indicators, covering many of the current behavioral, social/physical environmental, and access to quality care issues facing health care in 2005.

- Strategic interventions include the Step ONE (Optimize with Nutrition and Exercise) Initiative, the Hispanic/Latino Health Care Task Force, the Low Birthweight Task Force, and the subcommittees of the Regional Health Council (Tobacco Use, Obesity, Diet and Exercise, Addictions and Dependencies, Health Screenings, and Risky Sexual Behavior).
Healthy People 2010: A Systematic Approach to Health Improvement
The Underlying Determinants of Health in Hamilton County: Demographic Background

Demographics and Health

In addition to age and gender, with many clear influences on health, income and education levels also impact health. Healthy People 2010 puts it this way:

In general, population groups that suffer the worst health status are also those that have the highest poverty rate and least education. Disparities in income and education levels are associated with differences in the occurrence of illness and death, including heart disease, diabetes, obesity, elevated blood leads level, and low birth weight. Higher incomes permit increased access to medical care; enable one to afford better housing and live in safer neighborhoods, and increase the opportunity to engage in health promoting behavior. (Volume 1, page 12).

Demographic Overview

Hamilton County, Tennessee, located in the Southeast corner of Tennessee, about 120 miles north of Atlanta, Georgia, has a population of 310,371. (2004)

The population is about 76% white and 20% black, with persons of Hispanic/Latino ethnicity accounting for 1.8 % of official totals.

The Hamilton County population tends to include a higher proportion of elderly and lower proportion of children and youth than the state as a whole. Over the past four years, the population of the county has grown at a slower rate than the population of the state.

About four in five adults have completed a high school education, and among those who finished high school, about one in three also completed an undergraduate degree.

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1 All demographic data are from the 2000 census unless otherwise indicated.
2 Numbers thought to be underreported. Please see the Hispanic/Latino section for more on this population group.
3 Data reports on race and ethnicity follow procedures established by the Census Bureau, and applied by the Tennessee Department of Health. The TDH uses the terms "black", "white", and "other races" to denote racial groupings. Definitions used for classifying race and ethnicity are those specified by the Census Bureau.
<table>
<thead>
<tr>
<th>People QuickFacts</th>
<th>Hamilton County</th>
<th>Tennessee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, 2004 estimate</td>
<td>310,371</td>
<td>5,900,962</td>
</tr>
<tr>
<td>Population, percent change, April 1, 2000 to July 1, 2004</td>
<td>0.8%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Population, 2000</td>
<td>307,896</td>
<td>5,689,283</td>
</tr>
<tr>
<td>Population, percent change, 1990 to 2000</td>
<td>7.8%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Persons under 5 years old, percent, 2000</td>
<td>6.0%</td>
<td>6.6%</td>
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<td>Persons under 18 years old, percent, 2000</td>
<td>23.2%</td>
<td>24.6%</td>
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<tr>
<td>Persons 65 years old and over, percent, 2000</td>
<td>13.8%</td>
<td>12.4%</td>
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<tr>
<td>Female persons, percent, 2000</td>
<td>52.2%</td>
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<td>White persons, percent, 2000 (a)</td>
<td>76.3%</td>
<td>80.2%</td>
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<tr>
<td>Black or African American persons, percent, 2000 (a)</td>
<td>20.1%</td>
<td>16.4%</td>
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<tr>
<td>American Indian and Alaska Native persons, percent, 2000 (a)</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Asian persons, percent, 2000 (a)</td>
<td>1.3%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander, percent, 2000 (a)</td>
<td>0.1%</td>
<td>Z</td>
</tr>
<tr>
<td>Persons reporting some other race, percent, 2000 (a)</td>
<td>0.8%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Persons reporting two or more races, percent, 2000</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>White persons, not of Hispanic/Latino origin, percent, 2000</td>
<td>75.5%</td>
<td>79.2%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin, percent, 2000 (b)</td>
<td>1.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Living in same house in 1995 and 2000', pct age 5+, 2000</td>
<td>54.8%</td>
<td>53.9%</td>
</tr>
<tr>
<td>Foreign born persons, percent, 2000</td>
<td>3.0%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Language other than English spoken at home, pct age 5+, 2000</td>
<td>5.1%</td>
<td>4.8%</td>
</tr>
<tr>
<td>High school graduates, percent of persons age 25+, 2000</td>
<td>80.7%</td>
<td>75.9%</td>
</tr>
<tr>
<td>Bachelor's degree or higher, pct of persons age 25+, 2000</td>
<td>23.9%</td>
<td>19.6%</td>
</tr>
<tr>
<td>Persons with a disability, age 5+, 2000</td>
<td>60,373</td>
<td>1,149,693</td>
</tr>
<tr>
<td>Mean travel time to work (minutes), workers age 16+, 2000</td>
<td>22.6</td>
<td>24.5</td>
</tr>
<tr>
<td>Housing units, 2002</td>
<td>137,674</td>
<td>2,519,825</td>
</tr>
<tr>
<td>Homeownership rate, 2000</td>
<td>65.9%</td>
<td>69.9%</td>
</tr>
<tr>
<td>Housing units in multi-unit structures, percent, 2000</td>
<td>25.4%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Median value of owner-occupied housing units, 2000</td>
<td>$94,700</td>
<td>$93,000</td>
</tr>
<tr>
<td>Household, 2000</td>
<td>124,444</td>
<td>2,232,905</td>
</tr>
<tr>
<td>Persons per household, 2000</td>
<td>2.41</td>
<td>2.48</td>
</tr>
<tr>
<td>Median household income, 1999</td>
<td>$38,930</td>
<td>$36,360</td>
</tr>
<tr>
<td>Per capita money income, 1999</td>
<td>$21,593</td>
<td>$19,393</td>
</tr>
<tr>
<td>Persons below poverty, percent, 1999</td>
<td>12.1%</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

### Business QuickFacts

<table>
<thead>
<tr>
<th>Hamilton County</th>
<th>Tennessee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private nonfarm establishments with paid employees, 2001</td>
<td>8,810</td>
</tr>
<tr>
<td>Private nonfarm employment, 2001</td>
<td>174,484</td>
</tr>
<tr>
<td>Private nonfarm employment, percent change 2000-2001</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Nonemployer establishments, 2000</td>
<td>18,260</td>
</tr>
<tr>
<td>Manufacturers shipments, 1997 ($1000)</td>
<td>5,493,190</td>
</tr>
<tr>
<td>Retail sales, 1997 ($1000)</td>
<td>3,269,550</td>
</tr>
<tr>
<td>Retail sales per capita, 1997</td>
<td>$11,084</td>
</tr>
<tr>
<td>Minority-owned firms, percent of total, 1997</td>
<td>6.5%</td>
</tr>
<tr>
<td>Women-owned firms, percent of total, 1997</td>
<td>23.8%</td>
</tr>
<tr>
<td>Housing units authorized by building permits, 2002</td>
<td>1,699</td>
</tr>
<tr>
<td>Federal funds and grants, 2002 ($1000)</td>
<td>2,662,824</td>
</tr>
</tbody>
</table>

### Geography QuickFacts

<table>
<thead>
<tr>
<th>Hamilton County</th>
<th>Tennessee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land area, 2000 (square miles)</td>
<td>542</td>
</tr>
<tr>
<td>Persons per square mile, 2000</td>
<td>567.6</td>
</tr>
<tr>
<td>FIPS Code</td>
<td>065</td>
</tr>
</tbody>
</table>
AGE

A population pyramid for Hamilton County, based on 2000 census data, shows a fairly stable population distribution by sex and age group, a large number of the “baby boomers” generation, and a slightly less robust pattern than in more high growth counties:

Information on age distribution by race is shown in figures 2 and 3. Blacks had a very different distribution by age group in comparison to whites, with more young people (31.3% of blacks in Hamilton County are under the age of 18, while only 21% of whites are under 18) and a smaller proportion of elderly (9.6% of blacks were 65 and over, versus 15.1% of whites).
Figure 2

Percent Population by Age Group, Blacks, Hamilton County 2000

- 65+ 9.6%
- 45-64 20.6%
- 18-44 38.4%
- <18 31.3%

Figure 3

Percent Population by Age Group, Whites, Hamilton County 2000

- 65+ 15.1%
- 45-64 26.0%
- 18-44 37.9%
- <18 21.0%
Poverty Level

To measure poverty, the census bureau uses the poverty thresholds, the original version of the federal poverty measure. The poverty guidelines are the other version of the federal poverty measure. They are issued each year in the *Federal Register* by the Department of Health and Human Services (HHS). These guidelines, shown in Figure 4 below, are a simplification of the poverty thresholds for use for administrative purposes.4

**Figure 4**

2005 HHS Poverty Guidelines

<table>
<thead>
<tr>
<th>Persons in Family Unit</th>
<th>48 Contiguous States and D.C.</th>
<th>Alaska</th>
<th>Hawaii</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$9,570</td>
<td>$11,950</td>
<td>$11,010</td>
</tr>
<tr>
<td>2</td>
<td>12,830</td>
<td>16,030</td>
<td>14,760</td>
</tr>
<tr>
<td>3</td>
<td>16,090</td>
<td>20,110</td>
<td>18,510</td>
</tr>
<tr>
<td>4</td>
<td>19,350</td>
<td>24,190</td>
<td>22,260</td>
</tr>
<tr>
<td>5</td>
<td>22,610</td>
<td>28,270</td>
<td>26,010</td>
</tr>
<tr>
<td>6</td>
<td>25,870</td>
<td>32,350</td>
<td>29,760</td>
</tr>
<tr>
<td>7</td>
<td>29,130</td>
<td>36,430</td>
<td>33,510</td>
</tr>
<tr>
<td>8</td>
<td>32,390</td>
<td>40,510</td>
<td>37,260</td>
</tr>
<tr>
<td>For each additional person, add</td>
<td>3,260</td>
<td>4,080</td>
<td>3,750</td>
</tr>
</tbody>
</table>

**SOURCE:** *Federal Register*, Vol. 70, No. 33, February 18, 2005, pp. 8373-8375

About 12.1% of the overall population lives below the poverty level in Hamilton County, a number fairly similar to the national 12.4%. Certain age/race/sex specific groups in Hamilton County have a higher proportion living below the poverty level.

---

4 Adapted from the HHS Poverty Guidelines at http://aspe.hhs.gov/poverty/05poverty.shtml
Figure 5 shows that 15,835 black persons in Hamilton County live below the poverty level by sex and age. Some 37% of blacks under the age of 18 live below the poverty level, while 26.8% of all blacks 65 and over live below the poverty level. The elderly black population is shown in more detail in Figure 6. Among black persons 65 and over, 21% are black females living below the poverty level.

Figure 5

![Poverty Status by Age Group by Sex, Blacks, Hamilton County 1999](image)

<table>
<thead>
<tr>
<th></th>
<th>&lt;18</th>
<th>18-44</th>
<th>45-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Poverty Level Female</td>
<td>5477</td>
<td>9074</td>
<td>5485</td>
<td>2447</td>
</tr>
<tr>
<td>&gt; Poverty Level Male</td>
<td>6313</td>
<td>8481</td>
<td>4651</td>
<td>1764</td>
</tr>
<tr>
<td>&lt; Poverty Level Female</td>
<td>3554</td>
<td>3732</td>
<td>1366</td>
<td>1201</td>
</tr>
<tr>
<td>&lt; Poverty Level Male</td>
<td>3372</td>
<td>1658</td>
<td>808</td>
<td>344</td>
</tr>
</tbody>
</table>

Figure 6

![Poverty Status by Sex, Blacks 65+, Hamilton County 1999](image)
Figure 7 shows the poverty status of white persons in Hamilton County by age and sex. Some 18,202 white persons live below the poverty line. Figure 8 shows the poverty status of whites 65 and over by sex. About 6% of white females and 2% of white males aged 65 and over lived below the poverty level.

**Figure 7**

![Poverty Status by Age by Sex, Whites, Hamilton County 1999](image)

**Figure 8**

![Poverty Status by Sex, Whites 65+, Hamilton County 1999](image)
A comparison of Hamilton County poverty levels with those of other metropolitan areas in Tennessee is shown in Figure 9. Hamilton County and Knox County have similar proportions of persons living below the poverty level, while Davidson County has a slightly higher rate. Shelby County’s is the highest proportion of any metro area.

**Figure 9**

<table>
<thead>
<tr>
<th>County</th>
<th>Percent Below Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davidson</td>
<td>13</td>
</tr>
<tr>
<td>Hamilton</td>
<td>12.1</td>
</tr>
<tr>
<td>Knox</td>
<td>12</td>
</tr>
<tr>
<td>Shelby</td>
<td>16</td>
</tr>
</tbody>
</table>

A more detailed look at per capita income, for all and by race, for the four metropolitan areas of Tennessee is shown in Figure 10. Hamilton County’s white population has a per capita income lower than Davidson and Shelby County’s white population; while its black population has a per capita income lower than Davidson County’s but higher than Shelby County’s. Hamilton County’s per capita income was lower than Knox County’s for both the black and white populations.

---

5 The large student population at the University of Tennessee may impact these numbers.
Figure 10

Per Capita Income, All and by Race, Selected Metropolitan Counties, TN 1999

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Black</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davidson</td>
<td>23069</td>
<td>14509</td>
<td>27319</td>
</tr>
<tr>
<td>Hamilton</td>
<td>21593</td>
<td>13569</td>
<td>23895</td>
</tr>
<tr>
<td>Knox</td>
<td>21875</td>
<td>12610</td>
<td>22935</td>
</tr>
<tr>
<td>Shelby</td>
<td>20856</td>
<td>13207</td>
<td>29086</td>
</tr>
</tbody>
</table>
Education levels in Hamilton County are shown in Figures 11 and 12. While 11% of the Black population has a bachelor's degree or above, 25% of the white population has a bachelor's degree or higher.

**Figure 11**

Education Level, Black Adults Age 25+, Hamilton County, 2000

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>7%</td>
</tr>
<tr>
<td>High School (includes GED)</td>
<td>4%</td>
</tr>
<tr>
<td>Some College</td>
<td>5%</td>
</tr>
<tr>
<td>Assoc Degree</td>
<td>22%</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>28%</td>
</tr>
<tr>
<td>Graduate level and above</td>
<td>34%</td>
</tr>
</tbody>
</table>

**Figure 12**

Education Level, Whites Age 25+, Hamilton County 2000

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>9%</td>
</tr>
<tr>
<td>High School (includes GED)</td>
<td>18%</td>
</tr>
<tr>
<td>Some College</td>
<td>6%</td>
</tr>
<tr>
<td>Assoc Degree</td>
<td>24%</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>17%</td>
</tr>
<tr>
<td>Graduate level and above</td>
<td>26%</td>
</tr>
</tbody>
</table>
Hamilton County’s educational attainment in comparison with other metropolitan areas of the state is shown in Figure 13. Hamilton County is tied with Shelby County for the lowest educational attainment among blacks, and with Knox County for the lowest educational attainment among whites, for the counties shown in the chart.

**Figure 13**

Percent of Persons 25 and Older with Less than a High School Education by Race, Selected Counties, TN 2000

<table>
<thead>
<tr>
<th></th>
<th>Black %</th>
<th>White %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davidson</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Hamilton</td>
<td>29</td>
<td>17</td>
</tr>
<tr>
<td>Knox</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>Shelby</td>
<td>29</td>
<td>11</td>
</tr>
</tbody>
</table>
A Summary of Demographic Findings for Hamilton County

- AGE
  - The white population is aging, with 20% of persons 18 and under and 15% aged 65 or older. The black population is more youthful, with almost 33% under 18 and 10% aged 65 or older.

- POVERTY
  - About 18,000 white persons and 15,000 black persons live below poverty, representing 9% of the white population and 31% of the black population.

- AGE, RACE and POVERTY
  - Some 37% of blacks under the age of 18 live below the poverty level, while 26.8% of all blacks 65 and over live below the poverty level.

- AGE, RACE, SEX and POVERTY
  - About 25% of the black population over 65 lives below the poverty level, and most are elderly women.

- EDUCATION
  - 19% of the population 25 and over has less than a high school education.

- EDUCATION and RACE
  - Among adults aged 25 and over, more blacks (28%) than whites (17%) have less than a high school education; while fewer blacks (11%) than whites (26%) have a college degree or more.
Health Status

Life Expectancy and Mortality Rates

Life Expectancy for all and by race for the US, Tennessee, and Hamilton County are shown in Figure 14a. The life expectancy of a white person born in Hamilton County in 2004 is 6.5 years greater than the life expectancy of a black person.

As Figure 14b shows, the overall age-adjusted death rate for black persons in Hamilton County is similar to the statewide rate but much higher than the national rate. The overall age-adjusted death rate for white persons in Hamilton County is somewhat lower than the overall statewide rate but higher than the national rate. At every geographic level, blacks suffer higher age-adjusted death rates than whites.

Sources: US, National Center for Health Statistics, TN and Hamilton County, Tennessee Department of Health
The top ten leading causes of death for Tennessee and Hamilton County are shown for all and by race in Figures 15, 16, and 17. For both the state and the county, the top two leading causes of death (for all and by race) are heart disease and cancer. These causes of death reflect the chronic disease processes that are the major threats to health both locally and nationally as the 21st century begins. Comparisons between the charts show disparities by race, with black persons suffering significantly higher rates of death from heart disease, cancer and stroke than whites, on both the county and the state level. Comparisons between Tennessee and local data show generally higher rates of death from Chronic Lower Respiratory Disease and from Alzheimer’s disease in the county.
Figure 15

Top 10 Leading Causes of Death, Age-Adjusted Rates per 100,000
TN and Hamilton County, 2001-2003

<table>
<thead>
<tr>
<th>Cause</th>
<th>Tennessee</th>
<th>Hamilton County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>279.6</td>
<td>246.7</td>
</tr>
<tr>
<td>Cancer</td>
<td>213.8</td>
<td>212.5</td>
</tr>
<tr>
<td>Stroke</td>
<td>70.5</td>
<td>66.6</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>52.5</td>
<td>61.1</td>
</tr>
<tr>
<td>Accidents</td>
<td>48.6</td>
<td>34.3</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>23.6</td>
<td>33.9</td>
</tr>
<tr>
<td>Diabetes</td>
<td>30.9</td>
<td>30.4</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>30.6</td>
<td>20.4</td>
</tr>
<tr>
<td>Atherosclerosis</td>
<td>*</td>
<td>12.7</td>
</tr>
<tr>
<td>Chronic Liver Disease and Cirrhosis</td>
<td>*</td>
<td>11.8</td>
</tr>
<tr>
<td>Suicide</td>
<td>12.8</td>
<td>*</td>
</tr>
<tr>
<td>Nephritis</td>
<td>11.1</td>
<td>*</td>
</tr>
</tbody>
</table>

* Not in top ten leading causes of death for group.

Source: TN Department of Health
Figure 16

Top 10 Leading Causes of Death, Age-Adjusted Rates per 100,000 Blacks
TN and Hamilton County, 2001-2003

<table>
<thead>
<tr>
<th></th>
<th>Tennessee</th>
<th>Hamilton County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>356.8</td>
<td>319.0</td>
</tr>
<tr>
<td>Cancer</td>
<td>266.4</td>
<td>269.4</td>
</tr>
<tr>
<td>Stroke</td>
<td>95.8</td>
<td>97.4</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>32.9</td>
<td>55.8</td>
</tr>
<tr>
<td>Accidents</td>
<td>39.9</td>
<td>28.5</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>*</td>
<td>32.3</td>
</tr>
<tr>
<td>Diabetes</td>
<td>63.9</td>
<td>56.9</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>28.1</td>
<td>*</td>
</tr>
<tr>
<td>Assault (Homicide)</td>
<td>23.1</td>
<td>25.0</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>26.0</td>
<td>21.5</td>
</tr>
<tr>
<td>Primary Hypertension</td>
<td>24.0</td>
<td>21.1</td>
</tr>
</tbody>
</table>

* Not in top ten leading causes of death for group.

Source: TN Department of Health
### Figure 17

Top 10 Leading Causes of Death, 
Age-Adjusted Rates per 100,000 Whites 
TN and Hamilton County, 2001-2003

<table>
<thead>
<tr>
<th>Cause</th>
<th>Tennessee</th>
<th>Hamilton County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>270.2</td>
<td>234.5</td>
</tr>
<tr>
<td>Cancer</td>
<td>207.8</td>
<td>202.0</td>
</tr>
<tr>
<td>Stroke</td>
<td>67.3</td>
<td>60.9</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>55.1</td>
<td>62.1</td>
</tr>
<tr>
<td>Accidents</td>
<td>50.5</td>
<td>35.9</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>24.3</td>
<td>34.6</td>
</tr>
<tr>
<td>Diabetes</td>
<td>26.9</td>
<td>25.9</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>30.8</td>
<td>20.4</td>
</tr>
<tr>
<td>Atherosclerosis</td>
<td>*</td>
<td>13.9</td>
</tr>
<tr>
<td>Chronic Liver Disease and Cirrhosis</td>
<td>11.1</td>
<td>*</td>
</tr>
<tr>
<td>Suicide</td>
<td>14.0</td>
<td>12.3</td>
</tr>
</tbody>
</table>

* Not in top ten leading causes of death for group.

Source:  TN Department of Health
**Age-Race Specific Mortality Rates**

The age-race specific mortality rates presented in the following pages bring focus to many health issues facing Hamilton County residents. Discussion of each age group is included with the data; however, a preview of the highlights includes the following:

- **Black infant mortality in Hamilton County** is about 50% higher than black infant mortality in the state of Tennessee. Within the county, infant mortality is 4 times higher among the black population than among the white population. Since infant mortality is a “worldwide indicator of the health of a population,” (HP 2010), these data reflect an at-risk population in Hamilton County. The problem is discussed further in the special needs populations section under Maternal and Child health, as well as in the work of the Low Birthweight Task Force.

- **Premature deaths from cancer** are found among blacks in most age-specific groups less than 65 years. This finding is explored further in the Premature Deaths from Cancer section.

- **Among the 65 and older populations,** all age-race-sex groups had higher rates of Chronic Lower Respiratory Disease than their counterparts statewide. (See section on CLRD for further detail).

The source of all mortality data is the Tennessee Department of Health (TDH).

**One caution:** When the total number of deaths in an age/race/sex group by cause of death is small, death rates are unstable and can vary from year to year. Three year annualized rates are used to minimize this effect. However, it is also important to consider historical trend data, found in the previous Community Health Plan or available from the TDH.
Infant Mortality

From 2001-2003, there was an average of 40 infant deaths per year in Hamilton County or a rate of 10.4 per 1000 live births. The top leading causes of death of infants, with the total deaths per year by cause, included:

1. Certain conditions originating in the perinatal period 21
2. Congenital malformations 5
3. Sudden Infant Death Syndrome 5
4. Accidental Deaths and Injuries, Respiratory Illnesses, and Septicemia 2 (each)

Figure 18 shows that infant mortality6 in Hamilton County among African Americans from 2002-2004 was higher than the African American experience statewide. These excess deaths in comparison to statewide figures occurred in the neonatal period, and reflect a continuing problem in Hamilton County with premature or low birthweight births.

Figure 18

Black Infant Mortality Rates, Hamilton Co and TN, 2002-04

<table>
<thead>
<tr>
<th></th>
<th>Infant</th>
<th>Neonatal</th>
<th>Postneontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN</td>
<td>17.9</td>
<td>12.5</td>
<td>5.4</td>
</tr>
<tr>
<td>HC</td>
<td>20.2</td>
<td>14.8</td>
<td>5.3</td>
</tr>
</tbody>
</table>

6 The infant mortality rate is the number of infant deaths under one year of age per 1000 live births. Subcategories are neonatal deaths (infants 28 days old or less) and postneontal deaths (infants at greater than 28 days but less than one year). In general, most neonatal deaths relate to causes due to prematurity, while most postneontal infant deaths are due to Sudden Infant Death Syndrome (SIDS) and to accidental and injury related causes.
Figure 19 shows that the infant mortality rate in Hamilton County among whites from 2002-2004 was slightly lower than the white experience statewide, for total deaths and in both the neonatal and postneonatal categories.

**Disparities**

A comparison between Figure 18 and 19 shows a large disparity in infant health between the black and the white populations of Hamilton County, with black infants about 4 times as likely to die in the first year of life in comparison to white infants.
Leading Causes of Death among Children

The leading causes of death for children aged 1-14 in Hamilton County are listed below.

The average number of deaths per year, from 2001-2003, is included:

1. Accidents  5
2. Cancer    1
3. Assault   1
4. Congenital anomalies  1

(Please see “small totals” caution on page 39).

Leading causes of death during 2001-2003 for African American children ages 1-14 are shown in Figure 20. Black children had approximately the same rate of death from accidents as black children statewide, but twice the death rate for cancer and assault as blacks statewide.

Figure 20
Leading Causes of Death Black Children 1-14, 2001–03 Annualized Rates per 100,000
Leading causes of death for white children in Hamilton County and TN during 2001-2003 are shown in Figure 21. White children had fairly similar death rates to white children statewide in the accidental and congenital anomalies categories, and about half the death rate due to cancer of white children statewide.

**Figure 21**

Leading Causes of Death White Children 1-14, 2001–03 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Accidents</th>
<th>Cancer</th>
<th>Congenital</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TN</strong></td>
<td>9.5</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>HC</strong></td>
<td>7.8</td>
<td>0.9</td>
<td>1.7</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison of Figures 20 and 21 shows that black children in Hamilton County have higher rates of death from accidents and cancer than white children in the county.
Leading Causes of Death Females 15-24

The leading causes of death for females aged 15-24 in Hamilton County are listed below. The average number of deaths per year, from 2001-2003, is included:

1. Accidents 3
2. Assault 1
3. Cancer 1
4. Anemia <1

(Please see “small totals” caution on page 39).

Figure 22 shows that black females ages 15-24 in Hamilton County have low death rates compared to black females statewide.

Figure 22

Leading Causes of Death Black Females 15-24
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>TN</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accidents</td>
<td>16.4</td>
<td>6.5</td>
</tr>
<tr>
<td>Assault</td>
<td>14.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Anemias</td>
<td>1.6</td>
<td>6.5</td>
</tr>
</tbody>
</table>
Figure 23 shows that white females in Hamilton County had a lower rate of death from the leading cause of death – accidents - than white females statewide. However, white females in Hamilton County showed higher rates of death due to cancer and assault than whites statewide:

**Figure 23**

Leading Causes of Death White Females 15-24
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Accidents</th>
<th>Cancer</th>
<th>Assault</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TN</strong></td>
<td>32.6</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>HC</strong></td>
<td>19.9</td>
<td>8.8</td>
<td>4.4</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison of Figures 22 and 23 shows that in the top leading cause for death for females aged 15-24, accidental deaths, black females had a much lower death rate than white females.
Leading Causes of Death, Males 15-24

The leading causes of death among males aged 15-24 in Hamilton County are listed below. The average number of deaths per year, from 2001-2003, is included:

1. Accidents 11
2. Assault 6
3. Suicide 3

(Please see “small totals” caution on page 39).

Figure 24 shows the leading causes of death among black males aged 15-24. Young black men in Hamilton County had a higher rate of death from assault (the leading cause of death for this group) than young black men statewide.

Figure 24

Leading Causes of Death Black Males 15-24
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Assault</th>
<th>Accidents</th>
<th>Suicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN</td>
<td>90.2</td>
<td>46.4</td>
<td>13.9</td>
</tr>
<tr>
<td>HC</td>
<td>125.3</td>
<td>41.8</td>
<td>20.9</td>
</tr>
</tbody>
</table>
Figure 25 shows the leading causes of death among white males aged 15-24. Young white men in Hamilton County had lower rates of death from accidents and suicide (the two leading causes for this group) in comparison to young white men statewide.

**Figure 25**

Leading Causes of Death White Males 15-24  
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Accidents</th>
<th>Suicide</th>
<th>Assault</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN</td>
<td>80.9</td>
<td>18.5</td>
<td>6.6</td>
</tr>
<tr>
<td>HC</td>
<td>58.8</td>
<td>10.9</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison of Figures 24 and 25 shows that in Hamilton County, young black men had higher rates of death than young white men for two of the three leading causes of death in the population of men aged 15-24. The death rate was twenty times higher for assaults among blacks and three times higher for suicide.
Leading Causes of Death, Females 25-44

Leading causes of death among females aged 25-44 in Hamilton County are listed below. The average number of deaths per year, from 2001-2003, is included:

1. cancer 17
2. accidents 10
3. heart disease 7
4. AIDS 3

Figure 26 shows the leading causes of death among black females aged 25-44. Black women aged 25-44 in Hamilton County had a higher rate of death from cancer than black women statewide, but a lower rate of death from heart disease.

Figure 26
Leading Causes of Death Black Females 25-44
2001 – 2003 Annualized Rates per 100,000
Figure 27 shows that rates of death for the leading causes of death among white women aged 25-44 in Hamilton County are similar to statewide rates for white women in the same age category.

**Figure 27**

Leading Causes of Death White Females 25-44
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Accidents</th>
<th>Cancer</th>
<th>Heart Dis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TN</strong></td>
<td>29.9</td>
<td>29.7</td>
<td>16.6</td>
</tr>
<tr>
<td><strong>HC</strong></td>
<td>26.5</td>
<td>31.4</td>
<td>13.7</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison between Figure 26 and Figure 27 shows that in Hamilton County, black women have twice the cancer death rate of white women aged 25-44. Accidents, the leading cause of death among white women, appeared at a much lower death rate among black women; while HIV/AIDS, the third leading cause of death among black women in the age group, appeared at a much lower rate among white women.\(^7\)

---

\(^7\) The 13.6 rate of accidental deaths for black women is the group’s sixth leading cause of death and is not included in Figure 26. The white female HIV/AIDS death rate of 2.0 was the age group’s 9th leading cause of death and is not included in Figure 27.
Leading Causes of Death, Males 25-44

Leading causes of death among males aged 25-44 in Hamilton County are listed below.

The average number of deaths per year, from 2001-2003, is included:

1. Accidents 20
2. Heart Disease 17
3. Assault 10
4. Suicide 9

Figure 28 shows the leading causes of death among black males aged 25-44. For the three leading causes of death among black men aged 25-44 - heart disease, assault, and accidents - black men in Hamilton County had death rates similar to black men statewide.

Figure 28

Leading Causes of Death Black Males 25-44
2001 – 2003 Annualized Rates per 100,000
Figure 29 shows the three leading causes of death for white men ages 25-44. White men in Hamilton County had somewhat lower death rate for accidents, and a similar death rate for heart disease and suicide, as white men statewide.

**Figure 29**

Leading Causes of Death White Males 25-44  
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Accidents</th>
<th>Heart Dis</th>
<th>Suicide</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TN</strong></td>
<td>68.5</td>
<td>41</td>
<td>30.1</td>
</tr>
<tr>
<td><strong>HC</strong></td>
<td>49.3</td>
<td>36.7</td>
<td>26.1</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison of Figure 28 and 29 shows similar rates of death from accidents for both the black and white male population aged 25-44 in Hamilton County. Black men suffered higher death rates from heart disease and assault, while white men suffered higher death rates from suicide⁸.

---

⁸ Not shown in tables: White male assault death rate: 13.5; and black male suicide death rate: 13.0.
Leading Causes of Death, Females 45-64

Leading causes of death among females aged 25-44 in Hamilton County are listed below. The average number of deaths per year, from 2001-2003, by cause, is included:

1. Cancer 82
2. Heart Disease 51
3. Chronic Lower Respiratory Disease (CLRD) 13
4. Diabetes 12
5. Stroke 9

Figure 30 shows the leading causes of death among black females aged 45-64. For the leading causes of death among the group – Cancer - black women in Hamilton County had death rates somewhat higher than the rate for black women statewide.

Figure 30

Leading Causes of Death Black Females 45-64
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Cancer</th>
<th>Heart</th>
<th>Diabetes</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN</td>
<td>262.6</td>
<td>251.7</td>
<td>61.6</td>
<td>57.7</td>
</tr>
<tr>
<td>HC</td>
<td>308</td>
<td>249.9</td>
<td>44.6</td>
<td>58</td>
</tr>
</tbody>
</table>
Figure 31 shows the leading causes of death for white females aged 45-64. White women in Hamilton County were slightly less likely than white women statewide to die from cancer and heart disease.

**Figure 31**

Leading Causes of Death White Females 45-64  
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Cancer</th>
<th>Heart Dis</th>
<th>CLRD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TN</strong></td>
<td>209.6</td>
<td>114.9</td>
<td>38.5</td>
</tr>
<tr>
<td><strong>HC</strong></td>
<td>180.7</td>
<td>99</td>
<td>39.8</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison of Figures 31 and 32 shows than black women aged 45 – 64 in Hamilton County were 1.7 times as likely to die from cancer as white women, and over twice as likely to die from heart disease.
Leading Causes of Death, Males 45-64

Leading causes of death among males aged 45-64 in Hamilton County are listed below. The average number of deaths per year, from 2001-2003, is included:

1. Cancer 114
2. Heart Disease 100
3. Chronic Liver Disease and Cirrhosis 17
4. Chronic Lower Respiratory Disease 15
5. Accidents 14

Figure 32 shows the leading causes of death for black males aged 45 – 64 in Hamilton County and TN. Hamilton County black men have a similar heart disease death rate in comparison to black men statewide, but higher rates of death from cancer, chronic liver disease and cirrhosis, and chronic lower respiratory disease⁹.

Figure 32

Leading Causes of Death Black Males 45-64
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Heart</th>
<th>Cancer</th>
<th>Liver</th>
<th>CLRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN</td>
<td>466.4</td>
<td>384.2</td>
<td>36.6</td>
<td>29.4</td>
</tr>
<tr>
<td>HC</td>
<td>452.4</td>
<td>469.2</td>
<td>72.6</td>
<td>83.8</td>
</tr>
</tbody>
</table>

⁹ Not shown: AIDS and Stroke death rates were tied with liver disease as the 4th leading cause in the population.
Figure 35 shows the leading causes of death for white males aged 45 – 64 in Hamilton County and TN. White men aged 45 – 64 in Hamilton County had slightly lower death rates from cancer and heart disease, the two leading causes of death, in comparison to white men statewide.

**Figure 35**

Leading Causes of Death White Males 45-64
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th>Cause</th>
<th>TN</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>290.7</td>
<td>277.3</td>
</tr>
<tr>
<td>Heart</td>
<td>275.1</td>
<td>236.3</td>
</tr>
<tr>
<td>Accid.</td>
<td>62.8</td>
<td>35.6</td>
</tr>
<tr>
<td>CLRD</td>
<td>39</td>
<td>31.3</td>
</tr>
<tr>
<td>Liver</td>
<td>37.8</td>
<td>42.1</td>
</tr>
</tbody>
</table>

Disparities

A comparison of Figures 34 and 35 shows that the death rates for heart disease and cancer among black men ages 45-64 in Hamilton County were 50% higher than the rates for white men in the same age group in the county. Death rates for CLRD were about three times higher among black men than white men in the age group.
Leading Causes of Death, Females 65-74

Leading causes of death among females aged 65-74 in Hamilton County are listed below. The average number of deaths per year, from 2001-2003, is included:

1. Cancer 84
2. Heart Disease 62
3. Chronic Lower Respiratory Disease 30
4. Stroke 18
5. Diabetes 8

Figure 36 shows the leading causes of death for black females aged 65-74 in Hamilton County and TN. In the two leading causes of death, heart disease and cancer, black women in Hamilton County had somewhat lower death rates than black women statewide.

**Figure 36**

Leading Causes of Death Black Females 65-74
2001 – 2003 Annualized Rates per 100,000
Figure 37 shows the leading causes of death for white women aged 65-74 in Hamilton County and TN. White women in the county had a slightly lower rate of death from cancer and heart disease, but an elevated risk of chronic lower respiratory disease, in comparison with white women statewide.

**Figure 37**

**Leading Causes of Death White Females 65-74**

2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Cancer</th>
<th>Heart Disease</th>
<th>CLRD</th>
<th>Stroke</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TN</strong></td>
<td>670.1</td>
<td>462.7</td>
<td>190.1</td>
<td>118.5</td>
<td>83.3</td>
</tr>
<tr>
<td><strong>HC</strong></td>
<td>655.7</td>
<td>429.8</td>
<td>251</td>
<td>122.4</td>
<td>56.5</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison of figures 36 and 37 shows that in Hamilton County, black women aged 65-74 had about twice the death rate from heart disease and stroke as white women, while white women had twice the death rate from chronic lower respiratory disease as black women.
Leading Causes of Death, Males 65-74

Leading causes of death among males aged 65-74 in Hamilton County are listed below.

The average number of deaths per year, from 2001-2003, is included:

1. Cancer 94
2. Heart Disease 90
3. Chronic Lower Respiratory Disease 26
4. Diabetes 13
5. Stroke 12

Figure 38 shows the leading causes of death for black men aged 65 – 74 in Hamilton County and TN. Although cancer was the leading cause of death for black men in the age group statewide, heart disease was the leading killer in the population locally.

Figure 38

Leading Causes of Death Black Male 65-74
2001 – 03 Annualized Rates per 100,000
Figure 29 shows the leading causes of death for white men 65-74, Hamilton County and TN. Hamilton County men in the age group suffered somewhat lower rates of death from cancer and stroke than white men statewide.

**Figure 39**

Leading Causes of Death White Males 65-74
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>Cancer</th>
<th>Heart Disease</th>
<th>CLRD</th>
<th>Stroke</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TN</td>
<td>1072.9</td>
<td>923.1</td>
<td>254.6</td>
<td>147.5</td>
<td>112.9</td>
</tr>
<tr>
<td>HC</td>
<td>919.4</td>
<td>824.3</td>
<td>237.8</td>
<td>87.2</td>
<td>122.9</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison of Figures 38 and 39 shows that black men in Hamilton County had higher rates of death than white men for all leading causes of death in the age group.
Leading Causes of Death, Females 75+

Leading causes of death among females aged 75 or more in Hamilton County are listed below. The average number of deaths per year, from 2001-2003, is included:

1) Heart Disease 327
2) Cancer 157
3) Stroke 117
4) Alzheimer’s 82
5) Chronic Lower Respiratory Disease 70
6) Diabetes 36

Figure 40 shows the leading causes of death for black females aged 75 and older. In all leading causes of death for the age group except Alzheimer’s, black women in Hamilton County have lower death rates than black women statewide.

Figure 40

Leading Causes of Death Black Females 75+
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>TN</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>2947</td>
<td>1441.5</td>
<td>986.7</td>
<td>560.9</td>
<td>989.0</td>
</tr>
<tr>
<td>Cancer</td>
<td>1441.5</td>
<td>1161.4</td>
<td>1058.9</td>
<td>512.4</td>
<td>1053.8</td>
</tr>
<tr>
<td>Stroke</td>
<td>986.7</td>
<td>1058.9</td>
<td>512.4</td>
<td>597.8</td>
<td>819.2</td>
</tr>
<tr>
<td>Diabetes</td>
<td>560.9</td>
<td>512.4</td>
<td>597.8</td>
<td>597.8</td>
<td>550.3</td>
</tr>
<tr>
<td>Alzheimer’s</td>
<td>338.6</td>
<td>338.6</td>
<td>338.6</td>
<td>338.6</td>
<td>338.6</td>
</tr>
</tbody>
</table>
Figure 41 shows the leading causes of death for white females aged 75 and older, Hamilton County and TN. White women in Hamilton County had lower death rates in the three leading causes of death, heart disease, cancer, and stroke, than their counterparts statewide. The death rate from Alzheimer's and chronic lower respiratory disease was higher locally than on a state level for the population subgroup.

**Figure 41**

Leading Causes of Death White Females 75+
2001 – 2003 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>TN</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>2749</td>
<td>2422.5</td>
</tr>
</tbody>
</table>

**Disparities**

Black and white women in Hamilton County had fairly similar death rates by cause of death category, except for diabetes (white rate of 229.5 not shown) and chronic lower respiratory disease (black rate of 290.4 not shown).
Leading Causes of Death, Males 75+

Leading causes of death among males aged 75+ in Hamilton County are listed below.

The average number of deaths per year, from 2001-2003, is included:

1) Heart Disease 190
2) Cancer 161
3) Chronic Lower Respiratory Disease 57
4) Alzheimer’s 28
5) Pneumonia 21
6) Diabetes 20

Figure 42 shows the leading causes of death for black males aged 75 and older in Hamilton County and TN. Black men locally had a somewhat lower rate of death from heart disease than black men statewide.

Figure 42
Leading Causes of Death Black Males 75+
2001 – 03 Annualized Rates per 100,000
Figure 43 shows the leading causes of death for white males aged 75+, Hamilton County and TN. White males showed somewhat lower rates of death from heart disease and stroke, but somewhat higher rates of death from cancer, chronic lower respiratory disease, and Alzheimer's, than white men statewide.

**Figure 43**

Leading Causes of Death White Males 75 +
2001 – 03 Annualized Rates per 100,000

<table>
<thead>
<tr>
<th></th>
<th>TN</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>3160.3</td>
<td>2696.7</td>
</tr>
<tr>
<td>Cancer</td>
<td>2088</td>
<td>2262.1</td>
</tr>
<tr>
<td>Stroke</td>
<td>754.1</td>
<td>718.7</td>
</tr>
<tr>
<td>CLRD</td>
<td>728.3</td>
<td>824.6</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>429.3</td>
<td>300.9</td>
</tr>
<tr>
<td>Alzheimer's</td>
<td>271.5</td>
<td>401.2</td>
</tr>
</tbody>
</table>

**Disparities**

A comparison of Figures 42 and 43 shows that in Hamilton County, rates of death for heart disease, cancer and stroke were higher for black men than for white men aged 75 and older.
Key Findings and Further Analysis of Mortality Data

The above review of age-race-sex specific mortality data yield many findings that indicate a need for further study. This plan considers three: infant mortality, premature cancer deaths, and chronic lower respiratory disease mortality.

**Infant Mortality**  See the Maternal and Child Health Section.

**Premature Cancer Deaths**

Several of the age-race-sex specific death rates per 100,000 reviewed above for persons under 65 showed a higher local rate of death from cancer. A closer look at the problem follows. Figure 44 shows the age-specific cancer mortality rates for African Americans in Hamilton County and TN, 2001-2003. In every age group of the population under 65, with the single exception of black females 15-24, cancer mortality rates were higher in Hamilton County than in the comparable population statewide.

**Figure 44**

Cancer Mortality Age-Specific Rates, Blacks, TN and Hamilton County, 2001-03

Note: Rates for black children ages 1-14 were 3.8 (TN) and 6.5 (Hamilton Co)
Figure 44 shows the age-sex specific cancer mortality rates for whites under 65 in Hamilton County and TN, 2001-2003. In most age specific groups, whites locally have similar or slightly lower death rates to whites statewide.

**Figure 45**

Cancer Mortality Age-Specific Rates per 100,000 Whites
TN and Hamilton County, 2001-03

<table>
<thead>
<tr>
<th></th>
<th>15-24</th>
<th>25-44</th>
<th>45-64</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TN</strong></td>
<td>4</td>
<td>29.7</td>
<td>209.6</td>
</tr>
<tr>
<td><strong>HC</strong></td>
<td>8.8</td>
<td>31.4</td>
<td>180.7</td>
</tr>
</tbody>
</table>

Rates for white children ages 1-14 were 2.1 (TN) and 0.9 (Hamilton County)

**Disparities**

A comparison of Figures 44 and 45 shows that for the 25-44 age group, cancer death rates were about double in the black population. For the 45-64 age group, were over 1.5 times as high among blacks.
Trends in premature cancer death rates are shown in Figures 46 and 47 below. In general, since 1998, black cancer mortality rates in the under 65 population have tended to be higher than rates for blacks statewide, while white rates have been fairly consistent with (or slightly lower than) statewide trends.

**Figure 46**

Cancer Mortality Rates per 100,000 Blacks <65, TN and Hamilton County, 1990-2004

![Figure 46](image)

**Figure 47**

Cancer Mortality Rates per 100,000 Whites <65, TN and Hamilton County, 1990-2004

![Figure 47](image)
Figures 48 and 49 show the cancer mortality rates by race in the under 65 populations of various metropolitan areas of Tennessee. Hamilton County blacks had higher cancer mortality rates than blacks in other metropolitan areas and in the state. Hamilton County whites had higher cancer death rates than whites under 65 in other metropolitan areas but similar rates to whites statewide.

**Figure 48**
Cancer Mortality Rates per 100,000 Blacks <65, TN and Selected Counties
2001-2003 Annualized

Average # Premature Cancer Deaths per year (2001-03), Blacks:
Davidson: 106  Knox: 24  Hamilton: 62  Shelby: 331

**Figure 49**
Cancer Mortality Rates per 100,000 Whites <65, TN and Selected Counties
2001-2003 Annualized

Average # Premature Cancer Deaths per year (2001-03), Whites:
Davidson: 246  Knox: 215  Hamilton: 165  Shelby: 244
Chronic Lower Respiratory Disease

Chronic lower respiratory diseases refer to chronic (ongoing) diseases that affect the lower respiratory tract (including the lungs). The most prevalent are chronic obstructive pulmonary disease (COPD), emphysema, chronic bronchitis, and other smoking-related disorders. Also included are less common chronic lung disorders such as cystic fibrosis.

Figure 50 shows the chronic lower respiratory disease rates per 100,000, race and sex specific, for Hamilton County and the state, among persons 65-74. In every group except white males, the county rate is higher than the state rate.
Figure 51 shows the chronic lower respiratory disease rates per 100,000, race and sex specific, for Hamilton County and the state, among persons 75 and older. In every group, the county rate is higher than the state rate.
Communicable Diseases

Sexually Transmitted Infections

Figure 52 shows the number of chlamydia and gonorrhea cases in Hamilton County from 2000 to 2005. These numbers have been generally increasing; some clinicians attribute the change to improved testing procedures.

Figure 52

Number of Chlamydia and Gonorrhea Cases
Hamilton County, 2000-05

<table>
<thead>
<tr>
<th>Year</th>
<th>Chlamydia</th>
<th>Gonorrhea</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1183</td>
<td>888</td>
</tr>
<tr>
<td>2001</td>
<td>1167</td>
<td>968</td>
</tr>
<tr>
<td>2002</td>
<td>1239</td>
<td>847</td>
</tr>
<tr>
<td>2003</td>
<td>1432</td>
<td>607</td>
</tr>
<tr>
<td>2004</td>
<td>1746</td>
<td>737</td>
</tr>
<tr>
<td>2005</td>
<td>1610</td>
<td>896</td>
</tr>
</tbody>
</table>

Figure 53 shows the high concentration of rates of Sexually Transmitted Infections (STI) per 100,000 in selected zip codes in Hamilton County in 2004.

Figure 53

Rates of STI's per 100,000 Hamilton County and Selected Zips, 2004

<table>
<thead>
<tr>
<th></th>
<th>Chlamydia</th>
<th>Gonorrhea</th>
<th>Syphilis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamilton County</td>
<td>564.02</td>
<td>238.01</td>
<td>7.07</td>
</tr>
<tr>
<td>Zip code 37404</td>
<td>1428.47</td>
<td>553.9</td>
<td>7.29</td>
</tr>
<tr>
<td>Zip Code 37406</td>
<td>1530.95</td>
<td>852.96</td>
<td>36.45</td>
</tr>
</tbody>
</table>

Source: Tennessee Department of Health
HIV/AIDS data for Hamilton County are given in a series of charts on the facing page. All numbers are unduplicated counts. Key highlights include:

- Although black persons make up about 20% of the population of Hamilton County, about half the cases of HIV and 44% of the cases of full blown AIDS have occurred in the black community.
- Numbers of HIV cases have been increasing since 2001.
- An increasing number of HIV and AIDS cases are occurring in older populations.
- An increasing proportion of females are becoming HIV infected.

The map of HIV/AIDS cases in Hamilton County shows four areas with over 100 cases of HIV/AIDS:

- East Chattanooga 173 cases
- Brainerd 159 cases
- Highland Park 140 cases
- East Brainerd 111 cases

These cases include all persons who have contracted HIV/AIDS, living or deceased.

There are 589 males and 198 females living with HIV/AIDS in Hamilton County. There have also been 343 males and 64 females who have died with HIV/AIDS. Of the 1194 known HIV/AIDS positive persons in the county, 407 are deceased. Source:

http://www.coetenn.com/
In order to show HIV / AIDS trends for Hamilton County, the preceding graphs are to be seen as snapshots of specific years and not the total numbers of people who have HIV / AIDS.

It is important to remember that the statistics show duplicated data in that as people are reported HIV positive in one year and progress to AIDS in another year they are counted again.

SOURCE: TENNESSEE AIDS PROGRAM  For additional information contact your Health Department AIDS Outreach (423) 209-8272.
HIV / AIDS WATCH

CUMULATIVE HIV & AIDS COUNTS
by ZipCode
for Hamilton County, TN
through 2003.

Total number of HIV & AIDS
cases as of December 31, 2003 = 1,367

FOR INFORMATION ON PREVENTION EDUCATION PROGRAMS, CASE MANAGEMENT
and/or FREE HIV TESTING, PLEASE CALL: Chattanooga-Hamilton County Health Department AIDS OUTREACH at (423) 209-8272

HAMILTON COUNTY GEOGRAPHIC INFORMATION SYSTEMS
Hepatitis

Viral hepatitis is an inflammation of the liver usually caused by one of three viruses; hepatitis A, hepatitis B, or hepatitis C. All forms of viral hepatitis can cause similar clinical symptoms in the acute phase of the disease. Hepatitis B and C can result in a chronic form of the disease and may lead to liver failure or hepatocellular cancer. The incidence or all forms of hepatitis have decreased significantly over the past 10-20 years as a result of Hepatitis A and B vaccination efforts as well as education regarding risk factors. In Tennessee, acute hepatitis A, B, and C are reportable diseases as well as pregnant women with chronic hepatitis B.

Figure 56
Acute Hepatitis, Hamilton County 2000-05

Chronic hepatitis B and C are not reportable but positive lab results of all forms of viral hepatitis are received by public health officials. There are about 400 lab reports per year of positive viral hepatitis in Hamilton County.
**Special Needs Populations**

The following section focuses on two at-risk groups in Hamilton County:

- The Maternal and Child Health Population
- The Hispanic/Latino Population

**Maternal and Child Health Population**

Figure 57 shows the infant mortality rate per 1000 live births by race for selected counties in TN in 2004. Hamilton County had the lowest rate among white women compared with other metropolitan areas, but the highest rate among black women.

![Figure 57](image)

**Figure 57**

Infant Mortality Rates by Race, TN Selected Counties, 2004
Figure 58 shows trends in infant mortality by race in Hamilton County. The white rate was low in 2004 in comparison with previous years; the black rate was fairly typical.

**Figure 58**

Infant Mortality by Race Hamilton County TN 1991-2004

Low birthweight is often used as a measure of infant and maternal health. Hamilton County had the highest percent low birthweight of any metropolitan area, for both blacks and whites. (See Figure 59).

**Figure 59**

Percent Low Birthweight by Race, TN Selected Counties, 2004
Figure 60 shows the trends in low birthweight for Hamilton County, by race, 1991-2004. The percent low birthweight for both races has been generally increasing over time.

**Figure 60**

![Graph showing percent low birthweight by race, Hamilton County, TN 1991-2004](image)

Figure 61 shows the effect of race, education, and marital status on low birthweight.

**Figure 61**

![Bar chart showing percent low birthweight by race, education, and marital status, Hamilton County, TN 1999-2001](image)
Live Births by Marital Status

Figure 62 shows the trend in marital status by race, among live births to women ages 18 to 24. Between 1990 and 2001, in a fairly consistent pattern, over 80% of all live births to black women aged 18-24 were to single mothers. Between 1990 and 2001 the proportion of single white women aged 18-24 giving birth doubled, from 26% to 43% of all live births to the population.

Figure 62

Live Births to Teens

In Hamilton County, there are about 200 live births to women aged 10-17 per year. Figure 63 shows the live births to black women ages 10-14 and 15-17 in Hamilton County from 2000-2004. The number of live births had dropped in 2003 but was back up again in 2004. These births represent a rate of 19.8 live births per 1000 black females aged 10-17 in Hamilton County. The teen pregnancy rate for the black female population aged 10-17 was 23.9 per 1000 females.
Figure 63

Black Teen Live Births by Age of Mother, Hamilton County, 2001-04

<table>
<thead>
<tr>
<th>Year</th>
<th>15-17</th>
<th>10-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>91</td>
<td>10</td>
</tr>
<tr>
<td>2002</td>
<td>88</td>
<td>13</td>
</tr>
<tr>
<td>2003</td>
<td>79</td>
<td>8</td>
</tr>
<tr>
<td>2004</td>
<td>97</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 64 shows the number of live births to white females aged 10-17 in Hamilton County from 2001-2004. The number of live births has decreased in this population over the four year period. In 2004, there were 8.4 live births per 1000 white females aged 10-17; and 10.6 pregnancies per 1000 white females aged 10-17.

Figure 64

White Teen Live Births by Age of Mother, Hamilton County, 2001-04

<table>
<thead>
<tr>
<th>Year</th>
<th>15-17</th>
<th>10-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>104</td>
<td>11</td>
</tr>
<tr>
<td>2002</td>
<td>88</td>
<td>1</td>
</tr>
<tr>
<td>2003</td>
<td>90</td>
<td>6</td>
</tr>
<tr>
<td>2004</td>
<td>85</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 65 shows a map of teen pregnancies by zip code (see facing page).
Figure 65

Average Annual Pregnancies Among Women Ages 10-17 by Zip Code, 2000-2004

Hamilton County, TN

Chattanooga-Hamilton County Health Department, 2005
**Hispanic/Latino Population**

**Local Population Estimates**

Data from the 2000 Census showed that 5483 Hispanic/Latinos were living in Hamilton County. Among the population, 41% were female. The census breakdown by country of origin showed\(^{10}\) the following:

![Figure 66](image)

<table>
<thead>
<tr>
<th>HISPANIC OR LATINO AND RACE</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>307,896</td>
<td>100.0</td>
</tr>
<tr>
<td>Hispanic or Latino (of any race)</td>
<td>5,481</td>
<td>1.8</td>
</tr>
<tr>
<td>Mexican</td>
<td>2,490</td>
<td>0.8</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>646</td>
<td>0.2</td>
</tr>
<tr>
<td>Cuban</td>
<td>269</td>
<td>0.1</td>
</tr>
<tr>
<td>Other Hispanic or Latino</td>
<td>2,076</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Unofficial information suggests that the country of origin for most of the “Other Hispanic or Latino” population in Hamilton County, TN is Guatemala.

2005 Tennessee population estimates and projections approximate that there are 6,706 Hispanics now living in Hamilton County.\(^{11}\) However, the local Hispanic/Latino coalition, La Paz de Dios, estimates the population is at least 15,000 persons and growing.\(^{12}\)

**Health Status Data**

Currently, there is limited availability of health status data on Chattanooga – Hamilton County’s Hispanic/Latino population. In addition, the current BRFSS data has no data on the population. Health status data that is currently available includes live birth data in addition to data on participants in the county WIC program. The goal for

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\(^{10}\) [http://factfinder.census.gov](http://factfinder.census.gov)

\(^{11}\) Office of Health Statistics, Bureau of Health Informatics, Tennessee Department of Health

this health plan will be to conduct a thorough needs assessment of Chattanooga-
Hamilton County’s Hispanic/Latino population in order to obtain a better picture of health
status and therefore plan appropriate programs and services.

Persons emigrating from developing areas of Central and South America leave
behind certain health risks. Since public health problems such as maternal mortality
and lack of potable drinking water are practically nonexistent here, and other health
status measures, such as maternal anemia, are comparatively low\textsuperscript{13}, the new
Hispanic/Latino immigrant population may perceive this area as a healthy place to live.
However, many latent health risks do exist. Poor quality nutrition rather than
undernourishment faces many residents locally. Active living is very difficult, particularly
in less affluent neighborhoods, due to both safety concerns and accessibility
constraints. The protective health benefits of breastfeeding are realized by less than
half the local maternal population. In short, immigrants coming to Chattanooga replace
one set of health problems for another, and lack the health literacy necessary to lead a
healthy lifestyle, free of chronic disease, in the American culture.

Geographic Location of Hispanic/Latino Population

A map and table of the Hispanic /Latino population by zip code at the time of the
2000 census follows. At that time, the largest number of Hispanics resided in 37404.
Data from the health department’s WIC program (2004) also showed that the highest
proportion of prenatal WIC recipients (29\%) live in zip code 37404, followed by an
additional 16\% in the contiguous zip code 37407. Although the population has grown
considerably since the 2000 census, the distribution within the county probably remains
the same.

\textsuperscript{13} www.paho.org
Number of Hispanics/Latinos by Zip Code
Hamilton County, TN 2000

Legend
- 1 - 100
- 101 - 200
- 201 - 300
- 301 - 400
- 401 - 500
- 501 - 600
- 601 - 700
- 701 or more

Chattanooga-Hamilton County Health Department, 2005
Data from the 2000 US Census
Hispanic Live Birth Data

Vital statistics data on live births also suggest that the population has been growing for some time, with 41 total Hispanic live births in 1998 compared to 263 Hispanic live births by 2003. Data from the Women Infant and Children (WIC) program in 2004 showed that the CHCHD saw 276 Hispanic WIC prenatal patients last year. All these indicators point to a growing Hispanic/Latino population.

Local data on Hispanic live births are included in the table below. In 2001-2003, 11.2% of infants born to Hispanic women in Hamilton County were low birthweight – almost twice the 6.5% national average for the Hispanic population. Because low birthweight and prematurity can indicate poor maternal health status, the data suggest that the local female Hispanic/Latino population may have generally more health problems than Hispanics nationwide.

Figure 68

<table>
<thead>
<tr>
<th>Hispanic Live Birth Data, Hamilton County, TN, 2001-03</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Live Births</td>
<td>722</td>
</tr>
<tr>
<td>Number of Infant Deaths</td>
<td>6</td>
</tr>
<tr>
<td>Annualized Infant Death Rate per 1000 live births</td>
<td>8.3</td>
</tr>
<tr>
<td>Number Low Birthweight</td>
<td>81</td>
</tr>
<tr>
<td>Annualized Percent Low Birthweight</td>
<td>11.2</td>
</tr>
<tr>
<td>Number to Mother Age 10-17</td>
<td>54</td>
</tr>
</tbody>
</table>

Source: TN Department of Health

A related risk factor is adolescent pregnancies in this population. Between 2001 and 2003, 54 Hispanic live births - 7.5% of all Hispanic live births - were to teens between the ages of 10 and 17, suggesting a need for health education in the area of sexual health awareness.

15 http://www.marchofdimes.com/peristats/
Overweight/obesity

The Centers for Disease Control and Prevention’s National Center for Health Statistics report that women aged 18 and over of Hispanic ethnicity have the highest rates of overweight in the country and second highest rates of obesity. Locally, the CHCHD sees high rates of overweight/obesity among its Hispanic WIC clients, with 52% of Hispanic prenatal patients on WIC certified as prepregnancy “over weight for height.”

Access/ Cultural Barriers

Adding complication to the problem of assessing health status and addressing poor health outcomes among Hispanics in Chattanooga-Hamilton County are the many barriers to access of services. Recent conversations with stakeholders in the Hispanic/Latino community revealed that in addition to language, other significant barriers to service and care include lack of financial resources, no transportation or childcare and a general lack of understanding of the health care system in the U.S. Safety and trust issues are also prevalent.

Cultural differences also present a challenge in access to care. A 2000 article on cultural competence points out that “…minority Americans have different experiences in the health care system, even when they have similar medical conditions and insurance coverage…Since financial barriers should not be a factor in these cases, researchers have concluded that the health care delivery system, for whatever reasons, must be doing an inferior job in meeting the needs of racial and ethnic minorities than in meeting

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*Note that all WIC data is from reference 5, other local data on Hispanic health is from reference 3*
the needs of the nonminority population."17 In addition, health communication researchers point out that when addressing health among minorities, “…behavioral patterns in physician consultation will be impacted not by educational efforts directed at changing cultural beliefs, but rather by reducing the financial and structural limitations that keep community members from seeking a physician’s care.”18

When assessing the health status of the Hispanic/Latino population in Chattanooga-Hamilton County in order to address health outcomes problems, it will be important to keep language, access and cultural differences in mind.

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**Healthy People 2010: Leading Health Indicators**

The process of selecting the Leading Health Indicators mirrored the collaborative and extensive efforts undertaken to develop Healthy People 2010. As a group, the Leading Health Indicators reflect the major health concerns in the United States at the beginning of the 21st century. The Leading Health Indicators were selected on the basis of their ability to motivate action, the availability of data to measure progress, and their importance as public health issues.

The Leading Health Indicators illuminate individual behaviors, physical and social environmental factors, and important health system issues that greatly affect the health of individuals and communities. Underlying each of these indicators is the significant influence of income and education.

The Leading Health Indicators are intended to help everyone more easily understand the importance of health promotion and disease prevention and to encourage wide participation in improving health in the next decade. Developing strategies and action plans to address one or more of these indicators can have a profound effect on increasing the quality of life and the years of healthy life and on eliminating health disparities—creating healthy people in healthy communities.

**Leading Health Indicators**

- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury and Violence
- Environmental Quality
- Immunization
- Access to Health Care

Physical Activity:
This page excerpted from Healthy People 2010, Volume 1, Second Edition

Leading Health Indicator

Regular physical activity throughout life is important for maintaining a healthy body, enhancing psychological well-being, and preventing premature death.

The objectives selected to measure progress among adolescents and adults for this Leading Health Indicator follow. These are only indicators and do not represent all the physical activity and fitness objectives included in Healthy People 2010.

22-7. Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

22-2. Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.

Health Impact

Regular physical activity is associated with lower death rates for adults of any age, even when only moderate levels of physical activity are performed. Regular physical activity decreases the risk of death from heart disease, lowers the risk of developing diabetes, and is associated with a decreased risk of colon cancer. Regular physical activity helps prevent high blood pressure and helps reduce blood pressure in persons with elevated levels. Regular physical activity also increases muscle and bone strength, increases lean muscle and helps decrease body fat, aids in weight control and is a key part of any weight loss effort, enhances psychological well-being, and appears to reduce symptoms of depression and anxiety and to improve mood.
Physical Activity in Hamilton County

Figure 69 shows the percent of adults in Hamilton County reporting no leisure time physical activity, by race. Both blacks and whites have lower proportions of persons reporting no leisure time physical activity than the Tennessee 2003 figure of 29.8%.

Figure 69

<table>
<thead>
<tr>
<th>Percent No Leisure Time Physical Activity by Race, Hamilton County</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>23.2</td>
</tr>
</tbody>
</table>

Source: BRFSS 2004

Among high school youth in Tennessee, a 2003 survey showed that in the preceding seven day period, 11% had not participated in either moderate or vigorous physical activity of any kind, 39% had not participated in sufficient vigorous activity and 76% had not participated in sufficient moderate activity. More details on youth obesity, activity levels, dietary habits, physical education at schools, and policy recommendations can be found at: [http://www.cdc.gov/healthyyouth/obesity/pdf/Tennessee.pdf](http://www.cdc.gov/healthyyouth/obesity/pdf/Tennessee.pdf)
Overweight and Obesity:  
This page excerpted from Healthy People 2010, Volume 1, Second Edition

Leading Health Indicator

Overweight and obesity are major contributors to many preventable causes of death. On average, higher body weights are associated with higher death rates. The number of overweight children, adolescents, and adults has risen over the past four decades.

The objectives selected to measure progress among children, adolescents, and adults for this Leading Health Indicator are presented below. These are only indicators and do not represent all the nutrition and overweight objectives included in Healthy People 2010.

19-3c. Reduce the proportion of children and adolescents who are overweight or obese.

19-2. Reduce the proportion of adults who are obese.

Health Impact of Overweight and Obesity

Overweight and obesity substantially raise the risk of illness from high blood pressure, high cholesterol, type 2 diabetes, heart disease and stroke, gallbladder disease, arthritis, sleep disturbances and problems breathing, and certain types of cancers. Obese individuals also may suffer from social stigmatization, discrimination, and lowered self-esteem.
Obesity in Hamilton County

Figure 70 shows the percent with a healthy weight, overweight, and obese in Hamilton County.\textsuperscript{19} About 41\% of Hamilton County residents had a healthy weight, very similar to the 39\% statewide and 40\% nationwide statistics\textsuperscript{20}.

**Figure 70**

![Pie chart showing percent Healthy Weight, Overwt and Obese Hamilton County 2004. Healthy Wt 41\%, Overwt 37\%, Obese 22\%.]

Figure 71 shows that the higher the education level, the lower the obesity rate.

**Figure 71**

![Bar chart showing percent obese by education level, Hamilton County, 2004. < High School 27\%, High School 20\%, Some College 19\%, College Graduate 16\%. Source: BRFSS 2004.]

\textsuperscript{19} Source: BRFSS 2004

\textsuperscript{20} Source: CDC BRFSS 2003
**Tobacco Use**

*This page excerpted from Healthy People 2010, Volume 1, Second Edition*

**Leading Health Indicator**

Cigarette smoking is the single most preventable cause of disease and death in the United States. Smoking results in more deaths each year in the United States than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined.

The objectives selected to measure progress among adolescents and adults for this Leading Health Indicator are presented below. These are only indicators and do not represent all the tobacco use objectives included in Healthy People 2010.

27-2b. **Reduce cigarette smoking by adolescents.**

27-1a. **Reduce cigarette smoking by adults.**

**Health Impact of Cigarette Smoking**

Smoking is a major risk factor for heart disease, stroke, lung cancer, and chronic lung diseases—all leading causes of death. Smoking during pregnancy can result in miscarriages, premature delivery, and sudden infant death syndrome. Other health effects of smoking result from injuries and environmental damage caused by fires. Environmental tobacco smoke (ETS) increases the risk of heart disease and significant lung conditions, especially asthma and bronchitis in children. ETS is responsible for an estimated 3,000 lung cancer deaths each year among adult nonsmokers.

For more information on Healthy People 2010 objectives or on tobacco use, visit [http://www.health.gov/healthypeople/](http://www.health.gov/healthypeople/)
Tobacco Use in Hamilton County

In Hamilton County, 23.3% of black persons and 19.7% of white persons reported current tobacco use. (See Figure 72 below).

Figure 72

Smoking Status by Race, Hamilton County BRFSS 2004

<table>
<thead>
<tr>
<th></th>
<th>Everyday</th>
<th>Some Days</th>
<th>Former</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Black</strong></td>
<td>18.3</td>
<td>5</td>
<td>15.2</td>
<td>61.5</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>15</td>
<td>4.7</td>
<td>26.5</td>
<td>53.7</td>
</tr>
</tbody>
</table>

Figure 73 shows trends by race in the percent of women who reported using tobacco during pregnancy (Source: TN Department of Health, Vital Statistics data). In 2003, a larger proportion of black women reported smoking during pregnancy than whites.

Figure 73

Percent Using Tobacco During Pregnancy by Race Hamilton County 1991-2003

- **Blacks**
- **Whites**
Substance Abuse
This page excerpted from Healthy People 2010, Volume 1, Second Edition

Leading Health Indicator

Alcohol and illicit drug use are associated with many of this country’s most serious problems, including violence, injury, and HIV infection.

The objectives selected to measure progress among adolescents and adults for this Leading Health Indicator follow. These are only indicators and do not represent all the substance abuse objectives in Healthy People 2010.

26-10a. Increase the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days.

26-10c. Reduce the proportion of adults using any illicit drug during the past 30 days.

26-11c. Reduce the proportion of adults engaging in binge drinking of alcoholic beverages during the past month.

Health Impact of Substance Abuse

Alcohol and illicit drug use are associated with child and spousal abuse; sexually transmitted diseases, including HIV infection; teen pregnancy; school failure; motor vehicle crashes; escalation of health care costs; low worker productivity; and homelessness. Alcohol and illicit drug use also can result in substantial disruptions in family, work, and personal life. Alcohol abuse alone is associated with motor vehicle crashes, homicides, suicides, and drowning—leading causes of death among youth. Long-term heavy drinking can lead to heart disease, cancer, alcohol-related liver disease, and pancreatitis. Alcohol use during pregnancy is known to cause fetal alcohol syndrome, a leading cause of preventable mental retardation.
Substance Abuse in Hamilton County

In Hamilton County, 51.5% of white respondents in the 2004 Behavior Risk Factor Surveillance Survey (BRFSS) reported that they did not use alcohol, and 58.5% of the black respondents reported that they did not use alcohol. Figure 74 shows the proportion of binge drinking (defined as five or more drinks on any occasion during the past thirty days) by race, for Hamilton County and TN. The proportion of binge drinkers in Hamilton County is higher than comparable statewide figures for each race.

Figure 74

The Tennessee Youth BRFSS (2003) data show that among high school students, 30% of whites and 11% of blacks reported binge drinking in the last month. Additionally, the TN survey showed 23% of white youth and 25% of black youth reported marijuana use in the past month. In a fairly similar pattern, 26% of white youth and 13% of black youth in Hamilton County reported binge drinking in a 2002 BRFSS survey; while 22% of black youth and 22% of white youth reported marijuana use. Source of TN BRFSS: http://apps.nccd.cdc.gov/yrbss/SelHealthTopic.asp?Loc=TN
**Responsible Sexual Behavior**  
*This page excerpted from Healthy People 2010, Volume 1, Second Edition*

**Leading Health Indicator**

Unintended pregnancies and sexually transmitted diseases (STDs), including infection with the human immunodeficiency virus that causes AIDS, can result from unprotected sexual behaviors. Abstinence is the only method of complete protection. Condoms, if used correctly and consistently, can help prevent unintended pregnancy and STDs.

The objectives selected to measure progress among adolescents and adults for this Leading Health Indicator are presented below. These are only indicators and do not represent all the responsible sexual behavior objectives in Healthy People 2010.

25-11. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.

13-6a. Increase the proportion of sexually active persons who use condoms

**Sexually Transmitted Diseases**

Women generally suffer more serious STD complications than men, including pelvic inflammatory disease, ectopic pregnancy, infertility, chronic pelvic pain, and cervical cancer from the human papilloma virus. African Americans and Hispanics have higher rates of STDs than whites.

**HIV/AIDS**

Compelling worldwide evidence indicates that the presence of other STDs increases the likelihood of both transmitting and acquiring HIV infection.
**Responsible Sexual Behavior in Hamilton County**

Figure 75 shows the percent of persons under 50 who reported having sought treatment for a Sexually Transmitted Infection by race and sex in the 2004 Hamilton County BRFSS survey.

![Figure 75](image)

**Figure 75**

<table>
<thead>
<tr>
<th>% Treated for STI in Past Five Years, Hamilton Co</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Male</td>
</tr>
<tr>
<td>% Treated</td>
</tr>
</tbody>
</table>

Figure 76 shows the percent of persons for each race and sex group who reported three or more sex partners during the previous year.

![Figure 76](image)

**Figure 76**

<table>
<thead>
<tr>
<th>% Reporting 3 or more Sex Partners in Previous Year, Hamilton County, TN 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
</tbody>
</table>
Figure 77 shows the perceived effectiveness of condoms to prevent HIV as reported by the respondents under the age of 50 in the 2004 Adult BRFSS. Half of the respondents believed that condoms are very effective in preventing the spread of HIV/AIDS.

Figure 77

![Pie chart showing perceived effectiveness of condoms to prevent HIV in Hamilton County.](image)

Figure 78 shows the results of selected topics related to sexual behavior among high school students in Tennessee.

Figure 78

<table>
<thead>
<tr>
<th>Percent of TN High School Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever Had Sex</td>
</tr>
<tr>
<td>Four or More Sex Partners in Lifetime</td>
</tr>
<tr>
<td>Currently Having Sex</td>
</tr>
</tbody>
</table>


**Mental Health**

*This page excerpted from Healthy People 2010, Volume 1, Second Edition*

**Leading Health Indicator**

Approximately 20 percent of the U.S. population is affected by mental illness during a given year; no one is immune. Of all mental illnesses, depression is the most common disorder. Major depression is the leading cause of disability and is the cause of more than two-thirds of suicides each year.

The objective selected to measure progress among adults for this Leading Health Indicator is presented below. This is only an indicator and does not represent all the mental health objectives in Healthy People 2010.

18-9b. Increase the proportion of adults with recognized depression who receive treatment.

**Definition of Mental Health**

Mental health is sometimes thought of as simply the absence of a mental illness but is actually much broader. Mental health is a state of successful mental functioning, resulting in productive activities, fulfilling relationships, and the ability to adapt to change and cope with adversity.

**Populations With High Rates of Depression**

Serious mental illness clearly affects mental health and can affect children, adolescents, adults, and older adults of all ethnic and racial groups, both genders, and people at all educational and income levels.

Adults and older adults have the highest rates of depression.
Mental Health in Hamilton County

Figure 79 shows the number of days in the last thirty days that mental health was reported as “not good” among respondents in the Hamilton County 2004 BRFSS. About 35% of respondents locally reported at least one day of poor mental health, compared to 27% statewide. An analysis by age group showed that in Hamilton County, older persons are less likely to report any days of poor mental health than younger persons.

The TN Youth BRFSS 2003 showed that statewide, 28.3% of high school students reported “ever feeling so sad or hopeless almost every day for two weeks or more in a row” that they stopped doing some usual activities. By sex, 37.4% of females and 19.6% of males selected this response. Also, 17.5% of high school students reported that they had seriously considered attempting suicide in the last year.

Suicide is the most extreme measure of mental health function. In Hamilton County, suicide was the 9th leading cause of death (age adjusted, 2001-2003) among white persons, with a rate of 12.3 per 100,000 population, compared to a statewide rate of 14.
Injury and Violence
This page excerpted from Healthy People 2010, Volume 1, Second Edition

Leading Health Indicator

More than 400 Americans die each day from injuries due primarily to motor vehicle crashes, firearms, poisonings, suffocation, falls, fires, and drowning. The risk of injury is so great that most persons sustain a significant injury at some time during their lives. Motor vehicle crashes are the most common cause of serious injury. Because no other crime is measured as accurately and precisely, homicide is a reliable indicator of all violent crime. The objectives selected to measure progress for this Leading Health Indicator are presented below. These are only indicators and do not represent all the injury and violence prevention objectives in Healthy People 2010.

15-15a. Reduce deaths caused by motor vehicle crashes.

15-32. Reduce homicides.

Motor Vehicle Crashes

Motor vehicle crashes are often predictable and preventable. Increased use of safety belts and reductions in driving while impaired are two of the most effective means to reduce the risk of death and serious injury of occupants in motor vehicle crashes.

Homicides

Many factors that contribute to injuries also are closely associated with violent and abusive behavior, such as low income, discrimination, lack of education, and lack of employment opportunities. There has been a decline in the homicide of intimate partners, over the past decade, but this problem remains significant.
Injury and Violence in Hamilton County

Motor Vehicle Accidents

Figure 80 shows the number of fatalities attributed to Motor Vehicle Accidents in Hamilton County since 1990. Statewide, 40% of motor vehicle crashes with fatalities were alcohol related. Seat belt usage rates in 2004 were at 75% (Source: NHTSA)

![Figure 80](image)

Homicides

Figure 81 shows the number of homicides in Hamilton County from 1990-2003.

![Figure 81](image)
Environmental Quality

This page excerpted from Healthy People 2010, Volume 1, Second Edition

Leading Health Indicator

An estimated 25 percent of preventable illnesses worldwide can be attributed to poor environmental quality. In the United States, air pollution alone is estimated to be associated with 50,000 premature deaths and an estimated $40 billion to $50 billion in health-related costs annually. Two indicators of air quality are ozone (outdoor) and environmental tobacco smoke (indoor).

The objectives selected to measure progress among children, adolescents, and adults for this Leading Health Indicator are presented below. These are only indicators and do not represent all the environmental quality objectives in Healthy People 2010.

8-1a. Reduce the proportion of persons exposed to air that does not meet the U.S. Environmental Protection Agency’s health-based standards for ozone.

27-10. Reduce the proportion of nonsmokers exposed to environmental tobacco smoke.

Defining the Environment

Physical and social environments play major roles in the health of individuals and communities. The physical environment includes the air, water, and soil through which exposure to chemical, biological, and physical agents may occur. The social environment includes housing, transportation, urban development, land use, industry, and agriculture and results in exposures such as work-related stress, injury, and violence.
The Environment and Hamilton County

Air Quality

Air pollution poses a serious health threat especially those with other, chronic conditions. The federal government has mandated that certain pollutants be monitored when a county is out of compliance with national standards. Chattanooga is required to monitor ozone and particulates in the air. Several electronic devices monitor particulates daily in different areas of Hamilton County. Reports are available for particulates, ozone, mold, and pollen from the Chattanooga-Hamilton County Air Pollution Control Bureau.

Particulates are small particles that are suspended in the air. They come from a variety of sources including vehicles, wood burning, power plants, and dust from roads. Particulates have been implicated in respiratory and cardiovascular effects have been correlated with increased respiratory-associated visits to emergency rooms.

Ozone is monitored in Hamilton County by a single air monitor March-November. Ozone is a gas that occurs both at the ground level and in the upper atmosphere. When found in the upper atmosphere it shields people, animals, and plants from ultraviolet (UV) radiation which can be damaging. Depletion of the ozone layer caused by human activities and pollution can lead to increases in skin cancer and other health problems. Ozone near the ground is a major ingredient in smog and can cause health effects such as chest pain, coughing, and congestion. Chattanooga, because of its location between two mountains and a ridge, is subject to temperature inversions which may trap pollution.\(^2^1\) This inversion also contributes to another problem in Hamilton County, allergies. The Asthma and Allergy Foundation of America includes Chattanooga on both the Fall and Spring Allergy Capitals lists.\(^2^2\)

\(^{21}\) http://www.apcb.org/about/history.aspx
Air emissions from industrial sites have decreased in Hamilton County over the last decade. However, vehicle emissions have greatly increased. The number of vehicle miles traveled has almost doubled in the last two decades. In 2004, over 10,000,000 miles were traveled within the county, about 32.3 miles per day for each person living in Hamilton County. Estimates are based on data from the Air Pollution Control Bureau and the US Census 2004 estimates.

Figure 82

![Figure showing total vehicle miles traveled in Hamilton County, 1984-2004]

In April 2004, the Environmental Protection Agency (EPA) determined that 18 of 95 Tennessee counties had ozone levels that exceeded federal health standards (84 ppm), and Hamilton County was one of those counties. In 2005, the State of Tennessee began a vehicle inspection program for light-duty cars and trucks in Hamilton County. Vehicle inspection programs have proven to be very beneficial in reducing ozone pollution, and modeling shows ozone attainment in Hamilton County by 2007. The following graphs show pollution levels at local monitors from 1999-2004. The downward trend is expected to continue, with a projection that we will meet ozone standards by 2007 and particulate standards by 2008.

---

23Tennessee Department of Environment and Conservation: [www.state.tn.us/environment](http://www.state.tn.us/environment)
According to the Air Pollution Control Bureau in Hamilton County, air quality is better than it has ever been. Compliance with the increasingly strict standards is essential to attract new business to the area. The Bureau projects that the county will be in compliance on all standards by 2007. Residents can check the air quality daily at http://www.apcb.org/.

Additional Resources:
United State Environmental Protection Agency-Ozone
http://www.epa.gov/epahome/ozone.htm
Radon
Radon is a colorless, toxic gas that comes from the decay of radium in rocks beneath homes, well water, and building materials. There are no immediate health effects but long-term exposure can increase the risk of lung cancer. It is estimated that radon causes about 21,000 lung cancer deaths per year in the United States and is the number one cause of lung cancer among non-smokers. Hamilton County is considered by the EPA to be a medium-risk area for radon. Currently, a study is underway to assess radon levels in selected houses in Hamilton and Bradley Counties.

Additional Resources:
United States Environmental Protection Agency
http://www.epa.gov/radon/index.html
US EPA radon map
http://www.epa.gov/radon/zonemap/tennessee.htm
Tennessee Radon Program
http://tennessee.gov/environment/apc/radon/

Water Quality
A continuous and plentiful supply of clean drinking water is essential to public health. In Hamilton County, over 99% of residents have access to public water systems to meet their domestic needs. According to the Tennessee Department of Environment and Conservation, Division of Water Supply (TDEC-DWS), there are 355 residences in Hamilton County that do not have access to a public water supply and therefore must
rely on a private source such as a well or spring. Residences that do not have public water service may experience problems with the quantity, quality, and reliability of their water.

Public Water System Regulations
Public water systems are closely regulated. The TDEC-DWS has Rules that require water utility companies to perform routine testing for microbiological contaminants, inorganic chemicals, pesticides, organic chemicals, and radioactive contaminants (http://www.tennessee.gov/environment/dws/dwslinks.php). If any water quality parameter exceeds the legal limit, the utility is required to report the exceedance to both TDEC-DWS and its customers. The Rules also require each water utility to provide detailed water quality information to its customers on an annual basis. Residents can obtain information about the quality of their drinking water by contacting the water utility directly or by calling TDEC-DWS at 1-888-891-8332.

Fluoridation
The Tennessee Department of Health, Oral Health Services Section encourages public water systems in Tennessee to fluoridate water to help protect the oral health of its customers. The Oral Health Services Section’s statewide fluoridation program provides training and financial assistance to help initiate, upgrade, and maintain community water fluoridation. Statewide, 96% of Tennesseans on public water systems are served water containing optimal levels (~1.0 ppm) of fluoride.

http://www2.state.tn.us/health/oralhealth/

In Hamilton County, all major public water systems provide fluoridated water (See Figure 84). The information is from the “Tennessee Rural Water Needs Report”, January 2005, Tennessee Department of Environment and Conservation, Division of Water Supply, http://www.tennessee.gov/environment/dws/pdf/rural_ws_report.pdf.
### Figure 84 Water Systems in Hamilton County

<table>
<thead>
<tr>
<th>Water System</th>
<th>Number Served</th>
<th>Fluoridates Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastside Utility District</td>
<td>37,261</td>
<td>Yes</td>
</tr>
<tr>
<td>Grasshopper Creek Campground</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>Green Gables Hotel</td>
<td>25</td>
<td>No</td>
</tr>
<tr>
<td>Grindstone Estates Mobile Home Park</td>
<td>747</td>
<td>Yes, purchasing from Eastside Utility</td>
</tr>
<tr>
<td>Hixson Utility District</td>
<td>52,914</td>
<td>Yes</td>
</tr>
<tr>
<td>Mowbray Mountain Utility District</td>
<td>2,875</td>
<td>Yes, purchasing from Soddy Daisy-Falling Water</td>
</tr>
<tr>
<td>Sale Creek Utility District</td>
<td>1,499</td>
<td>Yes</td>
</tr>
<tr>
<td>Savannah Valley Utility District</td>
<td>14,342</td>
<td>Yes</td>
</tr>
<tr>
<td>Signal Mountain Water System</td>
<td>7,585</td>
<td>Yes, purchasing from TAWC</td>
</tr>
<tr>
<td>Soddy Daisy-Falling Water Utility District</td>
<td>9,597</td>
<td>Yes</td>
</tr>
<tr>
<td>Tennessee-American Water Company</td>
<td>171,679</td>
<td>Yes</td>
</tr>
<tr>
<td>Union Fork-Bakewell Utility District</td>
<td>3,386</td>
<td>Yes</td>
</tr>
<tr>
<td>Walden’s Ridge Utility District</td>
<td>6,227</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Lead

Lead is a highly toxic metal that human activities have spread throughout the environment. It is one of the most preventable public health problems in the country. CDC estimates that nearly 500,000 children nationwide have a blood lead level (BLL) high enough to cause permanent damage to their bodies. Children are exposed to lead primarily through the environment including lead dust in their homes and through soil. They are more likely to ingest lead and a smaller dose will cause their developing bodies more harm than an adult’s. Young children who put objects in their mouths are at higher risk. Exposure to lead can cause developmental and behavioral problems. Children living in poverty, minorities, and those living in housing built before 1950 are at higher risk because these older homes are more likely to contain lead paint.

Figure 85
In 2003, 4 Hamilton County children were found to have elevated blood lead levels (CDC). 5.42% of children at risk (1,209) were tested.

Over the past decades, there has been an effort to remove lead from products where it was once commonly used including gasoline and paint. This has significantly decreased the number of children at risk. According to childstats.gov, the percent of children with elevated BLL has declined from 88% in 1976-1980 to 2% in 1999-2002. However, lead is still present in some products, such as ammunition, and because it does not decompose in the environment, it will remain with us for some time.

Additional Information:
Centers for Disease Control and Prevention
http://www.cdc.gov/lead/
Childstats.gov
http://www.childstats.gov/
Tennessee Department of Health
http://www2.state.tn.us/health/lead/sources.htm

Methamphetamine
Clandestine methamphetamine (meth) laboratories have become a major public health problem in the United States. Meth is considered to be the leading drug threat today according to the 2005 National Drug Threat Assessment. Tennessee has one of the highest numbers of labs and accounts for 75% of lab seizures in the southeast. Hamilton County is one of the top counties for labs. Meth labs can be located anywhere including houses, apartments, recreational vehicles, hotel/motel rooms, cars, and boats. It is relatively easy to make and all equipment and chemicals required can be purchased at discount stores and pharmacies. Recipes are easily available. In Tennessee, meth has gone from being a drug primarily used in rural areas to one that is also found in urban areas.
Map by Dawn Ford, Chattanooga Hamilton County Health Department

Figure 85

Figure 86

Data from the South/East Tennessee Meth Task Force
In early 2005, the state passed the Meth Free Tennessee Act. This act requires retailers to move products containing pseudoephedrine, commonly found in many over-the-counter allergy/sinus medications and a key ingredient in methamphetamine, behind the counter and to require identification from those purchasing these products. Since the implementation of this act, seizures of labs have decreased.

**Figure 87**

![Graph from the South/East Tennessee Meth Task Force](image_url)

Meth labs contain a variety of chemicals which can be explosive and harmful to those who breathe in the fumes. Particularly at risk are young children living in meth labs. Children are at risk from the chemicals in the home which can contaminate their toys and the areas where they play and sleep as well as burns, ingestion of toxic substances, explosions, and neglect or abuse from parents. The Tennessee Department of Children’s Services estimates that each year 700 children are placed in state custody as a result of lab seizures. Also at risk are people who move into contaminated buildings. Residual contamination can be found long after the lab is gone and residents moving into former labs may not be aware of the dangers they face. Each pound of meth produced leaves behind five to six pounds of toxic waste.
Additional Resources:
The National Alliance For Drug Endangered Children
http://www.nationaldec.org/
South/East Tennessee Meth Task Force
http://www.rid-meth.org/
Tennessee Bureau of Investigation Methwatch
http://www.tbi.state.tn.us/methwatch/tnmethwatch.htm
Meth Free Tennessee
http://www.methfreetn.org/
Drug Enforcement Administration
http://www.dea.gov/

Pollution
The US Environmental Protection Agency’s Superfund program was established in 1980 to remediate contaminated areas. These sites pose a current or future threat to human health. Every state has at least one superfund site and one in four Americans lives within three miles of a Superfund site. Two local areas of concern are discussed below. For a complete listing of sites in Hamilton County, please see the EPA’s website www.epa.gov

Chattanooga Creek
Chattanooga Creek flows through the Alton Park and Piney Woods neighborhoods. A 2.5 mile section of the creek and several coal tar dumps have been named an EPA Superfund site. For years, it has been a disposal site for industries and is one of the most polluted creeks in the southeast. Polyaromatic hydrocarbons, or PAHs, which are produced from the incomplete combustion of coal, oil, gas, wood, and other products were the major chemical of concern. Exposure can cause many problems such as irritation of the skin, liver, mouth, and throat as well as kidney and liver problems. The Tennessee Department of Health conducted a soil study of the Glover Site, an area of concern identified with the help of the community. The purpose of this study was to determine the potential health effects of a proposed greenway in the area. The authors
concluded that the health effects from PAHs along the path studied are unlikely to pose a significant health threat to those using the greenway. However, other hazards such as broken glass and illegal dumps still exist. The site was not studied for other contaminants. For a full report, please visit the Tennessee Department of Health Communicable and Environmental Disease Surveillance website at http://www2.state.tn.us/health/CEDS/environ.htm

Volunteer Army Ammunition Plant
The Volunteer Army Ammunition Plant (VAAP) on Bonny Oaks Drive is also a Superfund site. In the past, the plant had produced TNT (trinitrotulene) and chemicals associated with the production were the main chemicals present. Volatile organic compounds, pesticides, and metals were also found there during a public health assessment done by the Agency for Toxic Substances and Disease Registry (ATSDR).

The health assessment concluded that residents near the plant might have had some exposure to chemicals but not enough to cause health effects. It also stated that people living in the area during the time of TNT production may have had short-term respiratory effects due to nitrogen and sulfur dioxide emissions. The ATSDR also concluded that there had been some runoff of chemicals that may have contaminated private wells. However, all residents are believed to be on the municipal water system. A copy of the final health assessment is available online at the website of the ATSDR or at the Chattanooga-Hamilton County Bicentennial Library.

Additional Resources
Agency for Toxic Substances and Disease Registry
http://www.atsdr.cdc.gov/
Environmental Protection Agency
www.epa.gov
Glover Site Fact Sheet
http://www2.state.tn.us/health/CEDS/PDFs/gloverfsfin.pdf
Glover Site Health Consultation (Full Report)
http://www2.state.tn.us/health/CEDS/PDFs/HC-GloverSite_022706.pdf
Immunizations

This page excerpted from Healthy People 2010, Volume 1, Second Edition

Leading Health Indicator

Vaccines are among the greatest public health achievements of the 20th century. Immunizations can prevent disability and death from infectious diseases for individuals and can help control the spread of infections within communities.

The objectives selected to measure progress among children and adults for this Leading Health Indicator are presented below. These are only indicators and do not represent all the immunization and infectious diseases objectives in Healthy People 2010.

14-24a. Increase the proportion of young children who receive all vaccines that have been recommended for universal administration for at least 5 years.

14-29a, b. Increase the proportion of noninstitutionalized adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.

Impact of Immunization

Many once-common vaccine-preventable diseases now are controlled. Smallpox has been eradicated, poliomyelitis has been eliminated from the Western Hemisphere, and measles cases in the United States are at a record low. Immunizations against influenza and pneumococcal disease can prevent serious illness and death.

Other Immunization Issues

Coverage levels for immunizations in adults are not as high as those achieved in children, yet the health effects may be just as great.
Figure 88 shows the percent of adults ages 65+ in Hamilton County (2004 BRFSS) who reported receiving a flu shot in the past year and the percent who have ever received a pneumococcal vaccine. More detailed information on adult immunizations is found on the following page.

Figure 88

<table>
<thead>
<tr>
<th>Percent of Adults 65+ Receiving Vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flu shot past 12 months</td>
</tr>
<tr>
<td>Percent</td>
</tr>
</tbody>
</table>

Childhood immunizations are reported through the Tennessee Department of Health’s *Immunization Status Survey of 24-Month Old Children*. A random, statistically valid sample is drawn for each region of the state. The Immunization Program’s goal is to achieve a 90% level of complete immunization against the following 10 vaccinepreventable diseases: Diphtheria, Tetanus, Pertussis, Polio, Measles, Mumps, Rubella, Haemophilus influenza type B, Hepatitis B and Varicella. In 2004, the proportion of children age two with “immunizations complete” in Hamilton County was 85.1%, down slightly from the 2003 89.4%. However, the definition of “immunization complete changed from 2003 to 2004, to a “4-3-1-3-3-1 standard (4 Dtap, 3 polio, 1 MMR, 3 Hep B, 3 Hib, and 1 Chicken pox), and improvements are expected in the years ahead.
### Figure 89

<table>
<thead>
<tr>
<th>Flu Shot in Past Year</th>
<th>Hamilton Co.</th>
<th>TN</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults (18-64)</td>
<td>34.0</td>
<td>68</td>
<td>66.3</td>
</tr>
<tr>
<td>Elderly Adults (65+)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Gender**

<table>
<thead>
<tr>
<th></th>
<th>Adults (18-64)</th>
<th>Elderly Adults (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>32.2</td>
<td>67.1</td>
</tr>
<tr>
<td>Female</td>
<td>35.7</td>
<td>67.1</td>
</tr>
</tbody>
</table>

**Race/Ethnicity**

<table>
<thead>
<tr>
<th></th>
<th>Adults (18-64)</th>
<th>Elderly Adults (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>35.1</td>
<td>67.3</td>
</tr>
<tr>
<td>Non-white</td>
<td>29.8</td>
<td>*</td>
</tr>
</tbody>
</table>

**Age**

<table>
<thead>
<tr>
<th></th>
<th>Adults (18-64)</th>
<th>Elderly Adults (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24 Years</td>
<td>23.3</td>
<td></td>
</tr>
<tr>
<td>25-34 Years</td>
<td>31.6</td>
<td></td>
</tr>
<tr>
<td>35-44 Years</td>
<td>29.2</td>
<td></td>
</tr>
<tr>
<td>45-54 Years</td>
<td>38.4</td>
<td></td>
</tr>
<tr>
<td>55-64 Years</td>
<td>49.4</td>
<td></td>
</tr>
</tbody>
</table>

**Annual Household Income**

<table>
<thead>
<tr>
<th></th>
<th>Adults (18-64)</th>
<th>Elderly Adults (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$15K</td>
<td>26.2</td>
<td>67.9</td>
</tr>
<tr>
<td>$15K-$24,999</td>
<td>30.7</td>
<td>66.4</td>
</tr>
<tr>
<td>$25K-$34,999</td>
<td>30.0</td>
<td>75.5</td>
</tr>
<tr>
<td>$35K-$49,999</td>
<td>33.0</td>
<td>*</td>
</tr>
<tr>
<td>$50K+</td>
<td>40.1</td>
<td>71.2</td>
</tr>
</tbody>
</table>

**Education**

<table>
<thead>
<tr>
<th></th>
<th>Adults (18-64)</th>
<th>Elderly Adults (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>27.3</td>
<td>66.5</td>
</tr>
<tr>
<td>High School</td>
<td>26.9</td>
<td>61.6</td>
</tr>
<tr>
<td>Some College</td>
<td>34.5</td>
<td>68.8</td>
</tr>
<tr>
<td>College</td>
<td>39.7</td>
<td>73.0</td>
</tr>
</tbody>
</table>

**Marital Status**

<table>
<thead>
<tr>
<th></th>
<th>Adults (18-64)</th>
<th>Elderly Adults (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>35.1</td>
<td>70.0</td>
</tr>
<tr>
<td>Divorced</td>
<td>39.4</td>
<td>66.8</td>
</tr>
<tr>
<td>Widowed</td>
<td>46.1</td>
<td>66.4</td>
</tr>
<tr>
<td>Separated</td>
<td>32.4</td>
<td>**</td>
</tr>
<tr>
<td>Never Married</td>
<td>28.8</td>
<td>66.4</td>
</tr>
</tbody>
</table>

**Employment Status**

<table>
<thead>
<tr>
<th></th>
<th>Adults (18-64)</th>
<th>Elderly Adults (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>35.1</td>
<td>50.0</td>
</tr>
<tr>
<td>Unemployed</td>
<td>25.8</td>
<td>**</td>
</tr>
<tr>
<td>Homemaker</td>
<td>29.5</td>
<td>71.7</td>
</tr>
<tr>
<td>Student</td>
<td>26.1</td>
<td>**</td>
</tr>
<tr>
<td>Retired</td>
<td>52.2</td>
<td>71.5</td>
</tr>
<tr>
<td>Unable to Work</td>
<td>44.9</td>
<td>**</td>
</tr>
</tbody>
</table>

**Have Health Care Coverage**

<table>
<thead>
<tr>
<th></th>
<th>Adults (18-64)</th>
<th>Elderly Adults (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36.1</td>
<td>68.4</td>
</tr>
<tr>
<td>No</td>
<td>16.5</td>
<td>**</td>
</tr>
</tbody>
</table>

* Not available
** Indicates small number of people in this group
**Access to Health Care**  
*This page excerpted from Healthy People 2010, Volume 1, Second Edition*

**Leading Health Indicator**

Strong predictors of access to quality health care include having health insurance, a higher income level, and a regular primary care provider or other source of ongoing health care. Use of clinical preventive services, such as early prenatal care, can serve as indicators of access to quality health care services. The objectives selected to measure progress for this Leading Health Indicator follow. These are only indicators and do not represent all the access objectives in Healthy People 2010.

1-1. **Increase the proportion of persons with health insurance.**

1-4a. **Increase the proportion of persons who have a specific source of ongoing care.**

16-6a. **Increase the proportion of pregnant women who begin prenatal care in the first trimester of pregnancy.**

**Barriers to Care**

Financial, structural, and personal barriers can limit access to health care. Financial barriers include not having health insurance, not having enough health insurance to cover needed services, or not having the financial capacity to cover services outside a health plan or insurance program. Structural barriers include the lack of primary care providers, medical specialists, or other health care professionals to meet special needs or the lack of health care facilities. Personal barriers include cultural or spiritual differences, language barriers, not knowing what to do or when to seek care, or concerns about confidentiality or discrimination.
Access to Health Care in Hamilton County

The changing face of Health Access: In the face of major cuts in TennCare, it is estimated that about 42,000 persons in Hamilton County are without health insurance. A new program, “Cover Tennessee”, has at this time (May 2006) won final legislative approval and is on its way to the governor’s desk. CoverTN would create a state-subsidized basic insurance plan for low-income workers, create a coverage plan for low-income children, re-establish a high-risk health insurance pool, and provide prescription drug assistance, a more aggressive state prevention and treatment program, and a coordinated school health program. Hamilton County is fortunate to have Project Access, a partnership designed to make health care more available to low income uninsured residents of the county.

Hamilton County Project Access Community Health Partnership Fact Sheet

Project Access makes health care more available to low-income, uninsured residents of Hamilton County. Project Access is coordinated by the Medical Society of Chattanooga & Hamilton County and the Medical Foundation. It brings together doctors, hospitals, medical schools, community clinics, the Hamilton County health department, and many other partners all for a common goal. This goal is to improve the health and well-being of the people of Chattanooga and Hamilton County.

Who is eligible? Project Access patients must live in Hamilton County for at least 90 days prior to enrolling. Their family income must be below 150% of the poverty level. They cannot be eligible for health insurance or other medical benefits like TennCare or Medicare. They must have a current medical need or condition that requires treatment.

Why is Project Access needed? Many people in Hamilton County do not have health insurance. They work hard in one or more low-paying jobs with no health benefits. They earn too much to qualify for programs like TennCare, but not enough to pay for insurance and still afford other basic items such as food, clothing and housing.

Project Access is a referral network that offers access to medical care for low-income people in Hamilton County who do not have insurance. The program helps patients get specialty health care that the primary care clinics do not have.

How does Project Access work? Providers working in existing low-income clinics and primary care programs, as well as partner social service agencies, can refer patients for enrollment into Project Access. Participating physicians may also ask that their patients be enrolled. Patients enrolled in the program receive donated physicians care, hospital care and medication assistance.

How are patients enrolled? Patients can call the Project Access office at 826-0269 to see if they are eligible. Participating physicians or participating community health clinics can request a patient be enrolled. They must meet the income and other requirements. If you are under a physician’s care at this time, he or she must be a Project Access member and refer you for enrollment.

How does the process work? Prospective patients will talk to an eligibility specialist. If patients qualify for other medical benefits like TennCare, they must apply for these programs. In some cases, patients can be enrolled in Project Access as a short-term option until their other benefits begin. Project Access patients are enrolled for three months for specialty care and six months for primary care. Patients will be helped with getting specialty care and making appointments with health care providers. Project Access may not cover some needed services.

Tell me more! If you would like more information, or would like to help Project Access, please call 826-0269.
Project Access partners provide more than $6.5 million in health care to low-income uninsured residents of Hamilton County

CHATTANOOGA – The Project Access Community Health Partnership has provided more than $6.5 million in free health care to uninsured residents of Hamilton County since the program began in April 2004, including $4.4 million of care in 2005, said Dr. Joe Cofer, Project Access Chair.

“Project Access is a physician-led community-based program that coordinates donated voluntary medical care and services for uninsured people living on fixed or low income in Hamilton County,” according to Dr. Cofer. Physicians have provided nearly than $1.12 million in donated care through Project Access; hospitals and other partners have contributed $5.43 million in health care services.

“Since Project Access began patient care in April 2004, it has been a vital link to connect needy patients with needed care,” according to Jeff Fee, President/CEO of Parkridge Medical Center, Inc. “Project Access makes it easier for its partners to coordinate care effectively.”

Ruth Brinkley, CEO of Memorial Hospital, said “hospitals are proud to be part of Project Access. This program brings together all of the needed elements for quality care, including primary care, medical specialists, testing, and hospital services,” she said. “Through Project Access, physicians, hospitals, and health centers work collaboratively to meet the health care needs of our community’s uninsured.”

Jim Brexler, President/CEO of Erlanger Health System, said that hospitals are also working together to address the problems of the uninsured across the state of Tennessee. “We came together to create Project Access because of a need that existed even before the TennCare cuts, and since that time an estimated 11,500 more people have become uninsured. Today, the number of uninsured residents in our county has increased to an estimated 42,400, and the need is greater than ever. While we are doing all we can to provide care, we cannot lose sight of the need for broader systemic reform.”

Project Access was developed through the Medical Society of Chattanooga-Hamilton County and Medical Foundation of Chattanooga. Since the program began, more than 2,500 individuals have been evaluated for eligibility. In April, 572 patients were actively receiving care or finalizing enrollment, and 642 other patients had completed their care. Those who did not qualify for the program were directed to other services.
In addition to 400 volunteer physicians who provide services to Project Access patients, the partnership includes the Erlanger Health System, Memorial Health Care System, and Parkridge Medical Center Inc., Siskin Hospital, the Health Department, Memorial Primary Care Centers, Southside and Dodson Avenue Health Centers, Volunteers in Medicine, Rehab South, and a variety of other partners.

"Project Access coordinates charity care and allows uninsured patients to receive earlier, less costly treatment," according to Mark Brzezienski, M.D., President of the Medical Society. “Left untreated, many of these would end up in the emergency room, which is the most costly form of care.”

To qualify for Project Access, patients must reside in Hamilton County, not have any health insurance, and not receive any state or federal medical benefits. Total family income cannot exceed 150 percent of the federal poverty level, which is $24,900 for a family of three.

“Through Project Access, uninsured residents have access to quality specialty care, hospital care, and even rehabilitation services,” according to Rae Young Bond, executive director. “Over time, we expect Project Access to lead to:

- Better coordination of care to allow the uninsured to gain entry into and receive services from a more efficient, comprehensive and higher quality system of care, regardless of ability to pay.
- Improved health status among the low-income uninsured, which increases their employability and productivity; and
- Fewer of Project Access patients in the emergency room.”

“Project Access is a remarkable initiative that provides health care to those who need it most,” Dr. Brzezienski said. “Through the strong support of Hamilton County physicians, hospitals, health centers, and other leaders, this program is making a real difference in the lives of working residents in our county.”

“At the same time, we want to continue to call attention to the problems faced by the uninsured. When people do not have health insurance it hurts individuals, families, and our entire community,” according to Dr. Cofer. “Project Access is a great community service, but we can never lose sight of the larger problem.”
## PROJECT ACCESS

### Program Results

<table>
<thead>
<tr>
<th>Category</th>
<th>2004</th>
<th>2005</th>
<th>YTD 2006</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients Screened</td>
<td>611</td>
<td>1372</td>
<td>549</td>
<td>2532</td>
</tr>
<tr>
<td>New Patients Enrolled</td>
<td>308</td>
<td>629</td>
<td>366</td>
<td>1303</td>
</tr>
<tr>
<td>Total Patients Currently Enrolled/Pending</td>
<td></td>
<td></td>
<td>572</td>
<td></td>
</tr>
<tr>
<td>Patient Care Completed (Disenrolled)</td>
<td>276</td>
<td>405</td>
<td>6</td>
<td>642</td>
</tr>
<tr>
<td>Patients Disenrolled due to noncompliance</td>
<td></td>
<td></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Not Eligible-Directed to Other Resources</td>
<td>276</td>
<td>471</td>
<td>162</td>
<td>909</td>
</tr>
<tr>
<td><strong>Physician Care Delivered</strong></td>
<td>$113,347</td>
<td>$749,639</td>
<td>$263,784</td>
<td>$1,126,770</td>
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<tr>
<td>Physician Care Claims Received</td>
<td>267</td>
<td>1796</td>
<td>544</td>
<td>2607</td>
</tr>
<tr>
<td><strong>Hospital Care Delivered</strong></td>
<td>$601,895</td>
<td>$3,649,022</td>
<td>$1,183,845</td>
<td>$5,434,762</td>
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<tr>
<td>Hospital Claims Received*</td>
<td>81</td>
<td>1302</td>
<td>330</td>
<td>1713</td>
</tr>
<tr>
<td><strong>TOTAL CARE PROVIDED</strong></td>
<td>$715,242</td>
<td>$4,398,661</td>
<td>$1,447,629</td>
<td>$6,561,532</td>
</tr>
</tbody>
</table>
## Project Access Patients and Applicants
### From Program Inception (Apr 2004 – Jan 2006)
### Total Patients: 2185

<table>
<thead>
<tr>
<th>Category</th>
<th># of patients</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>678</td>
<td>32.9%</td>
</tr>
<tr>
<td>Female</td>
<td>1377</td>
<td>66.9%</td>
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<tr>
<td>Unknown</td>
<td>4</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>511</td>
<td>24.8%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>1102</td>
<td>53.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>50</td>
<td>2.4%</td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
<td>1.6%</td>
</tr>
<tr>
<td><em>Unknown</em></td>
<td>363</td>
<td>17.6%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;18</td>
<td>30</td>
<td>1.5%</td>
</tr>
<tr>
<td>18-25</td>
<td>119</td>
<td>5.8%</td>
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<tr>
<td>26-44</td>
<td>708</td>
<td>34.4%</td>
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<tr>
<td>45-64</td>
<td>1107</td>
<td>53.8%</td>
</tr>
<tr>
<td>65+</td>
<td>82</td>
<td>4.0%</td>
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<tr>
<td>Unknown</td>
<td>13</td>
<td>0.6%</td>
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<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;High School</td>
<td>388</td>
<td>18.8%</td>
</tr>
<tr>
<td>Diploma/GED</td>
<td>704</td>
<td>34.2%</td>
</tr>
<tr>
<td>Some College</td>
<td>359</td>
<td>17.4%</td>
</tr>
<tr>
<td>College Grad</td>
<td>129</td>
<td>6.3%</td>
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<tr>
<td><em>Unknown</em></td>
<td>479</td>
<td>23.3%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
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<td></td>
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<tr>
<td>Single</td>
<td>1217</td>
<td>59.1%</td>
</tr>
<tr>
<td>Married</td>
<td>473</td>
<td>23.0%</td>
</tr>
<tr>
<td>Divorced</td>
<td>114</td>
<td>5.5%</td>
</tr>
<tr>
<td>Separated</td>
<td>102</td>
<td>5.0%</td>
</tr>
<tr>
<td>Widowed</td>
<td>67</td>
<td>3.3%</td>
</tr>
<tr>
<td>Unknown</td>
<td>86</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>702</td>
<td>32%</td>
</tr>
<tr>
<td>Self Employed</td>
<td>91</td>
<td>5.0%</td>
</tr>
<tr>
<td>Retired</td>
<td>11</td>
<td>0.5%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>1253</td>
<td>57%</td>
</tr>
<tr>
<td>Unknown</td>
<td>120</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

*At program inception, patients not meeting eligibility requirement were directed to other resources & all patient information was not available*
Health Strategy Areas

The Regional Health Council has worked through many venues to define and implement strategies for health promotion, including:

- Health Priority Subcommittees
  - Obesity Diet and Exercise
  - Tobacco Use
  - Addictions and Dependencies
  - Risky Sexual Behavior
  - Health Screenings

- The Health Care Task Force for the Hispanic/Latino population

- The Step ONE (Optimize with Nutrition and Exercise) Initiative

- The March of Dimes/Low Birthweight Task Force

Details on the goals and progress of these groups are found in the following pages.
**Obesity, Diet and Exercise Subcommittee**

**GOAL**

To promote healthier lifestyles among residents of Hamilton County by advocating and planning for activities and policies that encourage and support healthier eating and exercise practices as a means to reduce morbidity, disability and premature mortality.

**Tobacco Use**

**GOAL**

To reduce the extent of tobacco use among residents of Hamilton County by advocating and planning for services, interventions, prevention activities, and policies that encourage and support behavior change regarding tobacco product use as a means to reduce morbidity and premature mortality.

**Addictions and Dependencies Subcommittee**

**GOAL**

To improve the overall health of the community by promoting healthy lifestyles through prevention, identification, education, and advocacy of the risk associated with alcohol and other drug abuse, and to promote the reduction of practices associated with other forms of addictions and dependency.
Health Screenings Subcommittee

GOAL

To promote the early identification of health problems among residents of Hamilton County by advocating and planning for health screening initiatives, planning and coordinating health education campaigns, and by advocating for public policies, practices, and laws that support preventive health measures that reduce morbidity and premature mortality.

Risky Sexual Behavior Subcommittee

GOAL

To reduce the extent of risky sexual behavior practices among residents of Hamilton County that would in turn assist in reducing the incidence of teen pregnancies and other unintended pregnancies, sexually transmitted diseases, HIV, rape and other personal attacks and violations.
Hispanic Health Care Task Force

Health Care Task Force for the Hispanic/Latino Population

The Hispanic Health Care Task Force has four goals:

1. To increase access to and the actual number of linguistically and culturally competent health care providers/staff so that the health care needs of this population are met.
   a. Health Care Providers
      i. Chattanooga-Hamilton County Medical Society
         1. Physician Education Opportunities related to Cultural Competence
      ii. Dalton, Ga.’s Medical Society
         1. training resources
   b. Newsletter Articles
      i. Distributed monthly to Chattanooga-Hamilton County Medical Society, local hospitals, Task Force, RHC and Hamilton County employees
   c. Project Access
      i. Survey local physicians/practices re: language capacity
      ii. Recruit more physicians, especially OB/Gyn
      iii. Presentation at Project Access Operations Council

2. To obtain additional financial resources
   a. Grants
      i. Research multiple opportunities
      ii. Healthy Behaviors in Women
      iii. Project Access

3. To increase community resources in order to eliminate or reduce language and cultural barriers.
   a. Interpreters
      i. Medical Interpretation Class
         1. Train bilingual persons
         2. Local institutions adopt and offer a curriculum
         3. Incorporate instructions in existing curriculums (e.g. social work, nursing, etc.)

4. To improve the Hispanic/Latino population’s ability to navigate the local health care system.
   a. Hispanic Health Fair

http://rhc.hamiltontn.org/latino%20task%20force.htm
The Step ONE Initiative is a county-wide effort to address the problem of obesity in our community and promote physical fitness and healthy lifestyles. The Hamilton County Health Department has partnered with the Mayor of Hamilton County, and the Hamilton County Regional Health Council to launch this initiative. Other agencies, organizations, churches, as well as area hospitals, schools, and physicians are being asked to become partners in this effort. Local restaurants, the insurance industry, and other businesses are being recruited as partners as well. The University of Tennessee at Chattanooga and other area colleges and universities will also play active roles. This program seeks to counter the obesity trend among all citizens – including youth who are leading inactive lifestyles and experiencing a growing rate of type II diabetes, and the elderly, who are experiencing an increase in the prevalence of arthritis that is thought to be influenced by the sedentary lifestyles of our senior citizens.

Step One will serve all citizens in an effort to improve nutritional practices and physical activity. The organizers of the initiative have formed a Steering Committee to provide input into the planning process and to oversee the initiative. This group consist of approximately 60 persons representing a number of area business, the Chamber of Commerce, all of the municipalities in Hamilton County, the Hamilton County School System, local hospitals, health providers, and healthcare organizations, community organizations, and lay persons. A public input process will be completed by early Fall of 2004 to gather information from the public about perceived barriers to healthy eating and evolvement in physical fitness activities. A number of work groups are being formed, using the information gathered from the public input process, and a review of model programs from across the country, to development a broad array of strategies and interventions to encourage participation by residents, businesses, schools, institutions, and organizations. The workgroups are formed around the following environment-based categories: home, worksite, school, church, neighborhoods, and healthcare providers/resources. The menu of interventions and strategies developed by the workgroups will become part of a county-wide plan to address obesity. The plan will be unveiled to the public at the Annual Medical Society Forum which will be held in November of 2004.

It is planned that the initiative will eventually employ staff including a program manager, community nutritionist, and an exercise physiologist. Resources will be sought for a marketing and promotional campaign to assist with outreach to increase public awareness and involvement. This awareness and educational health promotion program will readily repay its cost in the reduced future medical expenses of participants. The Step ONE program will initiate a long-term process in the community that is expected to result in healthy lifestyle changes through greater involvement in better nutritional practices and more exercise and fitness activities.

See http://hcstepone.org/
Step ONE: Optimize with Nutrition and Exercise

Vision: Hamilton County residents practice good nutrition, are physically fit and maintain their optimal weight.

Mission: To create a culture in Hamilton County where residents choose to practice good nutrition and exercise regularly.

Goals and Objectives:
1. To improve nutrition and increase physical activity thereby decreasing obesity among individuals residing in Hamilton County.
   a. To educate the public in regards to the fitness and nutrition practices of Hamilton County residents and how those practices relate to the incidence of obesity in the community.
   b. To promote and provide community wide opportunities which encourage all residents to participate in good nutrition, fitness and weight loss initiatives.
   c. To assist community partners in establishing nutrition, fitness and weight loss initiatives designed specifically to their target population.

2. To establish a strong organizational network of community partners which includes key leadership from government, area businesses, schools, and community based organizations.
   a. To increase an organizational structure that will support a broad-based, community-wide initiative.
   b. To identify key government, business, school and community based organization leaders and recruit them to partner with the Step One Program.
   c. To establish health programs for committee members involved with Step ONE.
   d. To organize workgroups based on target population groups or affinity groups to develop strategies in support of the mission and goals of the program.
   e. To support the implementation of the intervention strategies.
   f. To evaluate the program’s effectiveness in meeting its mission and goals.


Low Birthweight Task Force

In the fall of 2002, while working on a three year community health plan, the Chattanooga-Hamilton County Regional Health Council became aware of the statistics regarding infant health in the county. First, the infant mortality rate in the year 2000 was 12.4 deaths per 1000 live births, among the highest in the state. Second, the low birthweight proportion was 11.9%, the highest in the state and involving over 400 Hamilton County infants that year alone.

The Regional Health Council acted quickly to appoint a Low Birthweight Task Force to study infant health in Hamilton County and to make recommendations back to the full Council. This Task Force has been chaired since its inception by Dave Adair, MD, perinatologist at Erlanger Medical Center. In the spring of 2003, the LBW Task Force set the following goal:

By 2007, to reduce number of low birth weight births in Hamilton County from 460 to 340.

• Overall, a 25% decrease in low birth weight births
• 8.4 low birth weight births per 100 live births.
• A reduction of 40 low birth weight babies per year for the next 3 years.

A newsletter publication of the Task Force Findings is available at http://rhc.hamiltontn.org/Newsletter%20January%202005.pdf

A map of Low Birthweights in Hamilton County by zip code is also available at http://rhc.hamiltontn.org/lowbirthmap.htm

A report on the efforts of the Task Force from 2003-2005 is found on the following pages. When it became clear that the problems of infant health in Hamilton County were somewhat intractable, the need for a long-term sustainable effort was identified, and the Task Force has recently taken the step of becoming a part of the March of Dimes prematurity effort.
January 2003

- Organizational meeting of the **Low Birthweight Task Force**. The chairperson of the Regional Health Council, Irvin Overton, appointed Dave Adair, MD, to head the Task Force efforts. Hamilton County’s low birthweight and infant mortality trends were to be addressed.
- Also at that time, the Task Force determined to follow the state-of-the-art Perinatal Periods of Risk (PPOR) methodology for data analysis.

March 2003

- A health department staff person, Barbara Laymon, was sent to a one day CityMatCH conference in the spring for training in the Perinatal Periods of Risk methodology.
- After reviewing the Healthy People 2010 goals regarding low birthweight, as well as data from other metropolitan areas, the state and the nation, the Low Birthweight Task Force set a goal to drop the proportion of low birthweight births by 1% per year, beginning in 2004. At this rate, by 2007, the goal of 8.4% low birthweight (lbw) births would be realized.
- A newsletter, **Questions**, was produced to respond to early inquiries raised by the Low Birthweight Task Force. A **map** of lbw by zip codes was produced.
- The long-term health and educational needs costs of infants born at lbw was discussed at the Task Force meeting (and many subsequent meetings).

Spring and Summer 2003

- The Task Force appointed two groups, one to develop data and the other to find ways to gain input from the maternal at-risk population. The **data group** began meeting to review PPOR analysis and the work of the TN Department of Health Epidemiologist (Derek Chapman). The **Consumer Advisory Group** also began meeting.
- The Task Force looked at the preliminary results of the PPOR and Chapman analyses: most problems in infant health could be traced to maternal health (the prenatal, preconceptional or interconceptional health of the mother.)
- The Task Force identified the need to expand its membership to gain participation from more stakeholders, and to find more prevention expertise. The need to increase public awareness regarding the long-term costs and consequences of lbw was highlighted.
- The Chattanooga-Hamilton County Health Department’s Division of Case Management Services applied for a March of Dimes grant for interconceptional follow-up of high risk postpartum women. (Later funded.)
Fall 2003
- The March of Dimes hosted a Prematurity Conference at Erlanger: “How cool is it to be Number 1… Prematurity, Low Birthweight, and Crystal Meth.”
- The Task Force’s October meeting included a guest speaker, Kimberlee Wyche-Ethridge, MD, of the Nashville Metro health department. Dr. Wyche discussed PPOR, Fetal-Infant Mortality Review (FIMR), and other analytic tools, as well as new practice initiatives now underway in Nashville.
- The Task Force sent a draft newsletter summarizing the findings of the Task Force and requesting comments and suggested strategies to all area obstetricians.
- PPOR data for 1999-2001 were finalized and presented to Task Force. Key areas of concern included very low birthweight infants, SIDS deaths, and the relationship between Sexually Transmitted Infections (STI’s) and prematurity.
- The Joint Legislative Study Committee on Prematurity of the Tennessee Legislature was established.

Winter 2004
- A newsletter, Leading the Nation in Low Birthweight Babies, with data and strategic recommendations, was published. A report based on the newsletter was presented to the Regional Health Council.
- Census tract level data on low birthweight were mapped.
- The Consumer Advisory Group began to look at collaborating with other organizations that have ongoing mechanisms for consumer input, such as Head Start.

Spring 2004
- The Chattanooga-Hamilton County Health Department applied for a Healthy Start grant, using the Low Birthweight Task Force as the consortium body required in the request for proposals. (Later denied). The grant proposal included an in-depth look at high-risk areas of Chattanooga and specific strategies to reduce low birthweight in those areas.

Summer 2004
- Carolyn Fulghum, Executive Director of the East Tennessee Friendly Access Project, gave a report of the early findings of the project. Their data from consumers, communities, providers and staff showed that the common assumptions about access issues are incorrect. She recommended the Disney Institute’s approach to consumer satisfaction, and invited the audience to a training session to be held in Knoxville in July.
- The Health Department applied for a March of Dimes grant to provide ways for women of childbearing age, and in particular, consumers of maternal health services, to have a voice in the work of improving infant health in Hamilton County. (Later funded).
Fall 2004
- New data from the state showed that Hamilton County went from 12% low birthweight in 2002 to 11.5% in 2003. However, the drop was in the white population (from 9.3 to 8.9%), while the black population continued to show an increase (from 19.1% to 19.9%).
- Task Force members reported increasing work in the area of primary and secondary prevention, including a Chattanooga Head Start’s initiative to educate the families of 800 children using a University of Florida curriculum, READ Chattanooga’s use of “What to do when you’re expecting” materials which were rewritten at a 3rd to 5th grade level, tobacco prevention efforts, health department efforts in case management and early prenatal care, and the Volunteer Treatment Center’s work with prenatal clients to encourage early prenatal care.
- Dr. Liz Kennedy and others presented the low birthweight problem to the Clergy Coalition Fellowship (an African American Faith Based group) and invited their participation in the Task Force.

Winter 2004-05
- The health department re-applied for a Healthy Start Grant. (Later denied - actually out of the 67 funded grants nationwide, 66 went to previously funded projects.)
- Carrie Salafia, MD, placental pathologist, spoke at the January meeting of the Task Force, describing how fetal life events may predict lifelong health.
- Repeal of Tobacco Preemption targeted (measure later defeated).
- TN Department of Health formed statewide group to study infant health and make strategic recommendations.

Spring 2005
- Statewide MOD Prematurity Summit held in Chattanooga. Karla Damus, MOD national office research director and Bruce Taffel, MD, Blue Cross Blue Shield, spoke. The audience discussed obstetrical practices, including c-section rates and induction of labor rates.
- Drs. Salafia and Adair, together with Sean Richardson, PhD, applied for EPA and other grant funding to use the placenta as a measure of possible environmental exposures. The Task Force endorsed these proposals.
- The Task Force heard a report from the Regional Health Council’s Risky Sexual Behavior Subcommittee recommending the March of Dimes Teen Awareness Program (TAP), used in Knoxville for over 20 years, to be implemented as a pilot project in Hamilton County. Other preventive strategies, including Birmingham’s “Salons Saving Sisters,” were discussed.
Summer 2005

- Chattanooga READ (Adult Literacy) applied for MOD grant to expand “What to Expect” model.
- About four to five hundred persons attended a NICU Family Reunion at Erlanger. The MOD works with these moms in an effort to prevent future LBW.
- The Regional Health Council established a Hispanic/Latino Health Care Task Force to look into the primary care services available to this population group. The health department prenatal clinic, which serves mostly Hispanics, is operating at capacity.
- Referral problems were discussed at the Task Force meeting by several agencies. The Blue Cross “Caring Start” program was described.

Fall 2005

- In an effort to assure the long-term sustainability of the Low Birthweight Task Force, and to join forces with a group already involved in strategic interventions, the Task Force votes to recommend that it join forces with the March of Dimes Program Services Committee. The Regional Health Council accepted the recommendation and requested semi-annual reports from the March of Dimes on the status of infant health in Hamilton County.
Pandemic Influenza Planning

Many scientists believe it is only a matter of time until the next influenza pandemic takes place. For pandemic influenza to occur, three conditions must be met: a new influenza A virus appears in the human population, it causes serious illness in people, and it spreads easily from person to person worldwide.

It is difficult to predict when the next influenza pandemic will occur or how severe it will be. Modeling studies suggest that the impact of a pandemic on the United States could be substantial, with 15% to 35% of the U.S. population affected. Health officials are especially concerned about the continued spread of a highly pathogenic avian H5N1 virus across eastern Asia and other countries. The H5N1 virus raises concerns about a potential human pandemic because it is especially virulent, is being spread by migratory birds, can be transmitted from birds to humans, and it continues to evolve.

It is important to engage in pandemic influenza planning to permit a prompt and effective public health response. In November 2005, President Bush issued The National Strategy for Pandemic Influenza which guides the nation’s preparedness and response to an influenza pandemic. This guidance charges the U.S. Department of Human and Health Services with leading the federal pandemic preparedness.

In Tennessee, the Tennessee Department of Health will release the Statewide Pandemic Influenza Preparedness and Response Plan in April 2006. The state plan will serve as guidance in developing local plans. Regional health departments are being tasked with bringing together community and health care stakeholders to develop and finalize local plans by September 2006. Local plans will address the following elements: surveillance, public health and clinical laboratories, healthcare and public health partners, infection control and clinical guidelines, vaccine distribution and use, antiviral drug distribution and use, community disease control and prevention, public health communications, and workforce support.
AVIAN INFLUENZA (BIRD FLU) FACT SHEET

APRIL 2006

Avian (bird) flu is caused by influenza A viruses that occur naturally among birds. There are different subtypes of these viruses, and the one currently of concern is the H5N1 subtype. Wild birds worldwide carry avian influenza (AI) viruses, but usually do not get sick from them. Avian influenza is very contagious among birds and can make some domesticated birds such as chickens, ducks, and turkeys very sick and die.

Infected birds shed the influenza virus in their saliva, nasal secretions, and feces. Domesticated birds may become infected with avian influenza virus through direct contact with infected birds, or through contact with contaminated surfaces, food, or water.

Avian influenza infection in domestic poultry causes two main forms of disease, low pathogenic and highly pathogenic. Pathogenicity refers to the ability of the virus to cause disease. The low pathogenic form may go undetected and usually causes only mild symptoms. The highly pathogenic form spreads more rapidly through flocks of poultry. This form has a death rate in domestic poultry that can reach 90-100%, often within 48 hours. The H5N1 virus is highly pathogenic.

The highly pathogenic H5N1 strain of bird flu has been found in an increasing number of countries in Europe, Asia, and Africa. Currently, H5N1 influenza is not present in the United States.

Monitoring Bird Health

Wildlife experts and public health officials have been monitoring the spread of highly pathogenic H5N1 since it first appeared in Hong Kong in 1997. Since 1998, the U.S. Department of Agriculture (USDA) has tested over 12,000 migratory birds in the Alaska flyway, and since 2000, has tested nearly 4,000 migratory birds in the Atlantic flyway. All birds have tested negative for highly pathogenic H5N1. Since 2005, the Department of the Interior (DOI) has been working with the state of Alaska to sample migratory birds in the Pacific flyway. These agencies have recently developed a plan to help rapidly detect the pathogen through:

- Investigation of disease-outbreak events in wild birds
- Expanded monitoring of live wild birds
- Monitoring hunter-killed birds
- Use of sentinel animals such as backyard poultry flocks
- Environmental sampling of water and bird feces

In 2006, the agencies plan to collect between 75,000 and 100,000 samples from live and dead wild birds. They also plan to collect 50,000 samples of water or feces from high-risk waterfowl habitats across the United States.

Guidance for Handling Wildlife

The Department of Interior’s National Wildlife Health Center has issued guidance to follow routine precautions when handling wild birds:

- Do not handle birds that are obviously sick or birds found dead.
- Wear rubber or disposable latex gloves while handling and cleaning game, then wash hands with soap and water or with alcohol-based hand products if the hands are not visibly soiled.
- Thoroughly clean knives, equipment, and surfaces that come in contact with game.
- Do not eat, drink, or smoke while handling or cleaning birds.
- Cook all game meat thoroughly (at least to 165°F) to kill disease organisms and parasites.
Human Infection with Avian Influenza Viruses

At present, highly pathogenic avian influenza is a disease of birds and is not readily transmitted to humans. Most cases of H5N1 influenza infection in humans have resulted from direct and prolonged contact with infected poultry or poultry droppings. There have been no documented cases of highly pathogenic H5N1 disease in humans resulting from contact with wild birds.

So far, the spread of H5N1 virus from person to person has been limited and has not continued beyond one person. Nonetheless, because all influenza viruses have the ability to change, scientists are concerned that H5N1 virus one day could be able to infect humans and spread easily from one person to another. The U.S. Department of Health and Human Services is aggressively working with federal, state, and local partners to ensure public health is protected.

Vaccines to protect humans against H5N1 viruses currently are under development. In addition, research is underway on methods to make large quantities of vaccine more quickly.

So far, research suggests that two antiviral medicines, oseltamivir (Tamiflu®) and zanamavir (Relenza®), may be useful treatments for H5N1 avian influenza. However, H5N1 viruses are generally resistant to two other available antiviral medications, amantadine and rimantadine, so they cannot be used to treat avian flu.

Commercial Poultry Populations

Several safeguards are in place in the United States to protect the health of chickens on farms and to ensure the quality of poultry and eggs purchased by consumers. In commercial poultry and egg production systems, birds are housed indoors to prevent contact with wildlife that may spread diseases to chickens. There is ongoing surveillance of flocks to test birds that show signs of respiratory disease or unexpected mortality.

The risk of H5N1 avian influenza moving from backyard flocks in Asia to commercial flocks in the United States is low. If an outbreak in birds in the United States does occur, the risk of consumers being exposed to the virus from handling or consuming poultry meat or eggs is remote.

Food Safety

Eating properly handled and cooked poultry is safe. Proper cooking kills this virus just as it does many other disease organisms and parasites. Routine safety precautions should be taken when cooking poultry:

- Wash hands with warm water and soap for at least 20 seconds before and after handling food;
- Prevent cross-contamination by keeping raw meat, poultry, fish, and their juices away from other foods;
- After cutting raw meats, wash cutting boards, knives, and countertops with hot, soapy water;
- Sanitize cutting boards with a bleach water solution;
- Use a food thermometer to ensure food has reached the safe internal temperature in all parts of the birds. Cook poultry to at least 165°F to kill foodborne germs that might be present.
Frequently Asked Questions

If I live near people who keep chickens and other poultry, am I safe?

Living near people who keep chickens does not present a risk. At the present time, the highly pathogenic H5N1 virus has not spread to the United States. Even if the H5N1 strain were to appear in the U.S., transmission from birds to people would require close contact with birds or their droppings.

Does owning a caged pet bird increase the possibility of catching or spreading avian flu?

The likelihood of getting a pet bird already infected with avian flu is very low. Presently, it is illegal in the U.S. to import birds from regions that are infected with bird flu. If you own a pet bird and are concerned, keep the bird inside to avoid exposure to wild or migratory birds.

If you are buying a new bird, especially an exotic bird, be sure it has been legally imported. Information about federal embargoes on birds importation can be found at www.cdc.gov/flu/avian/outbreaks/embargo.htm.

What should I do if I find a dead bird?

Public Health is continuing to monitor bird deaths as part of its West Nile Virus program. The Environmental Health office collects dead blue jays and crows, May through October. Avoid touching the bird or any other dead animal with your bare hands. Pick up the bird using a glove or clear plastic bag. Place your hand in the bag, grasp the bird, and pull the bag over your hand and around the bird. Keep the bagged bird on ice or refrigerate. Deliver the bird to the Health Department at 921 East 3rd Street, Monday-Friday 8:00 am to 4:00 pm. On weekends, you can drop off bagged birds at the Hamilton County Highway Department guard shack at 7625 Standifer Gap Road.

If a large die off of wild birds is noticed, especially ducks, geese, or shore birds, Tennessee Wildlife Resources agency and the United States Department of Agriculture-Wildlife Services (615-736-5506) should be notified.

I have a small flock of chickens in my backyard. Are there any special precautions I should take to keep them from getting bird flu?

Good sanitation and prevention measures should be taken, including reducing their exposure to wild birds. Information on “Backyard Biosecurity for the Birds” is available from the USDA at http://www.aphis.usda.gov/vs/birdbiosecurity/hpai.html or from your local Agriculture Extension office. If birds in your flock die unexpectedly, please make a report to the Tennessee Department of Agriculture at 615-837-5120.

Can bird flu spread to dogs and cats?

There is no evidence that bird flu is a risk to dogs. There is evidence from the Asian outbreak that the bird flu virus might affect cats that are fed raw poultry. There is currently no cause for concern because the virus is not present in the United States.


Recommendations and Future Directions

In review of the findings presented in this Community Health Plan, it is important to note that the Council will organize much of its work around three strategy areas which include: the underlying causes and determinants of health (i.e. education, poverty, etc.); health risk behaviors; and health outcomes, including emerging disease patterns in the population. For each of these strategy areas, the doors will be open for the Council to consider these critical issues and diseases:

- Infant mortality
- Premature deaths from cancer among age groups less than 65 years of age
- Deaths from Chronic Lower Respiratory Disease
- Health disparities
- Obesity and tobacco product use
- HIV/AIDS

As referenced in earlier sections of this report, the five (5) behavior related priority areas of the Council (Obesity, Diet and Exercise; Tobacco Use; Alcohol and Drug Use; Risky Sexual Behaviors; and Lack of Health Screenings) seem to underlie many of the critical health problems listed above. The Council will take action to review the current health priority areas as listed above and others that may emerge in the future. They will then set priorities upon which to focus their efforts. This discussion and resulting decisions will be forthcoming during the fall months of 2006. In this regard, specific recommendations will follow regarding those areas selected.

The Chattanooga-Hamilton County Regional Health Council will continue with its responsibility for monitoring and accessing the health status of the residents of Hamilton County, Tennessee. And in doing so, it will continue to engage processes that will yield a prioritization of health needs of our community. While these activities are extremely important, the Council continues to have its eye on a bigger picture which drives the commitment of its members – and that is the Council’s Vision Statement, adopted in 1999, and revised in 2006, as presented in this document. It is the hope that one day, every resident of Hamilton County will be experiencing optimal health as a result of commitments to redesign our community, one person, one neighborhood, one institution and one system at a time. It is realized however that in order for residents to reach this goal and experience this vision, the Council will need to continue to share and promote the vision through partnerships with government leaders, other organizations, agencies, and institutions, and with community leaders and neighborhood associations.
APPENDIX

By-Laws

Membership, RHC

Membership, Committees and Subcommittees

Membership, Step ONE Operations Committee

Membership, Step ONE Working Groups

Membership, Health Care Task Force for the Hispanic/Latino Population

Membership, Low Birthweight Task Force
ARTICLE 1

NAME AND PURPOSE

Section I. Name

The name of this organization shall be the Chattanooga-Hamilton County Regional Health Council (herein this document also referred to as the “Council”).

Section II. Purpose

The purpose of the Chattanooga-Hamilton County Regional Health Council shall be to serve as the lead community based organization designated by the Tennessee Department of Health to be responsible for community health assessment, regional health planning and the provision of input regarding funding decisions for health and health related initiatives.

The role of the Council shall also be to monitor the health status of residents and recommend strategies to assure the health of persons residing in Hamilton County. The Council shall be responsible for:

1. Assessing the health status of the community and prioritizing the health needs.

2. Developing a community health plan that addresses identified health needs and includes goals and objectives, as well as outcome measures, and recommendations for interventions.

3. Identifying key resources and working through partnerships to facilitate the formation of other resources to address the needs of children and families in Hamilton County.

4. Serving as liaison between the community and health and medical related services, keeping all parties informed of pertinent issues, health plans, contributions and accomplishments.

5. Providing input where possible for the development of long-range strategic plans for other public and private agencies and organizations regarding health and health related matters.

6. Reviewing proposals and other funding requests in order to make recommendations to State and Federal agencies, foundations and other funding bodies.
ARTICLE II

MEMBERSHIPS AND TERMS

Section I. Ex-Officio (Non-Voting) Members

The persons occupying the following positions are ex-officio, non-voting, members of the Council.

1. Hamilton County Mayor
2. Administrator, Chattanooga-Hamilton County Health Department (and/or Staff Designee)
3. Health Officer, Chattanooga-Hamilton County Health Department
4. Chairman of the Hamilton County Board of Commissioners’ Committee on Health

Section II – Appointment of Members and Terms of Service

A. The membership of the council shall consist of 25 voting members appointed as follows:

Each of the nine (9) members of the Hamilton County Board of Commissioners may appoint one (1) voting member to the Chattanooga-Hamilton County Regional Health Council for a three-year term.

B. The Administrator of the Chattanooga-Hamilton County Health Department, and others shall recommend to the County Mayor for approval by the Hamilton County Board of Commissioners the appointment of sixteen (16) at-large members.

C. The terms of service for these persons shall be three (3) years.

Section III – Reappointment

Council Members may be re-appointed to serve additional terms in keeping with the By-Law provisions of Section II.

Section IV – Vacancies

Vacancies occurring during the year (and for un-expired terms) will be filled in accordance with the provisions in of Section II.
Section V – Participation and Attendance

Council Members are expected to exhibit leadership qualities and high standards of personal integrity and service as they represent the community in carrying out the work of the Council.

Council Members are expected to take an active role in the conduct of the business of the Council including committee assignments and attendance at committee meetings as well as regularly scheduled Council meetings.

As Council Members representing the Council in their interactions with residents, public/private agencies and organizations, and the media, their official positions on health and health related matters should be in keeping with positions held by the Council.

The Council Chairperson will contact Council members who have unexcused absences for three (3) consecutive Council meetings. The chairperson will inquire as to the intentions of the member concerning future participation. Members who indicate that they intend to continue participation will be encouraged to do so. However, any members who have missed one third (4) of the Council meetings in a calendar year may be recommended to the appointing authority for removal from the Council.

Section VI – Conflict of Interest

Direct Conflict of Interest – In the event of a vote by Council members on business that is personally or professionally directly associated with a Council member, said Council member shall abstain from all voting on the issue in question.

Indirect Conflict of Interest – In the event of a vote by the Council on business that is personally or professionally indirectly associated with a Council member, said Council member shall declare and make known his/her association before voting.
ARTICLE III

OFFICERS, DUTIES AND TERMS

Section I - Officers

The Officers of the Council shall consist of a Chairperson and Vice-Chairperson who shall be elected annually by a majority of a quorum of the Council. Additionally, there shall be a Recording Secretary position permanently filled by the Health Department Administrator, (or Staff Designee).

Section II - Terms and Elections

The Chairperson and Vice-Chairperson shall be elected for one-year terms (January through December) at the December Council meeting. A Nominating Committee shall be appointed by the Chairperson in November. This Committee will recommend a slate of officers at the December Council meeting with elections occurring following the presentation of the slate of officers. Others may be nominated from the floor. Consecutive terms can be served up to a maximum of three.

Section III - Duties

1. Chairperson. The duties of the Chairperson are as follows:
   a. To open meetings at the appointed time by taking the Chair and calling the meeting to order after ascertaining that a quorum is present.
   b. To announce the proper sequence of business in accord with the prescribed agenda.
   c. To recognize members who are entitled to the floor.
   d. To state and put to vote all legitimate questions.
   e. To enforce parliamentary procedures and rules relating to debate, order, and decorum.
   f. To expedite business compatible with the interests of members.
   g. To authenticate by signature all acts, orders, and proceedings of the assembly.
   h. To declare adjournment of meetings.
   i. May appoint up to two (2) voting Council members at large to the Executive Committee.

2. Vice-Chairperson. The Vice-Chairperson assumes the duties of the Chair if the Chair is vacant or is absent.

3. Recording Secretary. The duties of the Recording Secretary are as follows:
   a. To keep a record of the proceedings referred to as minutes.
   b. To keep on file all committee reports.
c. To keep the official membership role.
d. To make minutes and records available to members.
e. To send out notice for each meeting fourteen (14) days in advance, when possible.
f. To prepare the order of business (agenda) as determined by the Chairman.
g. In the absence of the Chairperson or Vice-Chairperson to call the meeting to order and preside until the Chairperson or Vice Chairperson arrives. When such positions are vacant, the Recording Secretary will preside until the immediate election of chairperson pro tem.
h. To provide logistical staff support as needed to the Council and its committees and subcommittees.

ARTICLE IV

MEETINGS AND QUORUMS

Section I – Meetings

The Council shall meet at least quarterly, on a day and at a time that is approved by the body. The location may be the Chattanooga-Hamilton County Health Department or another appropriate location as determined by the Executive Committee. Notification of changes in meetings may be necessary from time to time, and these shall be formally communicated to members fourteen (14) days prior to the scheduled meeting.

Section II – Quorums

A simple majority of the voting members of the Council present at a Council meeting constitutes a quorum.

ARTICLE V

COMMITTEES

Section I – Standing Committees

The Standing Committees are as follows:

1. Executive Committee shall consist of all officers and all Standing Committee Chairs and up to two (2) voting Council members at large. Decisions made by this Committee subsequently must be ratified by the Council.
2. **Community Health Planning Committee** shall consist of Council members who are to take the lead in processes designed to assess the health status of persons residing in Hamilton County and prioritize their health needs. This group will have responsibility for drafting for the Council’s consideration and approval the Community Health Plan for the Hamilton County Region. In so doing, this group may partner with key technical resources and with other groups, organizations and institutions who share an interest in assessing the health of our population and in developing strategies to address identified needs.

3. **By-Laws Committee** shall review and propose changes to the By-Laws as appropriate for consideration by the Council to be submitted to the Hamilton County Board of Commissioners for approval.

4. **Nominating Committee** is responsible for recommending a slate of officers to the Council to be voted upon. Should a Council officer be unable to complete the elected term, the Nominating Committee shall recommend to the Council someone to fill the unexpired term.

**Section II – Other Committees**

Other Council Committees may be established as deemed necessary by the Council Chairman.

Committee membership for Standing Committees, with the exception of the Community Health Planning Committee, will include only Council members.

**Article VI**

**Changes To The By-Laws**

**Section I – Process for Changing By-Laws**

The By-Laws Committee shall review and propose changes to the By-Laws as appropriate for consideration by the Council to be submitted to the Hamilton County Board of Commissioners for approval.
CHATTANOOGA-HAMILTON COUNTY REGIONAL HEALTH COUNCIL MEMBERS

Dr. Ronald Blankenbaker, Chairperson - UT College of Medicine

Dr. James Bardoner - Erlanger Medical Center  
Willena Byrd - Community Advocate  
Phyllis Casavant, Ed. D - S. E. Tenn. Area Agency on Aging  
Marilyn Davis - Southeast Region TN Commission on Children & Youth  
Eva Dillard - United Way  
Jim Folkner - Businessman  
Vicky Gregg (Represented by: Dr. David Moroney) - Blue Cross Blue Shield  
Bill Hicks - Southside/Dodson Avenue Community Health Centers  
Glenda Hood - Community Advocate  
Mai Bell Hurley – Child and Family Advocate and Former City Councilwoman  
Susan Kirk - TN Dept. of Human Services  
Melony Magoon, RN, Moccasin Bend Mental Health Institute  
Earl Medley - Fortwood Center, Inc.  
Ben Miller III, EAP Care, Inc. - Shepherd’s Care  
Irvin Overton, Retired - Erlanger Medical Center  
Dr. Carlos Parra - Southern Adventist University  
Deborah Poteet-Johnson, MD - Ad-Med, P.C.  
Carolyn Quinlan, Eastridge Medical Center  
Councilman Manuel Rico - Chattanooga City Council  
Howard Roddy - Memorial Hospital  
Sheryl Rogers, RN - Hamilton County Dept. of Education  
Patricia Walker – Southside/Dodson Avenue Community Health Centers  
Sandra Weaver - Community Advocate  

Ex-Officio Members  
Dr. Valerie Boaz - Chattanooga-Hamilton County Health Department  
Becky Barnes – Chattanooga-Hamilton County Health Department  
County Mayor Claude Ramsey - Hamilton County Government
HEALTH FUTURES COMMITTEE

Viston Taylor, chairperson - Alexian Brothers

Dr. Ronald Blankenbaker - UT College of Medicine
Howard Roddy - Memorial Hospital
Becky Barnes – Chattanooga-Hamilton County Health Department
Irvin Overton, Retired - Erlanger Medical Center
Dr. Poteet-Johnson - Ad-Med, PC
Dr. James Bardoner - Erlanger Medical Center
Phyllis Casavant, Ed. D - S. E. Tenn. Area Agency On Aging
Melony Magoon, RN – Moccasin Bend Mental Health Institute
Bill Ulmer – Chattanooga-Hamilton County Health Department
Barbara Laymon – Chattanooga-Hamilton County Health Department
Addictions & Dependencies SUBCOMMITTEE

Dr. James Bardoner, Chairperson - Erlanger Medical Center

Pat Fitzpatrick, Co-Chair - Mountain View Counseling
Jay Collum – Chattanooga-Hamilton County Health Dept.
Matt Callihan - Valley Hospital
Sheriff John Cupp - City Of Chattanooga
Tom Farmer, Sheriff’s Office - City of Chattanooga
Bob Fairweather, Cumberland Heights
Linda Fry, Center of Excellence for Children
Lynn Holaway - Volunteer Treatment Center
Jennifer Koch - Volunteer Treatment Center
Tony Smitherman - Volunteer Treatment Center
Tim Sivils - Volunteer Treatment Center
Rick Ward - Volunteer Treatment Center
Bill Hicks - Southside/Dodson Avenue Community Health Centers.
Stephanie Koukas - Bradford Health Services
Becky Encizo - Bradford Health Services
Jacki Marlee - Fortwood Center
Ben Miller III - EAP Care, Inc.
Dr. Mark Thomas - Ad-Med, P.C.
Earl Wilson - Abbott Laboratory
Jennifer Hartfield - Chattanooga Cares
Gary Cundiff - Consultants in Pain Management
Jackie Jolley - Dept. of Childrens Services
Melissa Wilson - Comprehensive Community Care
Zibin Guo, PhD – UTC, Dept. of Sociology, Anthropology & Geography
Max Hood - CADAS
Bob Hopkins, Ph.D. - STARS
Rosemary Readus – Chattanooga-Hamilton County Health Department
RISKY SEXUAL BEHAVIORS SUBCOMMITTEE

Deborah Poteet-Johnson, MD – Chair - Ad-Med, P.C.

Julie Baumgardner - First Things First
Charlene Becker - Hamilton County Schools
Amy Blankenship - Sexual Assault Crisis and Resource Center
Charlotte Boatwright, RN., L.P.C., Ph. D. - The Coalition against Domestic &
Community Violence of Greater Chattanooga, Inc.
Kenardo K. Curry - Neighborhood Services Dept.
Lynn Holaway - Volunteer Treatment Center
Jennifer Koch - Volunteer Treatment Center
Gini Lambert - Planned Parenthood of Middle & East TN
Tiundra Love - UTC, Student Health Services
Sylvia Mayer - Southern Adventist University
Donna Needham - Chattanooga-Hamilton County Health Dept
Sandra Nelson - Chattanooga-Hamilton County Health Department
Christie Parris - Sexual Assault Crisis and Resource Cntr
Dr. Jana Pressley, Psy.D. - CBI Counseling Center
Tom Rucci, AIDS Outreach - Chattanooga-Hamilton County Health Dept
Lesley S. Scearce - Why kNOw Abstinence Educ., Inc.
Jeannette Sebes-McDonald - Chattanooga-Hamilton County Health Dept.
Roserio Slack - First Things First
Tiffany D. Smith – University of Tennessee at Chattanooga
Laurie Tucker - Chattanooga-Hamilton County Health Dept
TOBACCO SUBCOMMITTEE

Viston Taylor - Alexian Brothers
Bill Hicks - Southside/Dodson Avenue Community Health Centers
Mark Denning - American Heart Association
Lynda Smith - Memorial Hospital
Robyn Tobias - Memorial Hospital
Julie Horton - American Cancer Society
Brenda Martin - Chattanooga-Hamilton Co. Health Dept.
Chris McKeever - TN Parents First Center
Walter Parks - 100 Black Men of Chattanooga
Bob Hopkins – STARS
Ben Cairns - TLC, Talk Listen Communicate, LLC
Terri Thompson - American Lung Association
STEP ONE: OPTIMIZE WITH NUTRITION AND EXERCISE
OPERATIONS COMMITTEE MEMBERS

Becky Barnes - Chattanooga-Hamilton Co. Health Dept.
Jeannine Alday - Hamilton County Government
Dr. Valerie Boaz - Chattanooga-Hamilton Co. Health Dept.
Tammy Burke - Chattanooga-Hamilton Co. Health Dept.
Marti Smith - Chattanooga-Hamilton Co. Health Dept.
Bill Ulmer - Chattanooga-Hamilton Co. Health Dept.
Scott Schoolfield - Human Services Admin., Hamilton County Government
Lark Walters - Hamilton County Government
Howard Roddy - Memorial Hospital
Viston Taylor - Alexian Brothers
Ron Priddy - Parks and Recreation, Hamilton County Government
Gina Hatler - Hamilton County Government
Joanne Favors - Hamilton County Government
Dr. David Moroney/Dr. Suzanne Baker - Blue Cross Blue Shield
Rae Bond - Chattanooga Medical Society
Phyllis Casavant, Ed. D - S. E. Tenn. Area Agency on Aging
Bill Hicks - Southside/Dodson Avenue Community Health Centers
Irvin Overton – Retired, Erlanger Medical Center
Dr. Ronald Blankenbaker - UT College of Medicine
STEP ONE: OPTIMIZE WITH NUTRITION AND EXERCISE
EXERCISE AND FITNESS ADVISORY BOARD MEMBERS

Nicholas F. Boer; Ph.D. MPH – UTC, Exercise Science, Health & Leisure Studies
Gene Ezell PhD. MPH – UTC, Exercise Science, Health & Leisure Studies
Allan Lewis - Memorial Hospital
John Myer - University of Tennessee at Chattanooga
Don Bowman - Sports Barn Inc.
Karen McMahon - City of Chattanooga
Angela Easter - Chatt-Hamilton Co. Health Dept.
Gretchen Castleberry - American Heart Association
Michael Geer, MD - Galen Medical Group
Brenda Ross - Chattanooga Lifestyle Center
Glenda B. Sajwaj - Occupational Health, Tennessee Valley Authority
Lonnie Smith MS, ATC/L - Parkridge Sports Medicine
Britt Watson - YMCA –Downtown Branch
Bill Linville, M.Ed. - Live Well

STEP ONE: OPTIMIZE WITH NUTRITION AND EXERCISE
NUTRITION ADVISORY BOARD MEMBERS

Melissa Craig – Health Department
Ray Burden – Agriculture Extension
Bill Hall – Restaurant Association
Misty Mullins – Erlanger
Jenny Buquo – Siskins
Nancy Sherrill – Erlanger
Jamie Welch – Erlanger
Rachel Lusk – Erlanger
Holly Dieke – University of Tennessee at Chattanooga
Peggy Noblett – Alexian Brothers
Nita Shumaker – Private Physician
Anne Olson – Agriculture Extension
Kelly Lytle – Memorial Hospital
Gale White – State of Tennessee
John Standridge – UT Family Practice
Tammy Burke – Health Department
HEALTHCARE TASK FORCE FOR The HISPANIC/LATINO POPULATION

Dr. Valerie Boaz, chairperson – Chattanooga-Hamilton County Health Dept.

Shawn Stallings, MD – Erlanger Medical Center
Ada Baron
Bill Hicks – Southside/Dodson Avenue Health Centers
Dr. Carlos Parra - Southern Adventist University
Howard Roddy - Memorial Hospital
Irvin Overton – Retired, Erlanger Medical Center
Joseph Kipikasa – Regional Obstetrical Consultants
Karla Garcia – T.C. Thompson’s Children’s Hospital
Marvin Hall - T.C. Thompson’s Children’s Hospital
Dr. Michele Pickett
Rae Bond, Chattanooga-Hamilton County Medical Society
Dr. Ronald Blankenbaker, Chairperson - UT College of Medicine
Jerri Underwood – Parkridge East Hospital
Tammy Burke – Chattanooga-Hamilton County Health Department
Kaye Greer – Chattanooga-Hamilton County Health Department
Karen Guinn – Chattanooga-Hamilton County Health Department
Diana Kreider – Chattanooga-Hamilton County Health Dept
Barbara Laymon – Chattanooga-Hamilton County Health Department
Marta Monzon – Chattanooga-Hamilton County Health Department
Marti Smith – Chattanooga-Hamilton County Health Department
Therese Yeiser Smith – Chattanooga-Hamilton County Health Department
Bill Ulmer – Chattanooga-Hamilton County Health Department
MARCH OF DIMES /LOW BIRTH WEIGHT TASK FORCE MEMBERS

Dave Adair, MD, Chair – Regional Obstetrical Consultants

Charles Adams, MD
James Bardoner, MD
Dr. Valerie Boaz – Chattanooga-Hamilton County Health Dept.
Bill Cecil - Blue Cross Blue Shield
Tracy Chappalear – Blue Cross/Blue Shield
Charlene Ellis – March of Dimes
Ann Everson - Erlanger Medical Center
Nellie Flanagan, RN, HUGS Program, Chattanooga-Hamilton County Health Dept.
Karen Gandy - Blue Cross Blue Shield
Kaye Greer – Chattanooga-Hamilton County Health Dept.
Representative JoAnne Favors
Linda Frye – Center of Excellence for Children
Karen Gandy, Blue Cross/Blue Shield
Terri Geiser - March of Dimes
Cherry Guinn, RN EdD - UTC School of Nursing
Donna Guinn – Chattanooga Head Start
Zibin Guo, Ph.D. - UTC, Dept. of Anthropology
Lori Hairrell - READ Chattanooga
LuAnn Hall, RN, NICU, Erlanger Medical Center
Pearl Hann – March of Dimes
Penelope Herman, RN – Parkridge Hospital
Lynn Holaway - Volunteer Treatment Center
Mai Bell Hurley – Former City Councilwoman
Joey James, Chattanooga Head Start
Amy Jenkins, TN Early Intervention System
Elizabth Kennedy, MD Neonatologist
Amy Killingsworth – Blue Cross/Blue Shield
Susan Kirk, TN Department of Human Services
Stephanie Koukas - Bradford Health
Diana Kreider – Chattanooga-Hamilton County Health Department
Jennifer Koch - Volunteer Treatment Center
Sylvia Mayer, RN, Southern Adventist University
Sadie McCain, Hamilton County Department of Education
Shelley Meredith - READ Chattanooga
Susannah Murdock - READ Chattanooga
Aaron Mesh, Regional Obstetrical Consultants
David Moroney, MD – Blue Cross/Blue Shield
Linda Pehlman, TN Early Intervention System
Sheryl Rogers, RN - Hamilton Co. Dept. of Education
Carrie Salafia, MD
Nancy Sisk, Chattanooga Head Start
LePaula Smith – March of Dimes
Sylvia Stamper – Chattanooga-Hamilton County Health Department
Kelly Strickland – Chattanooga-Hamilton County Health Department
Patti Taylor, RN - Chattanooga-Hamilton County Health Department
Vic Thomas, MD - Pediatrix Medical Group
Brenda Touchstone - Hospice of Chattanooga
Patricia Walker, RN – Southside/Dodson Avenue Health Centers
Teresa Walker, RN - Parkridge East Hospital, NICU
Rachel Watanabe - Choices Women’s Center
Sherry Whiteside – Inner Cities Ministries
Belinda Whitten – March of Dimes
Steve Witt - SE TN Development Dist.
Terri Woodruff, RN – Erlanger Medical Center
Janet Zarzour - Hospice of Chattanooga