


A Health Council's Concern..

A Look at Humphreys County Cancer Rates

**Meleisha Edwards, MS
Mid Cumberland Health Dept
Tennessee Department of Health**

The background of the slide is a solid blue color. In the lower right quadrant, there are several decorative elements consisting of concentric circles in a lighter shade of blue, resembling ripples in water. These circles are of varying sizes and are arranged in a way that suggests movement or a focal point.

Tennessee Regional Epidemiology Meeting

May 10-11, 2006

Millennium Maxwell House

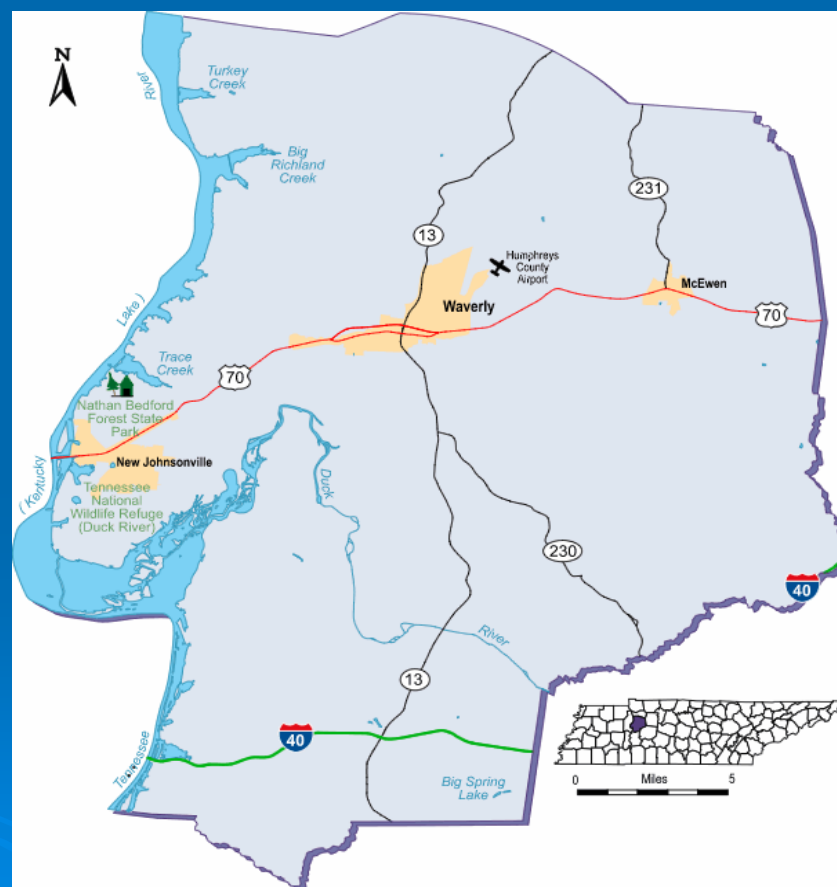
Nashville, TN



Humphreys County at a Glance

➤ Population: 18,469

Indicator	Number	Percent of Total
Males	9,089	49.2%
Females	9,380	50.8%
Whites	17,771	96.2%
Blacks	578	3.1%
Under 18	4,633	25.1%
Over 65	2,854	15.5%



Humphreys County Health Council

- Established May 1997
- Currently Has 13 Active Members
- Health activities include the development of county-wide Health Awareness Week; grant funded for development of handicapped playground
- Current Community Priority: Obesity
 - Other Focus Areas: Cancer, Autism

Community Health Concern

*Is the high cancer rate in
Humphreys County, TN
associated with the
environment?*

Cause for Concern...

- Humphreys County ranks 5th in state for total TCRI cases, 1991-2000
- Lung cancer has the highest incidence in Humphreys County
- Large number of diagnosed breast cancers in a 2 mile radius (10 cases)

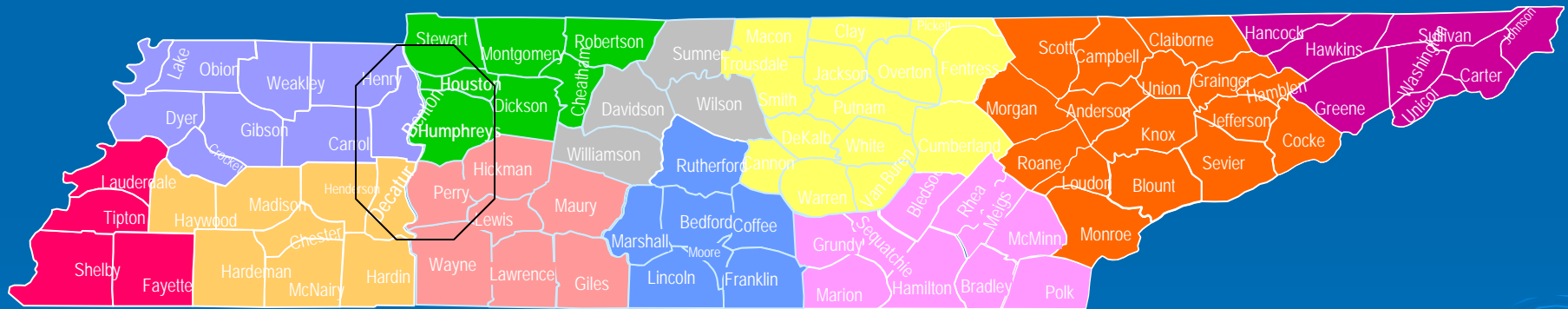
Cancer Data: Top 10 Tennessee Counties

Total TCRI Cases 1991-2000

County	Rank	Number	Crude Rate
Cumberland	1	2302	554.30
Loudon	2	1985	553.44
Perry	3	389	541.59
Decatur	4	599	534.75
Humphreys	5	881	520.36
Gibson	6	2423	509.52
Benton	7	803	507.21
Houston	8	389	503.47
Anderson	9	3522	495.34
Jefferson	10	1907	490.82

Things that Make You Say Hmmmm...

5 of the top 10 counties with the highest rates surround each other and have a common denominator....the Tennessee River!

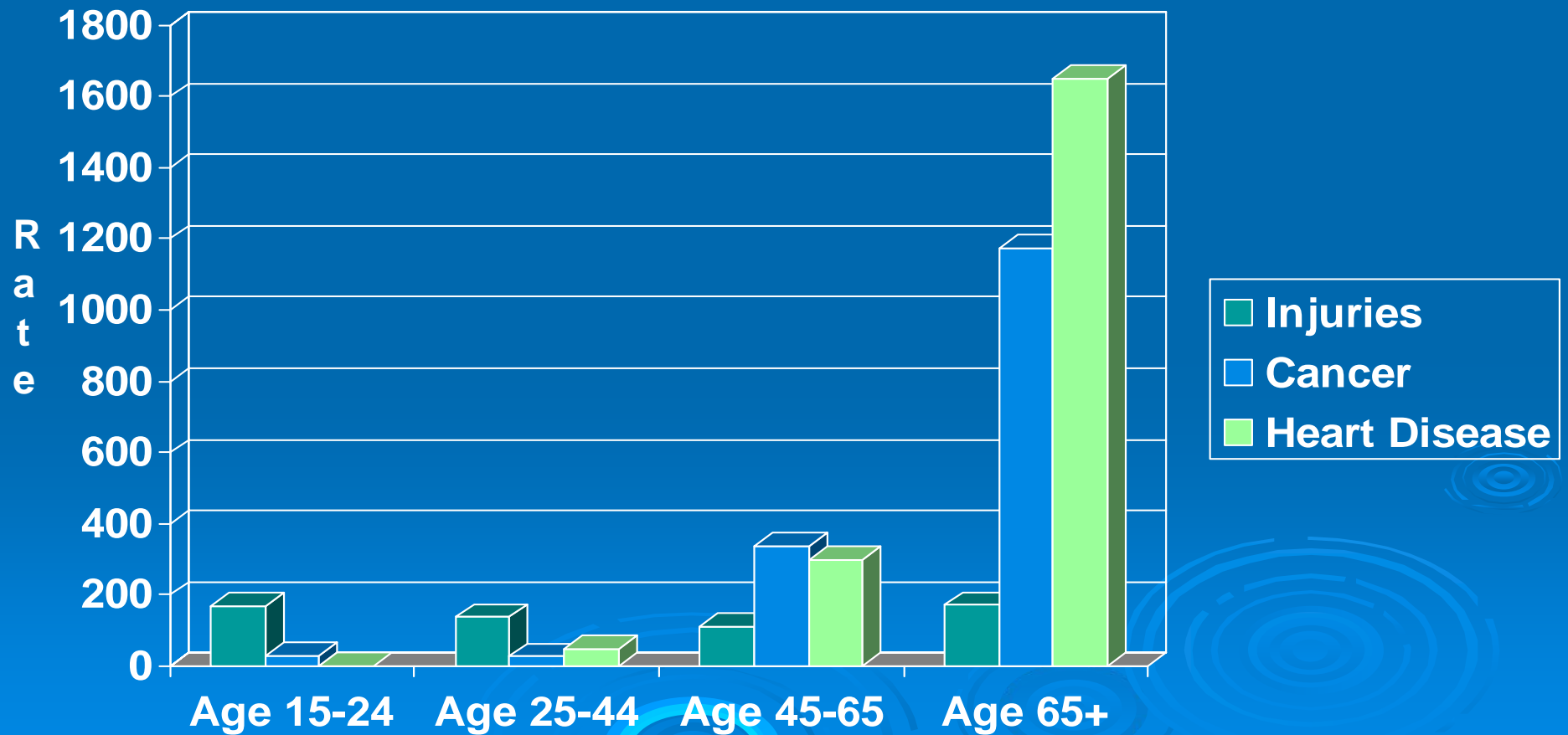


Is it coincidence....let's look at closer at
Humphreys cancer data...

Cancer Data: First Diagnosis Hospital Inpatient Data 2001-2004




Cancer Data: Leading Causes of Death by Age Humphreys County, Mortality Rates 2001-2003



Finding the Root of the Problem..

- March 24, 2006- Round Table of experts to discuss the problem and solution to the high cancer rates
- The State Environmental Epidemiologist, Epidemiologist of the Tennessee Cancer Registry, surrounding health councils members, local oncologist, and hospital CEO's all participated in the discussion.

Community Perceptions of Causes of Cancer

- Industry pollution
 - Tennessee and Duck River contamination (water source)
 - High rate of smokers
 - High rate of persons with sedentary lifestyle
- 


Cancer and the Environment?

- Difficulty of linkage of cancer to the environment because of confounding factors such as lifestyle and genetics
- Cancer is common, 1 in 3 people develop cancer, most cancers linked to the environment are rare forms of cancer
- Cancer takes years, often decades to develop, usually a person does not have an environmental exposure for that long

Preliminary Conclusions

- Cancer in Humphreys County is not atypical of national trend of cancer with the top 4 cancers being lung, breast, colon, and prostate
- Hard to determine a cancer cluster of breast cancer, because the commonality of breast cancer, usually 1 in 8 women develop

Preliminary Conclusions

- Cancer is more common among the older population in Humphreys County, which is typical looking at national trends
 - Humphreys County is a large tobacco producer which in turn results in a high tobacco use rate
- 

Next Steps: Health Council Priorities

- Educational Programs- antismoking and early detection and screening programs
- Cancer Cluster Investigation Protocol will be given, all persons in the breast cancer “cluster” will be interviewed

Questions???



Data Providers

- Death Statistical System

- Source: Tennessee Department of Health, Division of Health Statistics.

- Reference: Tennessee Department of Health, Division of Health Statistics.

- Death Statistical System. Nashville, Tennessee.

- Acknowledgment: Death data were provided by the Tennessee Department of Health, Division of Health Statistics, and compiled by the Environmental Epidemiology Program and the Mid Cumberland Regional Health Department.

- Hospital Discharge Data System

- Source: Tennessee Department of Health, Division of Health Statistics.

- Reference: Tennessee Department of Health, Division of Health Statistics.

- Hospital Discharge Data System. Nashville, Tennessee.

- Acknowledgment: Hospital discharge data were provided by the Tennessee Department of Health,

- Division of Health Statistics, and compiled by the Environmental Epidemiology Program and the Mid Cumberland Regional Health Department.

- Cancer Registry

- Source: Tennessee Department of Health, Office of Cancer Surveillance.

- Reference: Tennessee Department of Health, Office of Cancer Surveillance.

- Tennessee Cancer Registry, Year(s). Nashville, Tennessee.

- Acknowledgment: Cancer data were provided by the Tennessee Department of Health, Office of Cancer Surveillance, and compiled by the Environmental Epidemiology Program and the Mid Cumberland Regional Health Department.