Unicoi County Health Council
Community Diagnosis
1998

Community Development - Assessment & Planning
Northeast Tennessee Regional Health Office

Tennessee Department of Health
Community Diagnosis
Community Diagnosis is a community-based, community-owned process to assess the health status of Tennesseans. The Unicoi County Health Council was formed to conduct the community diagnosis process and future health planning. The Community Development Program of the Northeast Tennessee Department of Health, facilitates this community diagnosis, assessment process, and resulting health planning among all county health councils in the Northeast Tennessee region. The Unicoi County Health Council conducted a community survey, reviewed various data sets and evaluated resources in the community to identify areas of concern that affect the health of Unicoi County citizens.

Health issues for Unicoi County were identified from the data sources and prioritized for size, seriousness, and effectiveness of intervention. As a result of the assessment process, the health council is developing Action Strategies for Unicoi County to address the priority problems identified. The Action Strategies Report, to be published next year, will contain goals to improve the health of Unicoi County residents.

The Council and Its Mission:

The Unicoi County Health Council is a long-standing council made up of members who broadly represent its citizens (please see Appendix A for a complete list of council members and the diverse areas they represent). All share a strong desire to promote the highest level of health and well being for all residents of Unicoi County.

The mission of the council in conducting Community Diagnosis is to develop a community-based, community-owned, and community-directed process to...
I. County Description

Established in 1875, Unicoi County is located in Northeast Tennessee. Unicoi County is bordered by the Tennessee Counties of Washington, Carter, and Greene, and by the North Carolina Counties of Madison, Yancy, and Mitchell. Both the Nolichuckey River and Unaka Mountain enhance the county’s scenic beauty.

Unicoi County had a 1996 estimated population of 17,135 citizens. The county seat is Erwin with 5,145 inhabitants (1996 estimate). The County has a land area of 186.1 square miles with approximately 92.1 people per square mile. Between 1990 and 1996 the county recorded a 3.5% growth in population. Unicoi County’s population is predominately white (around 99.2%). Despite the low minority population, Unicoi County has a growing Hispanic population, resulting from the desire of Mexican migrant workers to remain in the county. The majority of Unicoi County’s citizens are between 25 and 44 years of age; however, citizens 40 years and older comprise the fastest-growing segment of Unicoi County’s population.

Unicoi County had a per capita income of $15,421 in 1993 and $15,725 in 1994 for a 2% change. The median household income for 1993 was an estimated $23,601. In 1993, an estimated 2,901 people (17.4% of the population) were living in poverty in Unicoi County.

Unicoi County has one hospital located in Erwin. There are eight (8) primary care physicians and three (3) dentists in Unicoi County. Only one county dentist accepts TennCare, and he is associated with the Unicoi County Health Department and primarily serves citizens 21 years of age and under.

II. Needs Assessment Data

A. Community Stakeholder Survey

The Stakeholder Survey provides a profile of perceived health care needs and problems facing the community stakeholders who respond to the survey. We see council members and other residents similar in that all have a stake in the overall improvement of Unicoi County’s health status and health care. This survey includes questions about the adequacy of availability, accessibility, and level of satisfaction regarding health care services in the community. The Community Stakeholder Survey is not a scientific random sample of the community; rather, its purpose is to obtain subjective perceptions of health care from a cross-section of the community. It is one of two sources of primary data used in the community diagnosis process.

The Stakeholder Survey was distributed to Unicoi County Health Council members in addition to a wide variety of community residents. The stakeholders included both the users and providers of health care services.

Of the 100 respondents to the survey, 69% were female. Respondents were predominately white, married, and 67% of them had lived in the county more than 20 years.

Of several Health Care Services in the community respondents perceived the availability of the vast majority to be Adequate or Better. Services considered most adequate of availability by the highest percentages of respondents included:

![Health Care Services Chart]

Most respondents were Satisfied or Better with Physician Care/Services; the only exceptions
included the following *Health Care Services* that were rated *Available but Not Adequate* by the highest percentages of respondents:

Most respondents were *Satisfied or Better* with the primary physician care/services in Unicoi County on such factors as accessibility, reputation, convenience, facility & equipment and cost. The services that respondents rated as least satisfactory were pediatric services (18%) and obstetrical services (14%). The majority of respondents were very satisfied to satisfied with their local health department. Health Department Services that respondents were not familiar with included maternity care services, health promotion services, maternity care services, and services for children with special needs.

Based on survey results, the council recommended making the community more aware of, and improving delivery of, the following services:

- Availability of Health Services
- Children’s Services
- Elderly Care
- Prenatal Care
- Specialty Physician Care

B. Behavioral Risk Factor Survey

The Behavioral Risk Factor Survey (BRFS) is a scientifically conducted, random sample telephone survey, weighted to the county’s population characteristics. The survey was conducted by the University of Tennessee, Knoxville, Community Health Research Group and is modeled after the BRFS conducted by the Centers for Disease Control. This 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.

A sample size of 200 respondents was collected from Unicoi County residents, creating a representative sample of county residents for estimating county risk factors. Of the respondents, 98% were white, 67% were married, and 63% had no children. Fifty percent (52%) were wage earners. Thirty-two percent (32%) of respondents earned $20,000 or less per year, and fifteen percent (15%) did not have health insurance coverage.

The council reviewed survey data on several lifestyle and health-related indicators. The table below lists selected health indicators with the corresponding percentages for the Unicoi County respondents and compares them with the Goals set by Healthy People 2000:

<table>
<thead>
<tr>
<th>Reported Health Indicator</th>
<th>% of Respondents; Unicoi County</th>
<th>HP 2000 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking; Current, Everyday</td>
<td>24%*</td>
<td>15%</td>
</tr>
<tr>
<td>Overweight*</td>
<td>14%**</td>
<td>20%***</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Pap Smears</td>
<td>92%</td>
<td>85%</td>
</tr>
<tr>
<td>Mammograms</td>
<td>60%</td>
<td>60%</td>
</tr>
</tbody>
</table>

*Highest percentage (69%) under 30 years of age  
**Have been advised to lose weight by their M.D.
***HP 2000’s goal for obesity

The BRFS also collects opinion data on *Access to Health Care/Environmental Issues* and *Community Issues*. The top issues
identified by respondents as *Definite Problems* in each category are presented in two charts below:

**Ch. 1: Access/Environmental Issues: % Saying ‘Definite Problem’**

![Graph showing percentage of respondents identifying different access/environmental issues as definite problems.]

**Ch. 2: Respondent Community Health Concerns**

![Graph showing percentage of respondents reporting different health concerns.]

Based on the results of the survey, the council identified and recommended development of strategies to address the following conditions/risk behaviors in order to improve the overall health of Unicoi County’s residents:

- Cancer
- Heart Disease
- High Blood Pressure
- Overweight
- Tobacco Use

The Council felt that the above-identified concerns involved changeable behavioral components, that if addressed, could have impact over time, thereby reducing cost of health care.

**C. Health Resource Inventory**

The council conducted an inventory of health and health-related services and resources for the primary purpose of identifying any gaps or inadequacies/areas of improvement in services. Several services and resources were found to be available and very adequate for the needs of the community. The council found the following services to be *adequate*, but had various *recommendations* for improving the adequacy, accessibility, or quality of the services:

- Civic Organizations
- Clinics
- Dentists
- Group Homes
- HMOs
- Home Health Services
- Hospitals
- Human Services
- Pharmacies
- Physicians
- Rehabilitation Services
- Pregnancy Services
- EMS Services

Particular areas of health and health-related service in need of improvement were:

- **Alcohol & Drug Services**: Citizens must go out of Unicoi County for extended counseling sessions.
- **Indigent Dental Care**: Dental care for indigents, especially adults, is unavailable in Unicoi County. Dental care is separated between the “haves” and the “have nots.”
- **Mental Health Services**: Expansion of services is badly needed.
- **Rehabilitation Services**: Specialized rehabilitation services are needed.
Services for Abused Persons: Abused persons, both children and adults, need aid, shelter, and long-term counseling. The council felt that senior citizens and children were the two population groups who needed expanded services in Unicoi County.

D. Vital Statistics/Health Status Data

This secondary data (information already collected from other sources for other purposes) provides the council with information about the health status of their community. It was assembled by the State Office of Assessment & Planning and compiled by the Community Development Program, Northeast Region, for the council’s analysis.

Vital statistics cover pregnancy & birth, mortality, and morbidity information for the county, region, and state; each set of information is separated into the categories of All Races, Non-white and White. These statistics are made available in three-year moving averages, which smooth trend lines and eliminate wide fluctuations (‘spikes’ and ‘valleys’) in year-to-year rates that distort true trends. Ten (10) three-year averages are made available for each health indicator, occurrence, or event for use in examining significant trends in those health indicators. Where applicable, vital statistics comparing the county, region, and state were also compared by the council with the nation’s “Healthy People 2000” objectives.

Due to the low minority population in Unicoi County, the information was not broken down by race for the purposes of the analysis. Data were compared to the corresponding data for the Northeast Tennessee Region, as well as for the State of Tennessee.

The Vital Statistics Subcommittee received information for the following population and health status indicators:

- POPULATION TRENDS 1990 TO 1995
- AVERAGE # FETAL DEATHS PER 1,000 LIVE BIRTHS AGES 10-44 (1994-1996)
- AVERAGE # OF LOW-WEIGHT BIRTHS WITH % OF TOTAL BIRTHS (1994-1996)
- AVERAGE ANNUAL # OF BIRTHS TO ADOLESCENT (10-17) MOMS WITH % OF TOTAL BIRTHS (1994-1996)
- BIRTHS TO UNWED MOTHERS (1990-1995)
- ADOLESCENT PREGNANCY RATE (1990-1995)
- DEATH RATE PER 100,000 PERSONS (1991-1996)
- SEXUALLY TRANSMITTED INCIDENCE RATE PER 100,000 TEENS AGE 15-17 (1992-1996)
- LEADING CAUSES OF DEATH, 1995

After the council’s analysis of the information listed above, the following areas of particular notice or concern were identified by the council:

- Increased Pregnancy Rate in Females 10-17 Years of Age, 1990 to 1995:

  | Ch. 3: Teen Pregnancy Rate Per 1,000 Females 10-17 |
  | 14 | 18 | 21 | 21 |

- Sexually Transmitted Disease Rate per 100,000 Teens 15-17, 1992-1996 (1992 Rate: 84; 1996 Rate: 1082)

- Increase in Age-Adjusted Deaths from Pneumonia & Influenza 1990-1995

  | Ch. 4: Pneumonia & Influenza Age-Adjusted Death Rates per 100,000 |
  | 15 | 19 | 17 | 25 | 25 | 24 |
Age Adjusted Breast Cancer Death Rates, 1993-1995:

<table>
<thead>
<tr>
<th>Area</th>
<th>Average # Deaths per Year</th>
<th>Age-Adjusted Death Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>904</td>
<td>22.5</td>
</tr>
<tr>
<td>NE Region</td>
<td>51</td>
<td>20.6</td>
</tr>
<tr>
<td>Unicoi County</td>
<td>5</td>
<td>34.5</td>
</tr>
</tbody>
</table>

Note: Unicoi County’s age-adjusted rate for 1993-1995 ranked #6 in the State of Tennessee.

Increasing Number of Citizens Age 40 and Over:

<table>
<thead>
<tr>
<th>Age</th>
<th>1990</th>
<th>1995</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>4,063</td>
<td>3,796</td>
<td>-7</td>
</tr>
<tr>
<td>20-39</td>
<td>4,728</td>
<td>4,464</td>
<td>-6</td>
</tr>
<tr>
<td>40-49</td>
<td>2,199</td>
<td>2,332</td>
<td>6</td>
</tr>
<tr>
<td>50 Years &amp; Over</td>
<td>5,559</td>
<td>5,904</td>
<td>6</td>
</tr>
<tr>
<td>Total Population</td>
<td>16,549</td>
<td>16,496</td>
<td>-.32</td>
</tr>
</tbody>
</table>

E. Other Secondary Data Sources

In addition to sources of data already cited, the Unicoi County Health Council used information from other various sources, weighing the information and statistics analyzed against county demographics, manpower information, managed care Increase of Percentage of Births Lacking Adequate Prenatal Care from 1992-1996

Currently, the council continues to assess more and more current information from these additional sources in planning and reassessment of changes in the health of the community.

Some of the additional sources of information which contributed, and continues to contribute, to the council’s diagnosis of health status and health care in Unicoi County include: the First Tennessee Development District “FACTS” Publication; the Tennessee Commission on Children and Youth “Kids Count” report; the U.S. Department of Commerce/Bureau of the Census; the Tennessee Department of Health (TDH)/Office of Health Statistics & Information “Tennessee’s Health: Picture of the Present” report; the TDH & University of Tennessee Community Health Research Group “HIT” Internet Website.

Please visit the Health Information of Tennessee (‘HIT’) website where county-specific health data is continually being expanded and updated. The address is:

WWW.SERVER.TO/HIT

At this address you may submit custom queries on health data by going to Statistical Profiling of Tennessee (‘SPOT’).

III. Health Issues & Priorities

After a review of available data, the council compiled and defined key health issues, which had been identified throughout the Community Diagnosis process. The list below outlines the concerns from each of the four analysis areas. Concerns are not listed in order of importance or severity:

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>BRFS (See Note)</th>
<th>Health Statistics</th>
<th>Health Resource Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialized MD Care</td>
<td>Overweight</td>
<td>Deaths from Pneumonia &amp; Influenza</td>
<td>Alcohol &amp; Drug Services</td>
</tr>
<tr>
<td>Maternal/ Prenatal Services</td>
<td>High Blood Pressure</td>
<td>STDs in Teens 15-17</td>
<td>Indigent Dental Care</td>
</tr>
<tr>
<td>Availability of Health Services</td>
<td>Tobacco Use</td>
<td>Aging Population</td>
<td>Services for Abused Persons</td>
</tr>
<tr>
<td>Cost of Health Care</td>
<td>Heart Disease</td>
<td>Deaths from Breast Cancer</td>
<td>Rehabilitation Services</td>
</tr>
<tr>
<td>Children’s Services</td>
<td>Health Care Transportation</td>
<td>Teen Pregnancy</td>
<td>Mental Health Services</td>
</tr>
<tr>
<td></td>
<td>Lack of Health Insurance (Note below)</td>
<td>Access to Assisted Living</td>
<td>Access to Nursing Homes</td>
</tr>
</tbody>
</table>

Note: BRFS Findings indicated that 15% of respondents were without health insurance at time of survey

The council then prioritized these key issues on the basis of the size of population impacted, the seriousness of the health concern, and the effectiveness of potential interventions. Because of the first-hand knowledge council
members possessed about various key health issues and their familiarity with effects key health issues had on their community, a multi-vote process was used to rank issues in order of priority for action planning.

The Health Council voted to concentrate on two specific priority populations, Children and Senior Citizens. The following priority concerns were identified for planning purposes for both populations:

**Unicoi County Health Council Priority Health Concerns:**

- Access to Assisted Living
- Dental Care
- Lack of Health Insurance Coverage
- Medical Transportation

**IV. Future Health Planning**

The Unicoi County Health Council slated a strategic planning meeting to develop strategies to address the above priority concerns. Because of the level of interest of the entire membership, all members of the Health Council will formulate action plans.

In addition to the council’s assessment efforts documented herein, future reports will include a second document that will describe the council’s specific action strategies, as well as a third document that will report results of the strategic plan(s). The third document will also report changes in specific health indicators, and/or any changes in vital statistics trends or health care services.
APPENDIX
APPENDIX A

The Unicoi County Health Council:

Sharron Grindstaff, R.N. (Chairperson)  
Unicoi County Memorial Hospital

Annette Florence, Dr.Ph. (Former Chair)  
Community Representative

Nancy Bogart  
Business/Education

Brenda Kegley, R.N.  
School Nurse

Becky Love  
Board of Education

Pat Lynch  
Community Representative

Becky Manfull, R.N.  
Unicoi County Health Department

Jim McMackin  
Unicoi County Memorial Hospital

The Honorable Paul C. Monk  
Unicoi County Executive

Jane O’Connor  
Unicoi County Memorial Hospital

Charlene O’Dell  
Clinchfield Senior Adult Center

Aruna Panini, M.D.  
Local Physician

Martha Pate  
Community Representative

Joy Powers, M.P.H.  
Community Representative

Bill Smith  
Unicoi County Health Department

* For more information about the Community Diagnosis assessment process, please contact council members or the Northeast Community Development Staff at (423) 439-5900.