



Johnson County Health Council

Community Diagnosis

1997-1998

Community Development - Assessment & Planning
Northeast Tennessee Regional Health Office

Tennessee Department of Health

Introduction

Community Diagnosis is a community-based, community-owned process to assess the health status of Tennesseans. The Johnson County Health Council in cooperation with the Northeast Tennessee Regional Health Office (NETRHO) of the Tennessee Department of Health restructured the county health council in 1997 in preparation for the community diagnosis process. The Community Development Program of the NETRHO facilitates this community diagnosis assessment process and resulting health planning among all county health councils in the Northeast Tennessee region. The Johnson 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 Johnson County citizens.

Health issues for Johnson 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 Johnson County to address the priority problems identified. The Action Strategies Report, to be published next year, will contain goals to improve the health of Johnson County residents.

The Council and Its Mission:

The Johnson County Health Council is a long-standing council made up of members who broadly represent Johnson County (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 Johnson County.

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

- ◆ Analyze the health status of the community.
- ◆ Evaluate health resources, services, and systems of care within the county.

- ◆ Assess attitudes toward community health services and issues.
- ◆ Identify priorities, establish goals, and determine courses of action to improve the health status of the community.
- ◆ Establish a baseline for measuring improvement over time.

Benefits of Community Diagnosis for the community include:

- ◆ Providing communities the opportunity to participate in directing the course of health services and delivery systems.
- ◆ Involving communities in development of health strategies which are directly responsive to the community's needs and are locally designed, implemented, and monitored.
- ◆ Providing justification for budget improvement requests, a foundation of information for seeking grants, and a tool for use in promoting public relations.
- ◆ Providing, at the local level, current health information and coordination of strategies to the Regional Health Council and to state-level programs and their regional office personnel.
- ◆ Serving health planning and advocacy needs at the community level. Here the community leaders, organizations, and local health departments provide leadership to ensure that documented community health problems are addressed.

This document provides a description of community diagnosis activities to-date. Data will be described with emphasis on important issues identified by the council. This report concludes with Johnson County's resulting priority health concerns as identified through the Community Diagnosis process, including teen pregnancy/infectious disease control (enhancing health education), alcohol and drug abuse, poor eating habits and smoking, improving access to and availability of dental services, heart disease, child abuse and neglect, cancer, and DUI issues to name a few.

TABLE OF CONTENTS

I.	County Description	1
II.	Needs Assessment Data:	
A.	Community Stakeholder Survey	1
B.	Behavioral Risk Factor Survey	2
C.	Health Resource Inventory	3
D.	Vital Statistics/Health Status Data	4
E.	Other Secondary Data Sources	6
III.	Health Issues & Priorities	7
IV.	Future Health Planning	7



APPENDIX

APPENDIX A: List of Johnson County Council Members & Areas Represented

Community Diagnosis



Johnson County Health Council - Community Diagnosis Report
Prepared November 1998 by Community Development/Assessment & Planning Program
Northeast Tennessee Regional Health Office

I. County Description



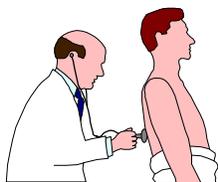
Johnson County is located in the Northeast corner of Tennessee bordered by the states of North Carolina and Virginia. With an estimated 1996 population of 16,485 people, the county seat (Mountain City) is made up of an estimated 2,457 people. Johnson County has a land area of 298.5 square miles supporting 55 people per square mile. From 1990 to 1996, the county recorded a booming 19.8% growth in population. Johnson County's population is approximately 99.1% white. The 1996 age distribution of the population compared to other counties in the Northeast region shows lower percentages of ages 17 and under, the lowest percentage of ages 25-44, the highest percentage of ages 45-59, and the second highest percentage of ages 60 and above.



The county has five two-lane highways running through it, all of which are relatively mountainous and curvy. The county has no major rail service, bus service, or four-lane highways. Access to Mountain City involves an approximate forty-five minute drive across the mountainous highways from the nearest large town of Elizabethton (which has a population of 12,380).



Johnson County had a per capita income of \$10,440 in 1993 and \$11,199 in 1994 for a 7.3% change. The median household income for 1993 was an estimated \$18,334. In 1993, an estimated 3,647 people (24.8% of the population – second highest percentage in the region) were living in poverty.



Johnson County is currently designated a state shortage area for pediatric primary care and Tenn-Care primary care, a federal Health Professional

Shortage Area for dental and primary care, and a Medically Underserved Area. Johnson County has one hospital (soon to be replaced by a newly constructed Health Center), approximately 17 full and part-time physicians, and 3 private dentists.

II. Needs Assessment Data

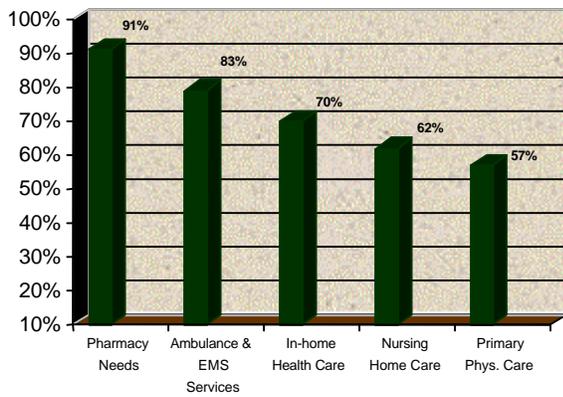
A. Community Stakeholder Survey

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 alike as having a stake in the overall improvement of this 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.

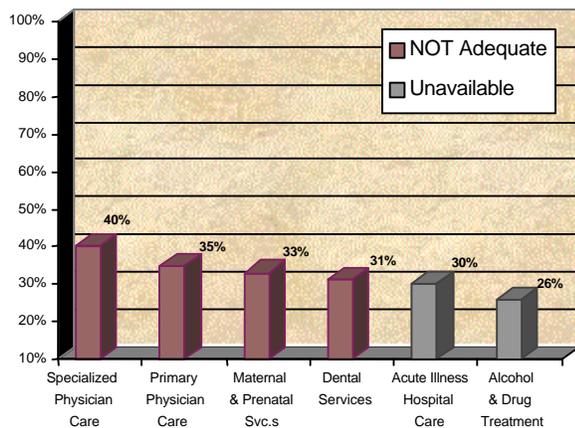
The Stakeholder Survey was distributed to Johnson County Health Council members in addition to a wide variety of community residents. The stakeholders included both the users and providers of health care services.

Of 86 respondents from the various communities in Johnson County, 69% were female. Sixty-one percent (61%) had lived in the county more than 20 years. Approximately 54% had no children under 18 years of age in the home.

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



Health Care Services perceived to be *Available but Not Adequate* (in purple) or completely *Unavailable* (in grey) in the highest percentages of respondents included:



A majority of respondents were *Satisfied or Better* with **Physician Care/Services**; notable exceptions included:

	Satisfied +	Not Satisfied	Don't Know About Svc.
laboratory	48%	20%	12%
obstetrical	19%	19%	26%
pediatrics	22%	19%	23%

In general, respondents seemed *most satisfied* with **accessibility, convenience, quality of care, and personnel** of the **Local Hospital Services** and *least satisfied* with **reputation, emergency room services, and cost**. Respondents reported having the *least knowledge* about **physical therapy** and **obstetrical** services.

A vast majority of respondents seemed to be *Satisfied or Better* with the **Local Health Department**, or were *not familiar* with their

services. The highest percentages who responded otherwise were 19% and 15% who held *no opinion* about **WIC services and disease investigation**, respectively, and 11% who were *Not Satisfied* with **health promotion** activities at the health department.

Due to various anomalies in the demographics of respondents and questions which were less than applicable, given the current health care landscape, the council decided to revise this survey and its method of delivery. The council hopes to conduct the new stakeholder survey some time in the future, after completion of the new Health Center and on a more regular basis.

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 representative sample of 201 residents was collected from Johnson County for use in estimating county risk factors. Of the respondents, 50% were female. The following table compares Johnson County responses to selected survey items with results of this survey in other Northeast Region counties.

Counties; N.E. Region	% Reporting NO Health Care Coverage	Feel Coverage Limits Care Received	Have Needed To See Dr., But Could Not Due to Cost
Johnson	9%	44%	18%
Carter	9%	39%	14%
Greene	10%	41%	17%
Hancock	6%	47%	24%
Hawkins	6%	44%	16%
Unicoi	15%	40%	15%
Washington	7%	43%	18%

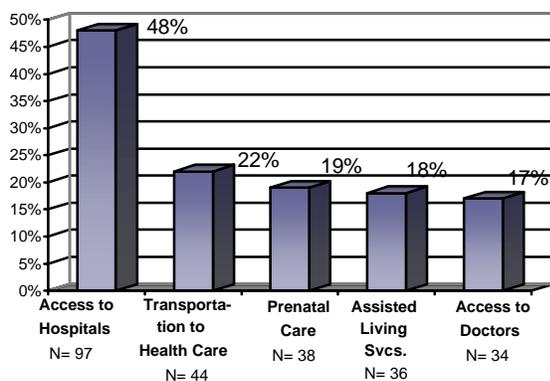
The council noted, in particular, those items on the Behavioral Risk Factor Survey which most directly impacted leading causes of death in Johnson County, *Heart Disease* and *Cancer*. Such items are listed on the table below, with percentages of those who responded compared for Johnson County and other Northeast Region counties.

Counties; N.E. Region	Current Everyday Smokers	Been Given Advice About Losing Weight	Ever Had High Blood Pressure
<u>Johnson</u>	31%	16%	29%
Carter	25%	18%	28%
Greene	27%	18%	29%
Hancock	33%	18%	N/A
Hawkins	27%	20%	30%
Unicoi	24%	14%	23%
Washington	26.5%	18%	30%

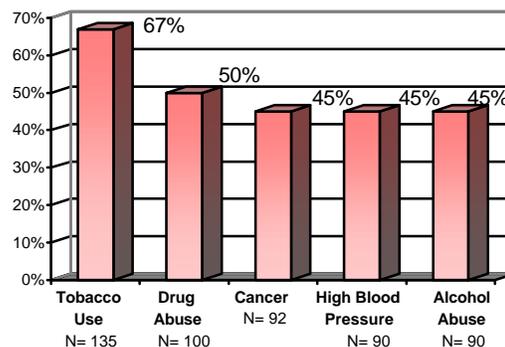
Counties; N.E. Region	% Who Reported Having Had Diabetes	Have Had 'Check-Up' Within The Past Year	Reported Health Status is 'Fair' to 'Poor'
<u>Johnson</u>	6%	70%	45%
Carter	9%	75%	29%
Greene	8%	75%	28%
Hancock	N/A	84%	N/A
Hawkins	7%	72%	25%
Unicoi	6%	73%	39%
Washington	10%	72%	21%

The BRFSS also collects opinion data on *Access to Health Care/Environmental Issues* and *Community Issues*. The top issues perceived by respondents as *Definite Problems* in each category were as follows in the next two charts:

**Chart 1 - Access/Environmental Issues:
% Saying 'Definite Problem'**



**Chart 2 - Community Issues:
% Saying 'Definite Problem'**



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:

- ◆ Medical Equipment – suppliers could provide broader selection and lower costs.
- ◆ Assisted Living – may need to watch current availability of these services in light of new regulations.
- ◆ Child Day Care – expansion of these services is indicated due to size of population served, need of working parents, and *need for supervision of older children (over 12 years)*.
- ◆ Homemaker Services (Esp. Aid & Attending) – expansion of these services is indicated due to growing size of elderly impacted through this service and due to the important economical preventive effect these services have upon premature need for more intensive/costly nursing home or assisted living services.

Other areas of health and health-related service were found by the council to be largely

unavailable or in great need of improvement. They were:

- ◆ **Dental Care for TennCare & Indigent Patients:** Care for this population of both children and adults is exclusively being provided by local health department (part-time). Population in need unquestionably supports expansion of service availability.
- ◆ **Therapeutic Daycare Services:** Services for targeted special-needs children are no longer available. Population in need supports making these services available and accessible again.
- ◆ **Specialty Services and Referral Capacities:** The need for expansion of availability was noted for the following services (with understanding that new Health Center may adequately fill the gap for these services):
 - Renal Dialysis Center*
 - Orthopedics (part-time)*
 - Surgery*

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. Multiple 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.

In compiling and analyzing vital statistics for Johnson County, considerations were made for the county's comparatively smaller population (16,485) and the very small percentage of minority population (less than 1% - this county's *Non-white* population represented almost exclusively zero data in the vital statistics information sets). Due to the comparatively small overall county population, the council had to remain cognizant, as they analyzed and later prioritized this data, of *numbers* of events (which might actually be rather low) represented by various *rates* (particularly those calculated per 100,000).

A great variety of health status data was made available to the council, including the following health indicators:

- PREGNANCIES (# and rate) by Age of Mother; Wed & Unwed
- LIVE BIRTHS (# and rate) by Age of Mother; Wed & Unwed
- LOW & VERY LOW BIRTHWEIGHT
- LATE/NO PRENATAL CARE
- % Of Births by GESTATIONAL AGE
- % Of Mothers w/Selected RISK FACTORS
- % Of Live Births w/Selected Maternal RISK FACTORS
- PARITY DATA: # of Births w/#s of Previous Live Births
- ENCOUNTER DATA for Programs Serving Children
- MORTALITY RATES:
 - INFANTS
 - NEONATAL
 - POST-NEONATAL
 - CRUDE DEATH RATES
 - YEARS OF LIFE LOST
- LEADING CAUSES OF DEATH: Mortality Rates and Years of Life Lost

- MOTOR VEHICLE (MV) DEATHS
- ACCIDENTAL/NON-MV DEATHS
- VIOLENT DEATHS
- SEXUALLY TRANSMITTED DISEASES
- TUBERCULOSIS
- VACCINE-PREVENTABLE DISEASES
- CANCER: Prevalence and Leading Sites

Of the indicators listed above, the council paid particular attention to (1) those indicators that relate to areas of concern already identified through other assessment components/data sources, and (2) those indicators that reflect trends causing concern. The council identified the following vital statistics and related health status data as areas of particular notice or concern:

- Births Among *10-17 Year Olds* and % of Total Births
- Number and % of Total Births that Experienced Problems with *Low Birth-weight* and *Late Prenatal Care*
- *Infant Death Rates*
- Incident Rates of *Sexually Transmitted Diseases*, Particularly Among *15-17 Year Olds*
- *Motor Vehicle Accidents*
- *Suicides and Homicides*
- Deaths from *Lung Cancer*
- Deaths from *Coronary Heart Disease*



BIRTHS AMONG 10-17 YEAR OLDS, 1994-1996

	Ave. Annual Number	% of Total Births	Number in 1997
Johnson	9*	6.4	9
NE Region	190	5.6	169
TN	4,742	6.5	4,520

* 71% were to unwed mothers for '94-96; compared to 46% to unwed for '92-94

LOW-WEIGHT BIRTHS, 1994-1996

	Ave. Annual Number	% of Total Births	Number in 1997	% of Total, 1997
Johnson	8	5.7	14	8.5
NE Region	256	7.5	277	8.0
TN	6,455	8.8	6,555	8.8
Healthy People 2000		5.0		5.0

BIRTHS WITH LATE PRENATAL CARE, 1994-1996

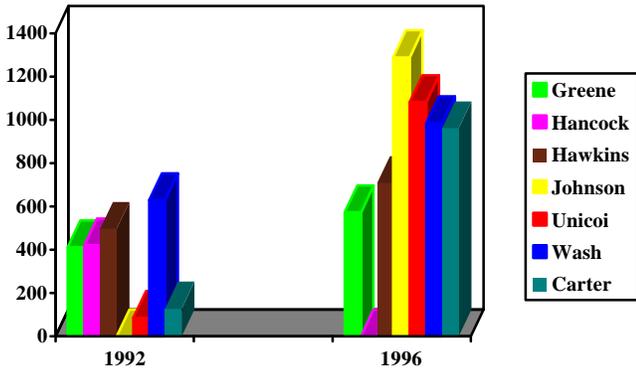
	Ave. Annual Number	% of Total Births
Johnson	26	18.0*
NE Region	491	14.3
TN	12,561	17.1
Healthy People 2000		10.0

* For '92-94, Johnson County's % of births with late prenatal care was 18.2%; for '93-95, it was 18.9%

INFANT DEATHS WITH RATES PER 1,000 LIVE BIRTHS, 1994-1996

	Ave. Annual Number	Rates	Number in 1997	Rates, 1997
Johnson	2	11.4	1	6.1
NE Region	21	6.2	21	6.1
TN	650	8.9	635	8.5
Healthy People 2000		7.0		7.0

SEXUALLY TRANSMITTED DISEASE RATES (PER 100,000) FOR AGES 15-17



*Johnson County rate in 1992: 0.0; rate in 1996: 1289.1 (this rate represents the equivalent of approximately 33 cases)

MOTOR VEHICLE DEATHS WITH AGE-ADJUSTED RATES, 1994-96

	Ave. Annual Number	Age-Adj. Rates
Johnson	6	35.5
NE Region	75	25.5
TN	1,288	24.3
Healthy People 2000		16.8

SUICIDE & HOMICIDE DEATHS WITH AGE-ADJUSTED RATES, 1994-96

	SUICIDE		HOMICIDE	
	Ave. Annual Number	Age-Adj. Rates	Ave. Annual Number	Age-Adj. Rates
Johnson	4	20.9*	2	10.1**
NE Region	43	13.5	16	5.1
TN	684	12.1	558	11.1
Healthy People 2000		10.5		7.2

* By 1997, the county's rate decreased to 18.1 while the state's rate increased to 14.0

** By 1997, both the county's and state's rates had decreased, to 6.0 and 10.4, respectively

LUNG CANCER DEATHS WITH AGE-ADJUSTED RATES, 1994-96

	Ave. Annual Number	Age-Adjusted Rates
Johnson	17	57.4
NE Region	228	46.1
TN	3,696	46.8
Healthy People 2000		42.0

CORONARY HEART DISEASE DEATHS WITH AGE-ADJUSTED RATES, 1994-96

	Ave. Annual Number	Age-Adjusted Rates
Johnson	41	94.7
NE Region	826	116.1
TN	13,293	125.8
Healthy People 2000		100.0

E. Other Secondary Data Sources

In addition to sources of data already cited, the Johnson County Health Council used information from other various sources, weighing the information and statistics analyzed against county demographics, manpower information, managed care information, and utilization information. 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 Johnson 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. These issues included (not listed in order of importance or severity):

- Specialized & Primary Physician Care (greater access & greater referral capacities for some specialty services)
- Maternal & Prenatal Care (greater access)
- Dental Services (particularly for TennCare & Indigent Patients)
- Acute Illness Hospital Care
- Alcohol & Drug Treatment Services
- Health Promotion Activities
- Smoking
- Transportation for Health Care
- Assisted Living Services
- Drug & Alcohol Abuse
- Cancer
- High Blood Pressure
- Therapeutic Daycare Services
- Teen Pregnancy
- Low-Weight Births & Late Prenatal Care
- Sexually Transmitted Diseases (incidence among adolescents)
- Motor Vehicle Deaths
- Suicide & Homicide
- Lung Cancer
- Heart Disease

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 relatively straightforward process of value-weighted voting was used to rank issues in order of priority for being addressed through strategic planning efforts.

The following ordered list of priority health concerns was rendered by the Johnson County Health Council through the initial Community Diagnosis assessment process:

Priority Health Concerns:

- ✓ **Teen Pregnancy/Sexually-Transmitted Diseases**
- ✓ **Drug/Alcohol Abuse**
- ✓ **Smoking & Poor Eating Habits**
- ✓ **Dental Care (Particularly for TennCare & Indigent Patients)**
- ✓ **Heart Disease**
- ✓ **Child Abuse/Neglect**
- ✓ **Cancer (Particularly Lung Cancer)**
- ✓ **Driving Under the Influence**

IV. Future Health Planning

The Johnson County Health Council slated a strategic planning subcommittee to be responsible for laying groundwork on action strategies to address



the above priority concerns. Their groundwork will then be taken to the full council for development and approval. With the council's assessment efforts documented herein, a natural progression of future efforts will include a later document describing the council's action strategies and a further document reporting results of those strategies, any changes in related health indicators, and any changes in vital statistics trends or health care services.

APPENDIX

APPENDIX A

The Johnson County Health Council: (Current Members, November 1998)



Curtis Sluder (Chairperson)	<i>Johnson County Executive</i>
J. Dwain Austin	<i>Johnson County Health Department</i>
Gerald K. Buckles	<i>Johnson County Board of Education</i>
Harvey Burniston	<i>Mayor, Mountain City</i>
Maureen Burniston	<i>Johnson County Health Department</i>
Dick Grayson	<i>Department of Human Services</i>
Willie D. Hammons	<i>Community Representative</i>
Jerry Hayes	<i>Northeast Correctional Complex</i>
Lisa Heaton	<i>Johnson County Health Center</i>
Doug Hornsby	<i>Mountain City Health Care</i>
Connie Hyder	<i>Johnson County Home Health</i>
Amy Kaplin	<i>Extended Hours Health Center</i>
Joyce Kidd	<i>Mountain City Senior Citizens Center</i>
Emily Millsaps	<i>Johnson County Schools</i>
Brad Reece	<i>Johnson County Bank</i>
Gregory Reece	<i>Community Representative</i>
Jean Ann Savery	<i>Johnson County Wellness Center</i>
Jim Shine, M.D.	<i>Johnson County Medical Group</i>
Shelton Simcox	<i>Community Representative</i>
Catherine Tanner, M.D.	<i>Family Health Care Medical Center</i>
Donald Tarr, M.D.	<i>Private Physician</i>
Jeannie Taylor	<i>School Nurse</i>
Joy E. Wachs, Ph.D.	<i>East Tennessee State University</i>
Toni Wheeler	<i>Johnson County Counseling</i>
Jerry Whitener	<i>National Textile</i>
Nancy Wills	<i>Johnson County Department of Children's Services</i>

Past Members:
Jim Barnett,
Paul Brown,
Sandra Fortune,
Danny Herman,
George Lowe
(Past Chair),
Scott Williams

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