

Community Diagnosis

**Loudon County Community Health Improvement Advisory Council
Community Diagnosis Report
Prepared June 1999**

By

**The Community Development Division
East Tennessee Regional Health Office**



INTRODUCTION

Community Diagnosis is a community–based community–owned process to identify and address health needs of Tennesseans. As a health assessment and planning process, Community Diagnosis involves:

- ⇒ Analyzing the health status of the community.
- ⇒ Evaluating the health resources, services, and systems of care within the community.
- ⇒ Assessing attitudes toward community health services and issues.
- ⇒ Identifying priorities, establishing goals, and determining course of action to improve the health status of the community.
- ⇒ Establishing a baseline for measuring improvement over time.

The Loudon County Community Health Improvement Advisory Council in collaboration with Covenant Health and the East Tennessee Department of Health conducted community surveys. They reviewed various data sets and evaluated resources in the community to identify areas of concern that affect the health of Loudon County citizens. A list of council members participating in the assessment can be found in Appendix A.

As a result of the assessment process, the health council will develop a health plan for Loudon County. The health plan will contain goals to improve the health of Loudon County residents. Intervention strategies will be developed to deal with problems identified and a listing of resources needed to implement those strategies.

Benefits of Community Diagnosis for the community included:

- Providing communities the opportunity to participate in directing change in the health services and delivery system.
- Armed with appropriate data and analysis, communities can focus on health status assessment and the development of locally designed, implemented, and monitored health strategies.
- Provide justification for budget improvement request.
- Provide to state-level programs and their regional office personnel, information and coordination of prevention and intervention strategies at the local level.
- Serve health planning and advocacy needs at the community level. Here the community leaders and local health departments provide leadership to ensure that documented community health problems are addressed.

This document provides a description of the Community Diagnosis (Assessment) activities to-date. Data will be described with emphasis on important issues identified by the council. Summary findings from work done by other organizations are included..

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I. COUNTY DESCRIPTION

A. County Profile

Loudon County was established in 1870 from parts of Monroe, Blount, and McMinn Counties. It was named for Fort Loudoun erected in 1756 by the British and named in honor of the Earl of Loudoun, Commander –in –Chief of British and American forces in the French and Indian War.

Loudon County “the Lakeway to the Smokies” is surrounded by mountains, TVA lakes and waterways. Loudon County has something for everyone from antiquing, museums, Civil War sites to water recreation. It is home of Tellico Village, one of the country’s top recreational communities. Loudon County also has industries as well as smaller businesses that ensure a healthy local economy. “With rolling hills, pastoral farms, a stately winding river and beautiful lakes Loudon County is a wonderful place to live, work and play.”¹

Loudon County Community Profile

Location

Region: East Tennessee

Square Miles: 240

Distance from Knoxville: 31 miles

Population (1997 est.)

Total: 38,234

Cities/Towns/Communities

Greenback

Lenoir City

Loudon

Philadelphia

Eaton Elementary School K-5

Highland Park Elementary School K-5

Steekee Elementary School K-5

Loudon Elementary School K-5

Loudon County High School 9-12

Lenoir City Elementary School K-5

Lenoir City High School 9-12

Education

Philadelphia School K-8

North Middle School 6-8

Fort Loudon Middle School 6-8

Greenback School K-12

Loudon Co. Technical Center 9-12

Lenoir City Middle School 6-8

Natural Resources

Minerals: Barite and Granite

Timber: Pine, Oak and Hickory

Agricultural: Tobacco, Small grain & Vegetable

Climate

Annual Average Temperature: 57°

Annual Average Precipitation: 56”

Elevation: 839’ above sea level

Loudon County Selected Economic Indicators

Annual Labor Force Estimates (1998)

Annual Total Labor Force: 19,960

Number Employed 19,320

Number Unemployed: 640

⁺Unemployment Rate %: 3.3

Tax Structure

County Property Tax Rate per \$100 value: \$2.11

*Per Capita Income (1996 est.) : \$19,341

¹ Loudon County Local Government <http://208.24.36.164/govt/govt.html>.

Table 1
Health Care Resources

	County	Region	State
Persons per Primary Care Physician	1833	1,776	1,053
Persons per Nurse Practitioner	10,997	7,429	7,134
Persons per Physician Assistant	32,991	15,053	18,664
Persons per Registered Nurse	252	178	106
Persons 10-44 per OB/GYN	3,957	4,509	2,100
Persons per Dentist	2,357	2,414	1,186
Persons per staffed hospital bed	1,100	491	245
Percent occupancy in community hospitals	56.4	57.3	57.7
Persons per staffed nursing home bed	110	119	135
Percent occupancy in community nursing homes	101.9	96.4	93.6
Physician shortage area for OB	YES		
Physician shortage area for Primary Care	YES		

Note: Manpower data are 1996; shortage areas, 1995; facilities, 1994.

Hospitals	# Beds	Nursing Homes	# Beds
Ft Sanders Loudon Medical Center	50	Baptist Health Care Center	104
		Loudon Health Care Center	192

B. County Process—Overview

The Assessment Process

The Tennessee Department of Health has made a strong commitment to strengthening the performance of the public health system in performing those population-based functions that support the overall health of Tennesseans: assessment, assurance, and policy development.

Community Diagnosis is a public-private partnership to define the county’s priority health problems and to develop strategies for solving these problems. The Loudon County Community Health Improvement Advisory Council in collaboration Covenant Health and the Tennessee Department of Health conducted an extensive assessment of the status of health in Loudon County. The health council contains community representatives from various geographic locations, social-economic levels, and ethnic groups. Extensive amounts of both primary and secondary data were collected and reviewed as the first step in the process. Major issues of concern identified by the community were perception and knowledge of health problems, which were important factors in analyzing the data. Council members identified major issues of concern and each issue was ranked according to size, seriousness, and effectiveness of interventions (Table 11).

Resources

The Loudon County Community Health Improvement Advisory Council is focusing on identifying existing resources. Cooperation of various agencies could allow redirection of such resources to target identified priorities. Loudon County Community Health Improvement Advisory Council is seeking these additional resources for the development and implementation of intervention programs for priorities identified through the Community Diagnosis process.

II. COMMUNITY NEEDS ASSESSMENT

A. Primary Data

1. Focus Group Survey

Six focus groups were conducted in September 1994 by the Lancaster Consulting Group, LLC,. The Focus Group survey provided a profile of perceived health care needs and problems facing the community and stakeholders who respond to the survey. Stakeholders are those individuals in a community who have a special interest in a particular issue or action being taken. The stakeholders represent a cross section of the community, i.e., young families, single parents, the elderly, business leaders, consumers, rural residents and urban residents.

The Focus Group Survey is not a scientific random sample of the community, rather its purpose is to obtain subjective data from a cross section of the community about health care services, problems, and needs in the county. It is one of two sources of primary data used in community diagnosis.

Four general population groups were recruited at random from the greater Loudon County area and two groups with community leaders of Loudon County. The objectives were 1.) Ascertain feelings as to what greatest health related needs are of the community. 2.) Determine what the community can do to address the needs.

Information gathered from the focus groups was a definition of health, how health is created, key health issues and areas that should receive the most attention. The results of the three top key issues and the three top areas that should receive the most attention from both groups are provided in Tables 2 and 3.

Table 2

KEY HEALTH ISSUES IN LOUDON COUNTY	
Community Leader Responses	General Population Responses
1. Access to and cost of medical care, health insurance	1. Access to cost of medical care, health insurance
2. Parenting skills	2. Drug abuse
3. Drug/alcohol abuse	3. Cigarette smoking

Table 3

AREAS THAT SHOULD RECEIVE THE MOST ATTENTION IN LOUDON COUNTY	
Community Leader Responses	General Population Responses
1. Access to and cost of medical care, health insurance	1. Access to and cost of medical care, health insurance.
2. Parenting skills	2. Drug abuse
3. Literacy	3. Teen pregnancy

2. Knowledge and Attitude Survey

The Lancaster Consulting Group conducted telephone surveys with 200 residents of Loudon County. The purpose was to ascertain the level of knowledge of and overall attitude toward specific health care and health related issues. The overall statistical reliability is a confidence level of 95, \pm 5%. The following are statements that were extracted from information provided by the survey.

- 📌 Heart Disease Loudon County residents have a strong knowledge base of the risk factors for heart disease and the types of behaviors that can minimize risk. Ninety-two – Ninety-four percent of the respondents knew that cigarette smoking, lowering high blood pressure, regular exercise, weight reduction if overweight, choosing low fat foods, lowering a high-cholesterol level and eating fewer high-cholesterol foods are actions that people could take which would have a moderate to large effect in preventing heart disease. Fifty-one percent of the respondents get “a lot” of their diet and health information from news stories and news programs².

- 📌 Hypertension. When given several blood pressure values, 78% of the respondents were able to choose the correct value representing a healthy blood pressure reading³. In addition, only 43% knew that stroke could be a consequence of not treating high blood pressure. Interestingly, only 3% identified taking medication as a health behavior that could be effective in reducing blood pressure.

- 📌 Cancer. Of those surveyed, 45% believe there is a connection between personal behaviors and risk of cancer and that personal behavior causes more cancer than family history and environmental pollution. The vast majority of respondents were very concerned (40%) or somewhat concerned (51%) about getting cancer in the future.⁴

3. What Creates Health Survey

The Daniel Yankelovich Group in November 1994 conducted a 240-phone survey of Loudon County residents to determine the critical determinants and beliefs of how to create health. Topics covered in the survey included 1.) Defining the boundaries of one’s own community. 2.) Evaluation of one’s own community’s quality of life. “Absolute rating”, “Compared to the country”, “Perceived health in the year 2000”. 3.) Perceived obstacles to a healthy community. 4.) Where residents place their confidence in leaders. 5.) Where residents stand on the issue of individual rights versus community interests. 6.) Residents’ perceptions on the health care system in the U.S. 7.) Residents’ perceptions of health care reform proposals. “its effects on their communities”, “Importance of inclusion of various elements in a benefits package”. The following are responses extracted from information provided by the survey.

Respondents were asked to rate a list of items on what is absolutely critical to a healthy community. The items were rated on a 10-point scale – a “10” means it is absolutely critical and “1” means it’s not critical. The following lists the top 5 responses (Table 4).

²Lancaster Consulting Group, *Executive Summary, Knowledge and Attitudes Survey, September 1994, p. 3.*

³ Lancaster Consulting Group, *Executive Summary, Knowledge and Attitudes Survey, September 1994, p. 3-4.*

⁴ Lancaster Consulting Group, *Executive Summary, Knowledge and Attitudes Survey, September 1994, p. 4.*

Table 4
Items Critical to Healthy Community

“10” or “9” on a 10—point scale	% of Responses
*Good schools	74%
*A good place to bring up children	74%
Strong family life	70%
A low crime rate	69%
A low level of child abuse	66%

*Tied for #1 in responses

Respondents were also asked to rate a list of items that may stand in the way of improving the health of their community. The items were rated on a 6—point scale—“6” means it’s one of the greatest obstacles to improvement, “1” means it’s not really an obstacle at all. The following lists the top 5 responses in order of greatest to no obstacle.

Table 5
Obstacles to Health of Community

“6”, “5”, or “4” on a 6—point scale	% of Responses
Elected local officials are less effective than they should be	76
Lack of sense of shared community needs and interest on the part of citizens	67
Not enough help or interest from local government officials	65
Not enough leadership from business community	62
*Not enough money to deal with community problems *Lack of accountability-no one is held responsible for what happens in the community *Lack of a shared vision of a desired future for the community *Lack of cooperation among community leaders from different sectors	*60

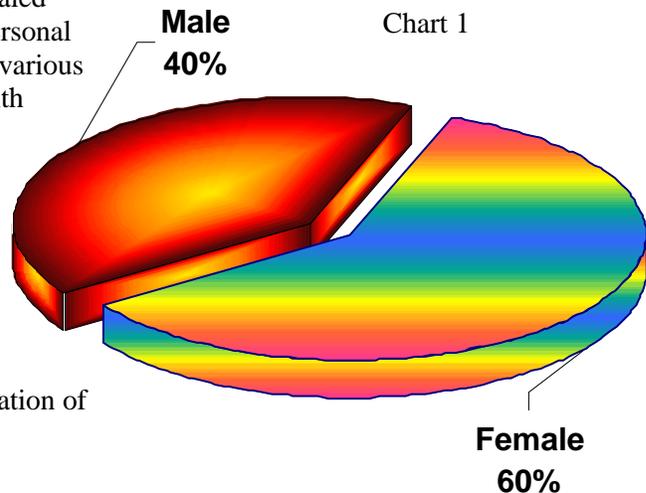
*Tied for # 5 response

4. Behavioral Risk Factor Survey (BRFS)

The BRFS is a randomly selected representative sample of the residents of the county. The survey that was used is a telephone interview survey modeled after the BRFS survey conducted by the Centers for Disease Control. The BRFS collects information from adults on health behaviors and preventive practices related to several leading causes of death such as chronic diseases, injury, and HIV infection.

Adults were randomly selected using random digit-dialed telephone surveys and were questioned about their personal health practices. In addition, they were asked to rate various community health issues. A Likert scale was used with respondents identifying issues as a definite problem, somewhat a problem, not a problem, or not sure.

A sample size of 198 was collected from Loudon County. This allowed estimates of risk factors to be made for the county. The overall statistical reliability is a confidence level of 90, ± 6%. Of the respondents, 60% were female and 40% male. This compares to 52% female and 48% male for the population of Loudon County based on the 1990 census (Chart 1).



After review of the data from the BRFSS, the council divided the information into three areas. The first area is personal health practices. Five key factors were identified as concerns for the health of the overall community. These issues were then compared to Healthy People: 2000. Table 6 lists the practices of concern with the year 2000 goal for the nation.

Table 6

Reported Health Practices	BRFS % of Respondents	Year 2000 Goal
Exercise (no exercise in last month)	21%	15%
Smoking (currently smoke)	30%	15%
Have high blood pressure	22%	(No Goal)
Advised to lose weight	18%	(No Goal)
Have Diabetes	7.1%	(No Goal)

The second area is Health Risk and the third area is Access to Care. These two areas were divided into two categories; 1.) Community issues and 2.) Access to health care. Charts 2a and 2b identify the top responses in these two categories

**Chart 2a
Community Issues
% Saying "Definite Problem"**

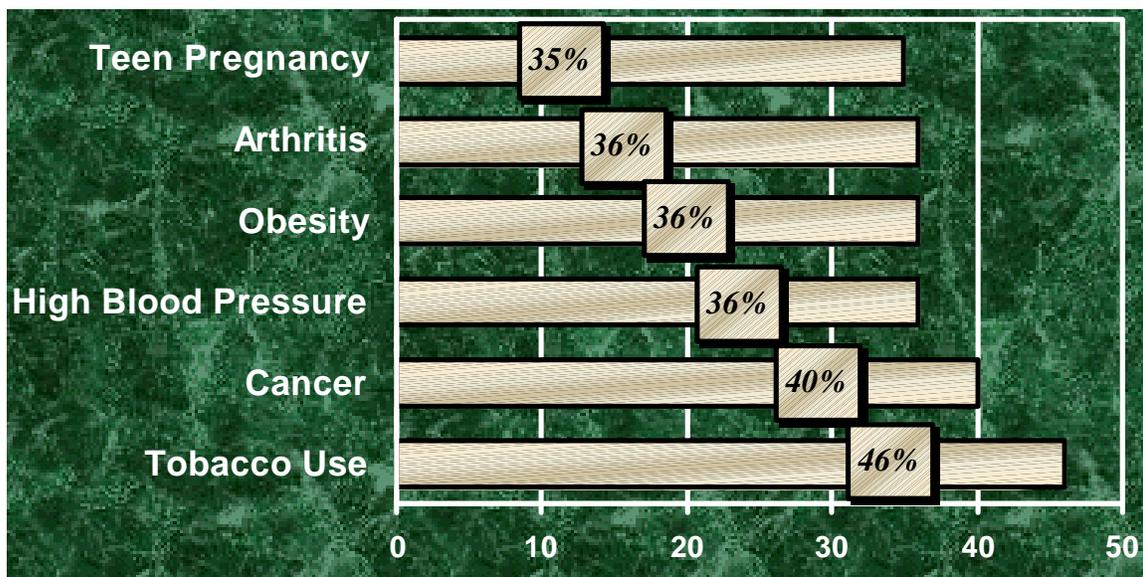
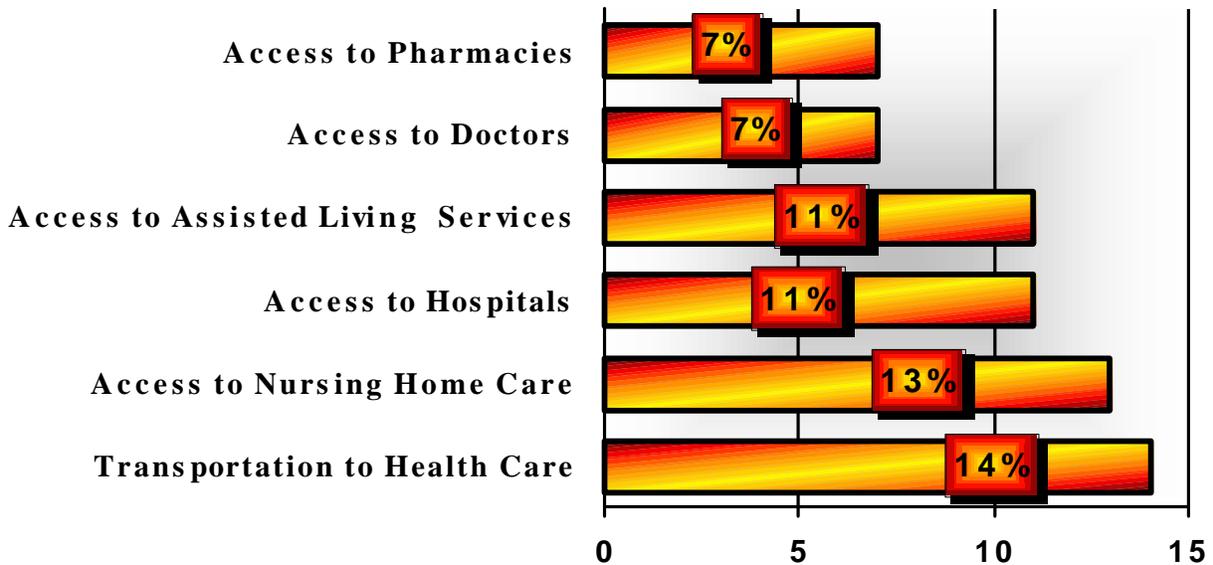


Chart 2b
Access to Health Care
% Saying “Definite Problem”



B. Secondary Data

Information on the health status, health resources, economy, and demographics of Loudon County is essential for understanding the existing health problems in the community. The health council received an extensive set of data for the county, which showed the current health status as well as the available health resources. The secondary data (information already collected from other sources for other purposes) was assembled by the State Office of Assessment and Planning. Data sets that are routinely collected by the Department of Health as well as other state departments and agencies were assembled and distributed to health council members. Socio-economic information was obtained from the Department of Economic and Community Development as well as information from the “Kid’s Count” Report by Tennessee Commission on Children and Youth.

Various mortality and morbidity indicators covering the last 12 years were presented for the county, region, and state. Trend data were presented graphically using three-year moving averages. The three-year moving averages smooth the trend lines and eliminate wide fluctuations in year-to-year rates that distort true trends.

Another section of secondary data included the status of Loudon County on mortality and morbidity indicators and compared the county with the state, nation, and Year 2000 objectives for the nation.

Issues identified by the council from all secondary data were selected primarily on the comparison of the county with the Year 2000 objectives. The issues identified were:

- 1. Coronary Health Disease
- 2. Infant Death
- 3. Lung Cancer
- 4. Motor vehicle accidents
- 5. Suicide
- 6. Stroke
- 7. Teen Pregnancy

Demographics & Sociocultural Profiles

Table 7
Total 1996 (est.) Population:
Total Number of Households: 12,155

	County	Region	State
Percent of households that are family households	76.4	76.3	72.7
Percent of households that are families headed by a female with no husband present	10.7	10.6	12.6
Percent of households that are families headed by a female with no husband present and with children under 18 years	5.1	5.4	6.9
Percent of households with the householder 65 and up	24.3	23.6	21.8

Table 8
Education

	County	Region	State
Number of persons age 25 and older	21,047	365,673	3,139,066
Percent of persons 25 and up that are high school graduates or higher	63.8	60.8	67.1
Percent of persons 25 and up with a bachelor's degree or higher	9.6	11.1	16.0

**Table 9
Employment**

	County	Region	State
Number of persons 16 and older	24,789	437,649	3,799,725
Percent in work force	63.4	60.1	64.0
Number of persons 16 and older in civilian work force	15,694	262,392	2,405,077
Percent unemployed	6	7.8	6.4
Number of females 16 years and older with own children under 6	1,723	30,082	287,675
Percent in labor force	65	57.4	62.9

**Table 10
Poverty Status**

	County	Region	State
Per capita income in 1989	\$12,006	\$10,756	\$12,255
Percent of persons below the 1989 poverty level	13.6	17.10	15.7
Families with children under 18 years, percent with income in 1989 below poverty level	17.6	22.3	20.7
Percent of persons age 65 years and older with income in 1989 below the poverty	19.6	21.1	20.9

- Sources: U.S. Department of commerce, Bureau of the Census, 1990 Census of Population General Population Characteristics, Tennessee, and 1990 Census of Population and Housing, Summary Social, Economic, and Housing Characteristics Tennessee.

III. HEALTH ISSUES AND PRIORITIES: IDENTIFICATION AND PRIORITIZATION

At the conclusion of the review of all data from the Community Assessment process and other sources, the Loudon County Community Health Improvement Advisory Council identified key health issues. A second step was taken to collect more specific data as it related to each of these issues. The health council then ranked each issue according to size, seriousness, and effectiveness of intervention. A final overall ranking was then achieved. Table 7 indicates the health issues in rank order.

Table 11

LOUDON COUNTY ISSUES / PRIORITIES

Rank Order

- **1. TEEN PREGNANCY PREVENTION**
- **2. PARENTING**
- **3. ACCESS TO HEALTH CARE SERVICES**
- **4. COMMUNITY AWARENESS REGARDING HEALTH AND RELATED RESOURCES**

IV. FUTURE PLANNING

The Health Planning sub-committee is charged with developing a Loudon County Health Plan. This plan will contain prioritized goals, which will be developed by the health council along with proposed intervention strategies to deal with the problems identified and a listing of resources needed to implement those strategies.

V. REFERENCES

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VI. NOTES

1. Loudon County Local Government <http://208.24.36.164/govt/govt.html>.
2. Lancaster Consulting Group, *Executive Summary, Knowledge and Attitudes Survey, September 1994*, p. 3.
3. Lancaster Consulting Group, *Executive Summary, Knowledge and Attitudes Survey, September 1994*, p. 3-4.
4. Lancaster Consulting Group, *Executive Summary, Knowledge and Attitudes Survey, September 1994*, p. 4.

APPENDIX A

APPENDIX A

A. Loudon County Community Health Improvement Advisory Council

<i>Jim Hamilton</i>	<i>Chairperson, Loudon County Community Health Improvement Advisory Council</i>
<i>Nancy Beaty</i>	<i>Vice-President, First Central Bank</i>
<i>Carol Beilharz</i>	<i>Community Representative</i>
<i>Toby Brewster</i>	<i>Community Representative</i>
<i>Betty Carroll</i>	<i>Community Representative</i>
<i>Martha O'Regan Chill</i>	<i>Fort Sanders Loudon Medical Center</i>
<i>Donna Cubberley</i>	<i>Community Representative</i>
<i>Bridget Everett</i>	<i>Community Representative</i>
<i>Nancy Foshee</i>	<i>Director, Loudon County Health Department</i>
<i>Pat Grayson</i>	<i>Home Care of East Tennessee</i>
<i>Dr. Guider</i>	<i>Community Representative</i>
<i>Wayne Henry</i>	<i>Community Representative</i>
<i>Kari Keeton</i>	<i>Break The Cycle, Loudon</i>
<i>JoAnn Kemp</i>	<i>Break The Cycle, Loudon</i>
<i>George Miller</i>	<i>County Executive, Loudon</i>
<i>Alison Millsaps-Garrison</i>	<i>Assistant Extension Agent</i>
<i>Robyn Perry</i>	<i>Family Resource Center</i>
<i>Al Porell</i>	<i>Community Representative</i>
<i>Evelyn Rainwater</i>	<i>Community Representative</i>
<i>Patricia Smith</i>	<i>Superintendent, Lenoir City Schools</i>
<i>Daryl Sponsellar</i>	<i>Community Representative</i>
<i>Tammy White Miller</i>	<i>Regional Director, Governor's Office</i>
<i>Susan Williamson</i>	<i>Community Representative</i>

B. Health Information Tennessee (HIT)

The Tennessee Department of Health and The University of Tennessee Community Health Research Group developed Health Information Tennessee (HIT) a web site that was developed in conjunction with the Health Status Report of 1997 to make health related statistical information pertinent to Tennessee available on the Internet. This web site not only provides an assortment of previously calculated health and population statistics, but also allows users an opportunity to query various Tennessee health databases to create personalized charts and tables upon demand. The health data is continually being expanded and updated. You may visit this web site at the following address: www.server.to/hit.

For more information about the Community Diagnosis assessment process, please contact council members or the East Tennessee Community Development Staff at (423) 546-9221.

