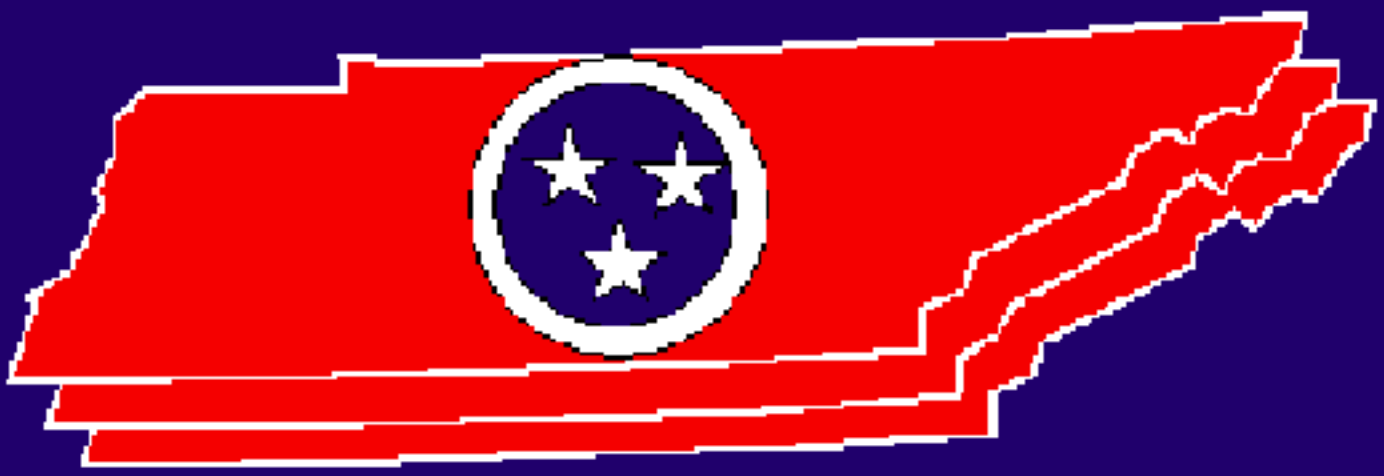
HEALTH STATUS OF TENNESSEANS

TENNESSEE HEALTH STATUS REPORT 2001-2002



TENNESSEE DEPARTMENT OF HEALTH

AND THE

COMMUNITY HEALTH RESEARCH GROUP

THE UNIVERSITY OF TENNESSEE, KNOXVILLE

JUNE 2003

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TENNESSEE HEALTH STATUS REPORT, 2002

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INTRODUCTION

- **The Tennessee Health Status Report, 2001-2002** is the fifth in a series of **Tennessee Health Status Reports**. These reports are benchmark, objective appraisals of the health status of Tennesseans.

- Three focal points are current health-related characteristics of the population, their health status, utilization of and need for treatment and prevention services, and emerging health issues.

- Baseline health status information is provided at state, regional, and county levels by age, gender, race, and risk, supplemented by access to tables, reports and case-level data for customized analysis and mapping on the Health Information Tennessee (HIT) Web site (*www.tennessee.gov/hitspot)*.

- Population subgroups at excess risk of health problems and disability are identified and profiled.

- Tennesseeís progress in meeting CDCís Healthy People 2000 Objectives is summarized, noting some important successes and some areas for improvement. Selected indicators from CDCís new Healthy People 2010 goals are analyzed; baseline levels are documented; and progress toward their achievement from 2000 on is monitored.

- Data are presented for health manpower, hospitals, nursing homes and other health facilities, and for services utilization. Health professionals are classified by major professional category, including mid-level practitioners -- nurse-practitioners, nurse-midwives and physician assistants -- as well as physicians, dentists, and other health practitioners. Licensed, regulated health facilities - hospitals, nursing homes, and home health agencies - are described and their characteristics profiled.

- Goals of Report 2001-2002 are to:

  - provide baseline measures for health status and problem identification in Tennessee;
  - present trends over time in key health indicators;
  - further develop needs assessment and planning infrastructure;
  - maximize communication via integrated data-sharing technologies;
  - target potential year-by-year goals; and
  - identify possible outcome measures to monitor goal attainment.

- The Tennessee Department of Health (TDH) is a department of State government headed by a cabinet level appointee reporting directly to the Governor.

- TDH divides the State into 14 statistical regions - 6 metropolitan counties and 8 nonmetropolitan clusters of counties.

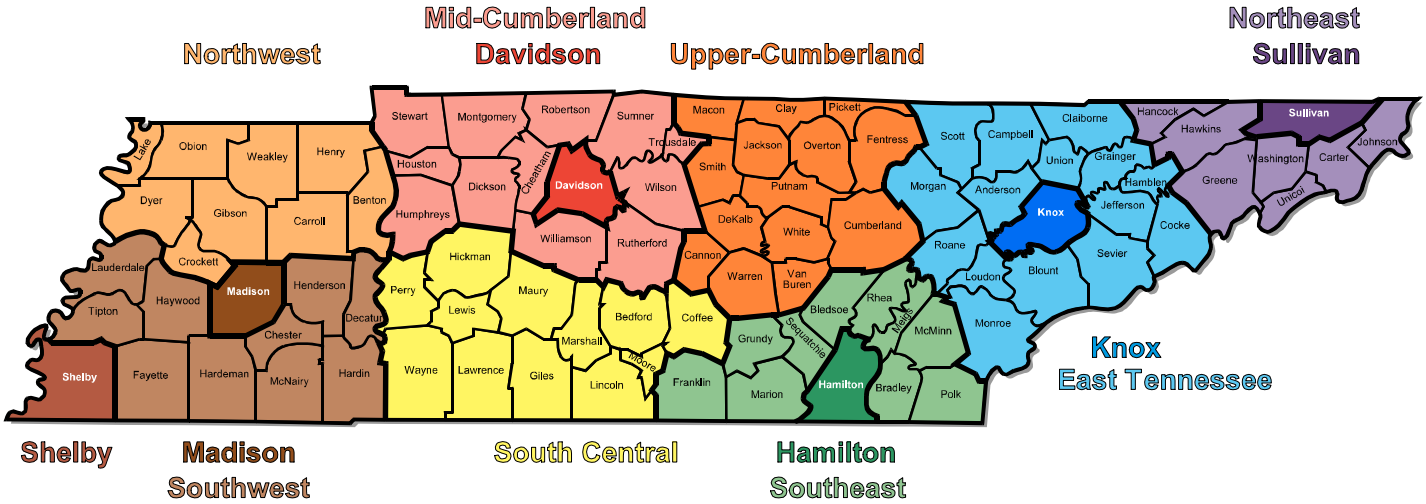
- Health departments in each of 95 counties have a county health officer, a local county director, and a board of health. Each county and region has established a health council composed of community residents to support the Community Diagnosis Initiative begun in 1995.

- The vision of the TDH is for "healthy individuals, families, and communities for a healthy Tennessee."

- The mission of the TDH is to provide the leadership and support necessary to promote, protect, and improve the physical and mental health and well-being of Tennesseans.

- To accomplish the mission of the Department, two major goals have been established: to offer every child a safe, healthy start and to protect the publicís health.

TENNESSEE'S HEALTH DEPARTMENT REGIONS



Metropolitan Regions are six counties: Sullivan, Knox, Hamilton, Davidson, Madison and Shelby.
Nonmetropolitan Regions are eight clusters of counties listed below.

Northeast
Carter
Greene
Hancock
Hawkins
Johnson
Unicoi
Washington

East
Anderson
Blount
Campbell
Claiborne
Cocke
Grainger
Hamblen
Jefferson
Loudon
Monroe
Morgan
Roane
Scott
Sevier
Union

Southeast
Bledsoe
Bradley
Franklin
Grundy
Marion
McMinn
Meigs
Polk
Rhea
Sequatchie

Upper Cumberland
Cannon
Clay
Cumberland
DeKalb
Fentress
Jackson
Macon
Overton
Pickett
Putnam
Smith
Van Buren
Warren
White

Mid-Cumberland
Cheatham
Dickson
Houston
Humphreys
Montgomery
Robertson
Rutherford
Stewart
Sumner
Trousdale
Williamson
Wilson

South Central
Bedford
Coffee
Giles
Hickman
Lawrence
Lewis
Lincoln
Marshall
Maury
Moore
Perry
Wayne

Northwest
Benton
Carroll
Crockett
Dyer
Gibson
Henry
Lake
Obion
Weakley

Southwest
Chester
Decatur
Fayette
Hardeman
Hardin
Haywood
Henderson
Lauderdale
McNairy
Tipton

MORTALITY IN TENNESSEE

General Mortality

- A total of 55,148 deaths occurred to Tennessee residents in 2001. The 2001 crude death rate in Tennessee was 961 deaths per 100,000 population. Higher mortality among males than females was reflected in their respective crude death rates of 966 and 956 deaths per 100,000 population. The crude death rate of whites, 1011 deaths per 100,000, exceeded that of blacks, 891 per 100,000. This differential is explained by the younger age composition of blacks as compared to whites. Once the death rate was adjusted for age differences[1], the death rate for blacks rose to 1,253 per 100,000 and that for whites declined to 961 per 100,000. Respective age-adjusted death rates for black males, white males, black females, and white females were 1,560, 1,182, 1,043, and 801 per 100,000 population.

- Crude death rates for metropolitan and nonmetropolitan residents of Tennessee were 929 and 983, respectively. After age-adjustment[1], the rate for the metropolitan population very slightly exceeded that for the nonmetropolitan population, 996 versus 981 per 100,000, with an overall rate of 987. Further differentiating the population by race and gender, black male residents in metropolitan areas exhibited the highest age-adjusted death rate, 1,601 per 100,000. The rate for black males in nonmetropolitan areas was second highest at 1,436 deaths per 100,000. By contrast, the lowest age-adjusted death rates were registered for metropolitan and nonmetropolitan white females, at 785 and 810 deaths per 100,000 population, respectively. Regardless of whether they resided in metropolitan or nonmetropolitan areas, black females had lower age-adjusted death rates (1,067 and 1,436) than white males (1,121 and 1,214 per 100,000, respectively).

- Annualized age-adjusted mortality rates for 1999-2001 were 982 statewide and were higher in metropolitan regions than nonmetropolitan regions of Tennessee at 1,001 and 968 per 100,000[1], respectively. Among Tennessee Health Department regions, the Mid-Cumberland Region (924) and Knox and Sullivan Counties (940 each) had the lowest annualized age-adjusted death rates, while Shelby County and Northwest Tennessee had the highest (1,068 and 1,055, respectively). Three rural counties had the highest 1999-2001 age-adjusted death rates -- Lake (1,338), Jackson (1,154) and Grundy (1,152) Counties -- while Cumberland (803), Williamson (787) and Moore (744) Counties had the lowest rates.

---

[1]All age-adjusted rates use the year 2000 standard million population.

Premature Mortality

- Years of potential life lost (YPLL) before age 65 is a common public health measure of population health status. In 2000, deaths from all causes accounted for 292,748 years of life lost among Tennesseeans. This translates into a YPLL rate of 5,146 per 100,000. Approximately 31.6% of the lost years was attributable to injury, the combination of unintentional (ìaccidentalî) injury and intentional (suicide and homicide) injury. Cancer and heart disease accounted for 15.1% and 13.8% of the premature mortality burden, respectively.

- Rates of YPLL for black males, black females, white males, and white females in 2000 were 11,688, 6,155, 6,108, and 3,148 per 100,000 population, respectively. Injury was the leading cause of YPLL for each of these race-gender groups. Its share of the YPLL total was 32% for black males, 17.1% for black females, 37.9% for white males, and 25.3% for white females. Only for white females did cancer exceed heart disease as a cause of premature mortality, where the cancer contribution was 22% of the total, as compared to 10.9% for heart disease.

Leading Causes of Death

- Based on the ICD-10 classification of diseases, the five leading causes of death in Tennessee in 2001 were heart disease, cancer, stroke, chronic lower respiratory disease (COPD), and accidents/unintentional injury. Respective rates were 273, 213, 70, 51 and 47 deaths per 100,000 population[2]. Collectively, they accounted for 68.2% of all deaths.

- Other leading causes of death for Tennessee for 2001 were, in sixth place, diabetes mellitus (30), followed by influenza and pneumonia (28), Alzheimer's disease (20), suicide/intentional self-harm (12) and in tenth place, nephritis, nephrotic syndrome and nephrosis (11).

- Heart disease, cancer and stroke were the top three causes of death for white females, and blacks of either gender. For white males, heart disease and cancer were also the top two causes of death. But for this group, accidents/unintentional injury ranked third, followed by COPD and stroke. COPD and the combined category of influenza and pneumonia ranked fourth and fifth as causes of death among white females. Respective fourth- and fifth-ranked causes of death for black males were unintentional injury and homicide, and for black females, diabetes mellitus and unintentional injuries[2].

- Unintentional injury ranked first as a cause of death for Tennesseans aged 15-24 years and for those aged 25-34, accounting for 51.8% of the former, and 31.5% of

[2]The ranking of causes of death is based on rates, not numbers of deaths.

the latter deaths. Suicide was the second leading cause of death among Tennesseans aged 25-34 (comprising 12.3% of deaths) and third for those aged 15-24 (10.8% of deaths). Homicide was the second leading cause of death for 15-24 year-olds in 2001 and the third for those 25-34 years of age, at 13.8% of the former and 10.3% of the latter deaths.

- Homicide was the leading killer among black males aged 15-34, comprising 34% of deaths, followed by unintentional injuries at 21.4%. Among white males aged 15-34, after unintentional injuries at more than half of deaths, suicide ranked second at 16%, and among corresponding black males (8%) and white females (8.7%), it ranked third. Rates in that age-group for white and black males were 23.8 and 20.6 suicides per 100,000 population, respectively. For white females, the suicide rate was 5.4, and 1.3 for black females.

- Respective heart disease death rates in 2001 for white females, white males, black males, and black females were 293.4, 288.6, 234.1 and 240.1 deaths per 100,000 population. Corresponding death rates for the second largest cause of death, cancer (malignant neoplasms only vs. all neoplasms), were 200.1, 251.3, 206.6 and 179.5 per 100,000. Together, heart disease and cancer accounted for nearly half of the deaths among white females (49%), black males (47%), and black females (49%), and more than half of deaths among white males (53%).

Infant/Neonatal/Postneonatal Mortality

- Infants are children under one year of age. In 2001, Tennesseeís infant mortality rate was 8.7 deaths per 1,000 live births. The rate for blacks was 16.2 and 6.7 for whites. Neonatal deaths are deaths to infants under 28 days of age. Respective neonatal death rates in 2001 for the overall Tennessee population, for blacks and for whites were 5.6, 10.6 and 4.2 per 1,000 live births. Postneonatal deaths are deaths to infants aged 28 days and older. Postneonatal death rates were 3.1, 5.6 and 2.5 per 1,000 live births for the Tennessee population, blacks and whites, respectively. Neonatal mortality predominantly reflects endogenous causes - genetic problems or problems associated with pregnancy. By contrast, postneonatal mortality predominantly stems from exogenous or socio-environmental causes. Increases in postneonatal death rates, especially among blacks, raises concern related to increases in low weight births, SIDS, and low or inadequate prenatal care accompanying increases in poverty rates.

- The three leading causes of infant mortality in Tennessee in 2001 were congenital anomalies[3], short gestation and unspecified low birth weight[4], and sudden infant death syndrome (SIDS). These causes were responsible for 44% of all infant deaths in the Tennessee population, for 49% among blacks and 42% among whites. Congenital anomalies, and short gestation and low birth weight were the leading causes of neonatal mortality for all three groups. SIDS ranked first as a cause of postneonatal mortality. This disease accounted for 23.4% of all postneonatal mortality in Tennessee, and 20.3% of corresponding deaths among whites and 29.4% among blacks. Unintentional injury ranked as the third leading cause of postneonatal mortality in Tennessee as a whole, and for both whites and blacks.

- Short gestation and low birth weight accounted for more than one-third of neonatal deaths among blacks, compared to about one-fifth among whites, while congenital anomalies represented 12% of deaths among black neonates but 23% among whites. Deaths from respiratory distress were equally represented by race at about 7% of deaths to neonates in 2001; this is the third leading cause of death in that age-group.

- SIDS represented a higher percentage of postneonatal deaths among blacks at 29%, compared to whites at 20%, as did congenital anomalies, at 24% of black neonatal deaths and about 18% of white deaths. Accidents were only slightly more prevalent as a cause of postneonatal deaths among whites at 11.5%, compared to 9.8% among blacks in 2001.

Selected Cause-Specific Mortality Trends

- Homicide has exacted an especially heavy toll among younger black males in Tennessee. However, there is evidence of an improving situation. The rate in 2001 for black males aged 15-34 years was 87.9 per 100,000 population, compared to a rate of 135.8 in 1990, a decrease of around 35%. The upturn in rates in 2000 to 99.4 per 100,000, after reaching an all-time low in 1999 of 86.2, reversed again in 2001. The 2001 rate represents a 44% decline from the 1992 high rate of 157 per 100,000 population.

- The suicide rate at aged 15-34 for whites and blacks of either gender fluctuated between 1990 and 2001. But the rate for black males in 2001, 20.6 per 100,000

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[3] Congenital anomalies are formally referred to as "Congenital malformations, deformations and chromosomal abnormalities" in the ICD-10 coding. The name is shortened here to match that used in ICD-9 coding.

[4] This cause of infant death is referred to as "Disorders related to short gestation and low birth weight, not elsewhere classified" in the ICD-10 codes.

population, was 24% lower than the 1990 rate of 27.2 per 100,000. It was 32% less than the 1997 rate, the highest rate recorded for this sub-population during the 1990s (30.3 suicides per 100,000 population). However, the 2001 rate was still 55% higher than the lowest rate for this group, which fell in 1998, at 13.3 per 100,000. White male suicide rates dropped by 15% between 1990 to 2001 (from 28.1 to 23.8, respectively), while suicide rates among white and black females dropped by 11% and 79%, respectively, over the period of observation.

- Lung cancer is a major public health problem that primarily afflicts the middle-aged and elderly populations. Unlike elderly white and black males, whose lung cancer death rates have been stable and declining respectively, females age 65 years and older of both races exhibited upward trends in their lung cancer rates during the 1990s. For white females, the 2001 rate (233.6 per 100,000 population) was 33% higher than the corresponding 1990 rate (157.2). The rate for black females (258.8 per 100,000) was 55% higher than the 1990 rate (166.9).

- There are signs of success in the battle against lung cancer. At ages 35-64 years, white and black females, and white and black males all manifested declines in their lung cancer death rates during the 1990s. Declines were especially marked among black males in this age-group whose lung cancer death rates fell from 144 in 1990 to 77.9 in 2001, a decline of 46%. White females in that age-group showed the least change (46.3 per 100,000 in 1990 versus 38.6 in 2001), a decline of close to 17%. Comparison of 2001 age-specific lung cancer death rates to corresponding 1990 rates revealed a 25% decline among black females (to 36.6 per 100,000), and a 24% decline among white males (to 80.3 per 100,000).

- Other changes in time trends relative to causes of death are declines in heart disease death rates over time, from 316.1 in 1990 to 273.2 in 2001, both for white Tennesseans (321.9 vs. 291.0) and black Tennesseans (304.7 vs. 237.3).

- Diseases of the lower respiratory system, also referred to as COPD (chronic obstructive pulmonary disease) have increased as causes of death, from 38.5 in 1990 to 51.2 in 2001 (a change not attributable to changes in coding from ICD-9 to ICD-10). This increase affected only whites, whose death rates from COPD rose from 41.7 to 59.1 between 1990 and 2001. This increase contrasts with death rates from this cause among blacks, which fell somewhat over the period from 24.3 to 22.4 deaths per 100,000.

- Stroke and cancer death rates overall have remained flat over time, as have chronic liver disease and cirrhosis death rates. However, diabetes death rates have risen from 18.7 to 30.4 between 1990 and 2001, with increases for both whites (17.9 to 28.6) and blacks (24.3 vs 45.3).

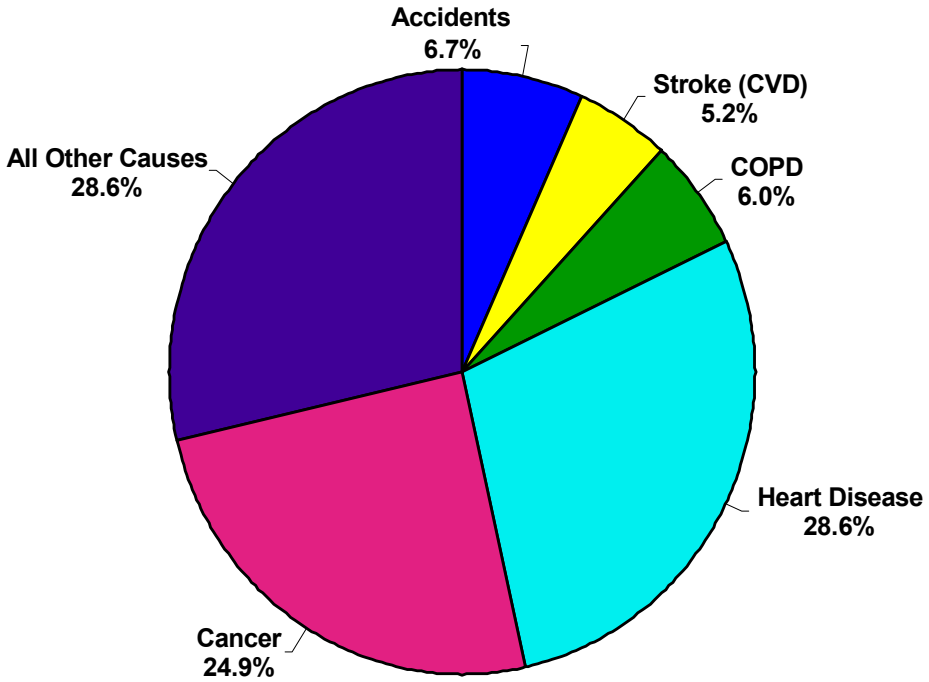
  - Increases in diabetes death rates have been especially dramatic among black males, whose rates rose from 16.9 in 1990 to 37.8 in 2001, a 124%

increase. Large increases are also observed for both black females and white males, with respective increases of 69% and 72% in diabetes death rates in the 11-year period. Diabetes death rates among the former rose from 30.7 to 51.9 and among the latter, from 15.9 to 27.4 between 1990 and 2001. The lowest percentage increase occurred among white females, whose diabetes death rates were 19.7 in 1990 and 29.7 in 2001, representing an increase of 51%.

It is important to note when examining causes of death over time that the transition from ICD-9 to ICD-10 coding systems in 1999 resulted in large jumps or falls in some death rates that may be due to coding changes and therefore may be artifactual. Examples are deaths from Alzheimerís disease and from influenza and pneumonia. The first appear to have increased from 1990 to 2001 overall by 208%, from 6.5 to 20 per 100,000. However, the big jump between 8.2 in 1998 and 17.2 in 1999 shows the impact of coding changes on the time-trend data. Similarly, death rates from influenza and pneumonia seem to have fallen from 34.8 to 28.2 between 1990 and 2001, but the largest decrease occurred between 1998 and 1999 when rates dropped from 41.2 in 1998 to 28.9 in 1999, due to coding changes. The impact may be seen more clearly by examining age-groups such as those 65 and older or infants. Using time trends from 1999 forward will obviate interpretation errors that may occur because of these changes.

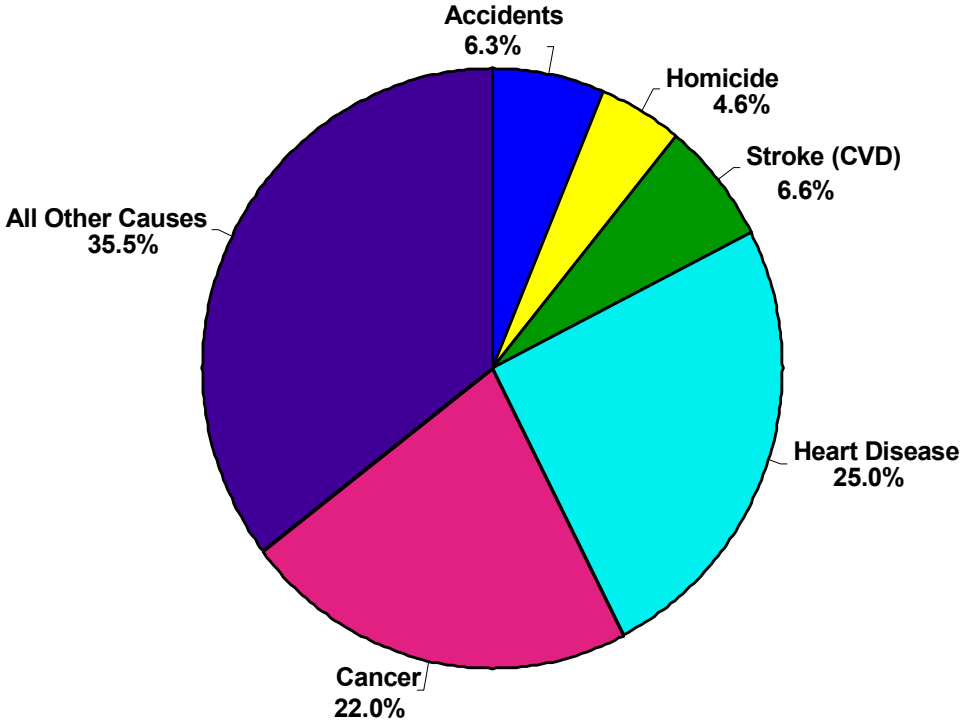
Source: Tennessee Department of Health, Office of Health Statistics and Research, and Health Information Tennessee (HIT) Web site (**www.tennessee.gov/hitspot**) under SPOT Mortality Rates and Infant Mortality Rates.

Top Five Leading Causes of Death among White Males, Ages 1-85+, Tennessee, 2001



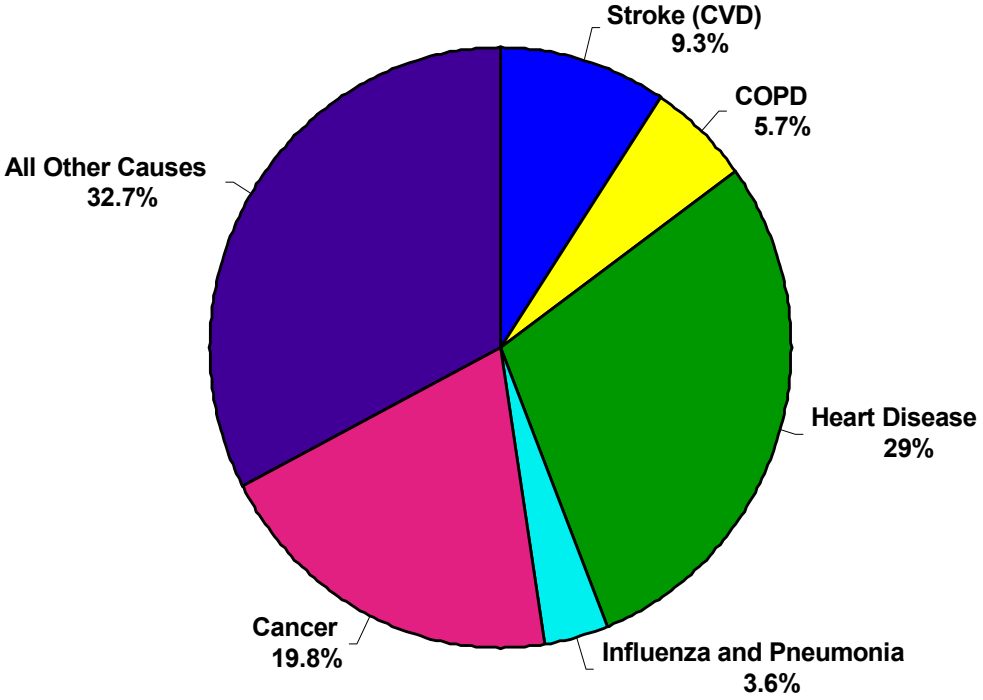
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot).

Top Five Leading Causes of Death among African-American Males, Ages 1-85+, Tennessee, 2001



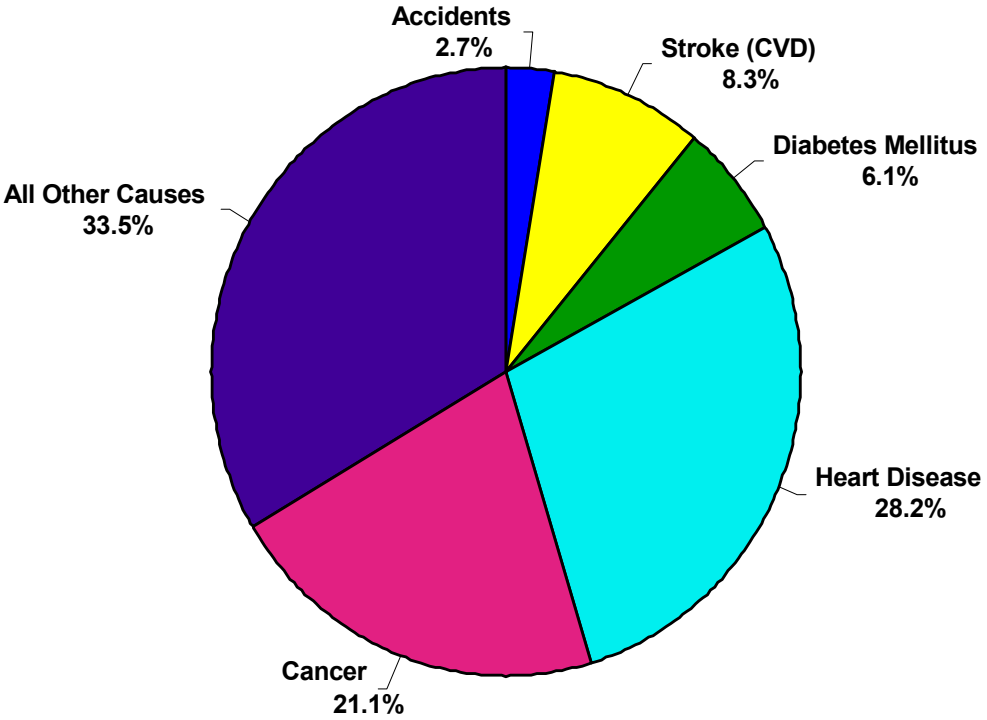
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot).

Top Five Leading Causes of Death among White Females, Ages 1-85+, Tennessee, 2001



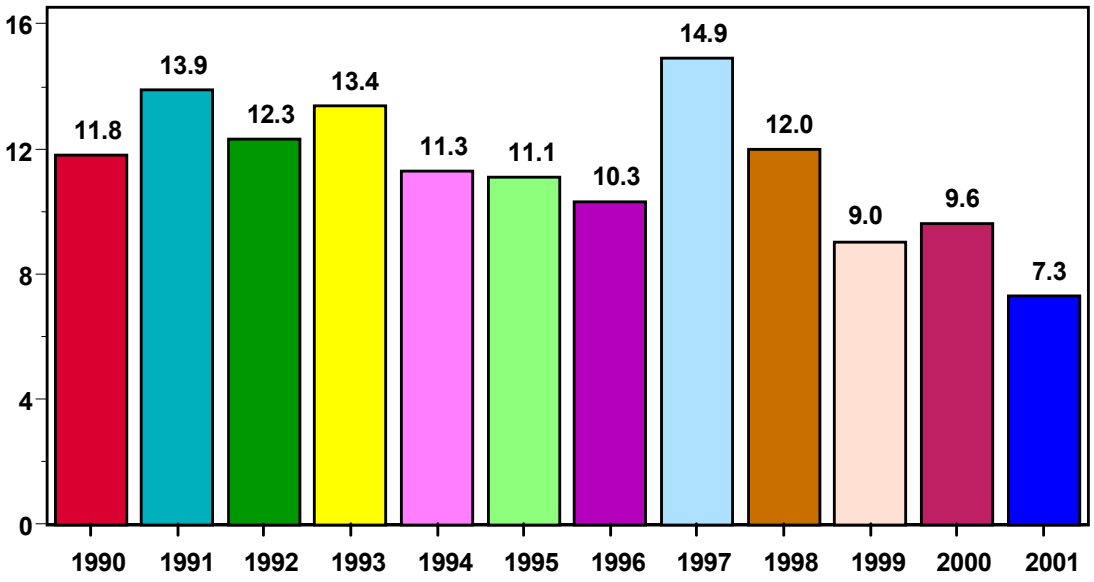
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Top Five Leading Causes of Death among African-American Females, Ages 1-85+, Tennessee, 2001



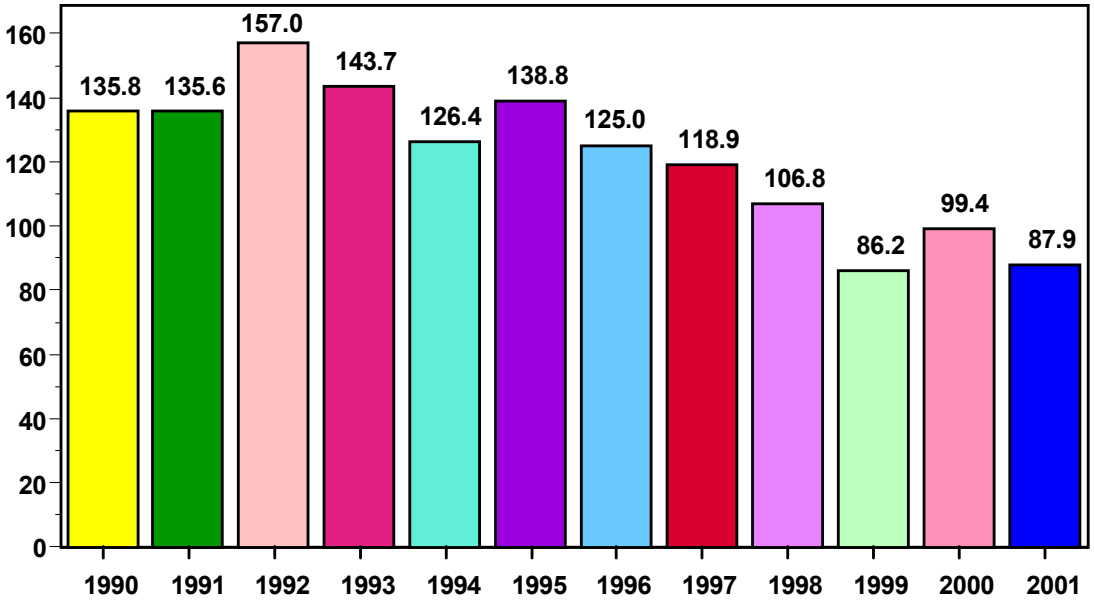
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Homicide Death Rates (per 100,000 Population) Among White Males, Ages 15-34, Tennessee, 1990-2001



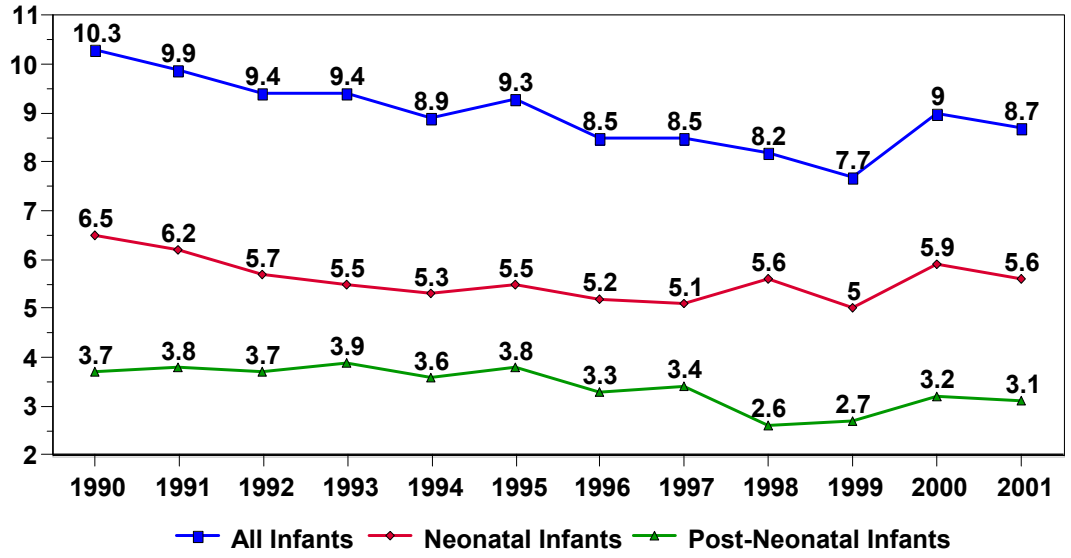
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Homicide Death Rates (per 100,000 Population) Among African-American Males, Ages 15-34, Tennessee, 1990-2001



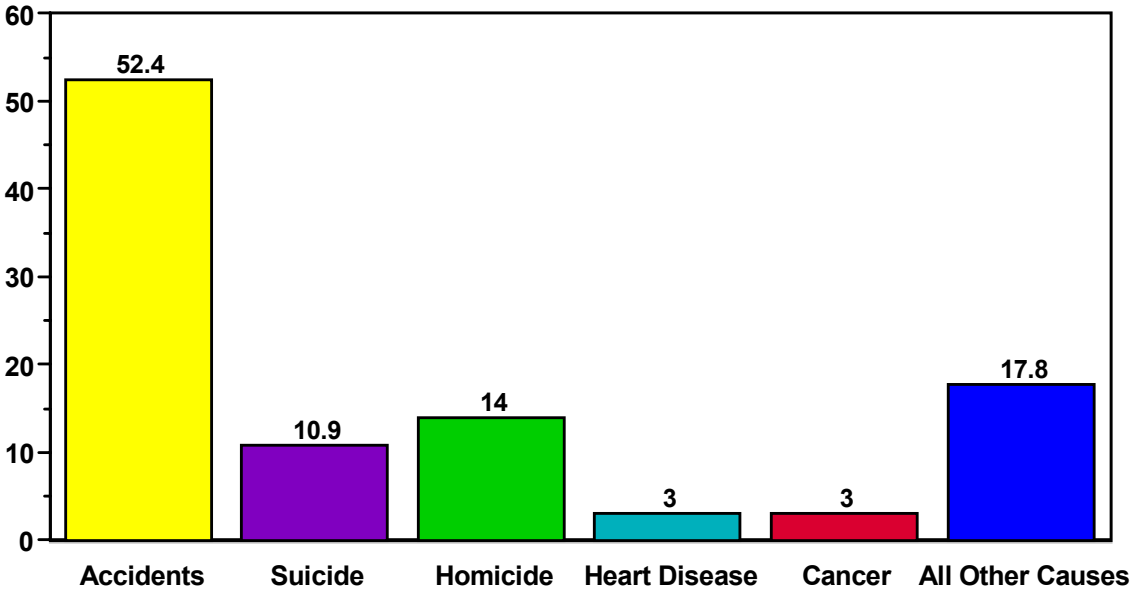
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Infant Deaths per 1,000 Live Births, Tennessee, 1990 - 2001



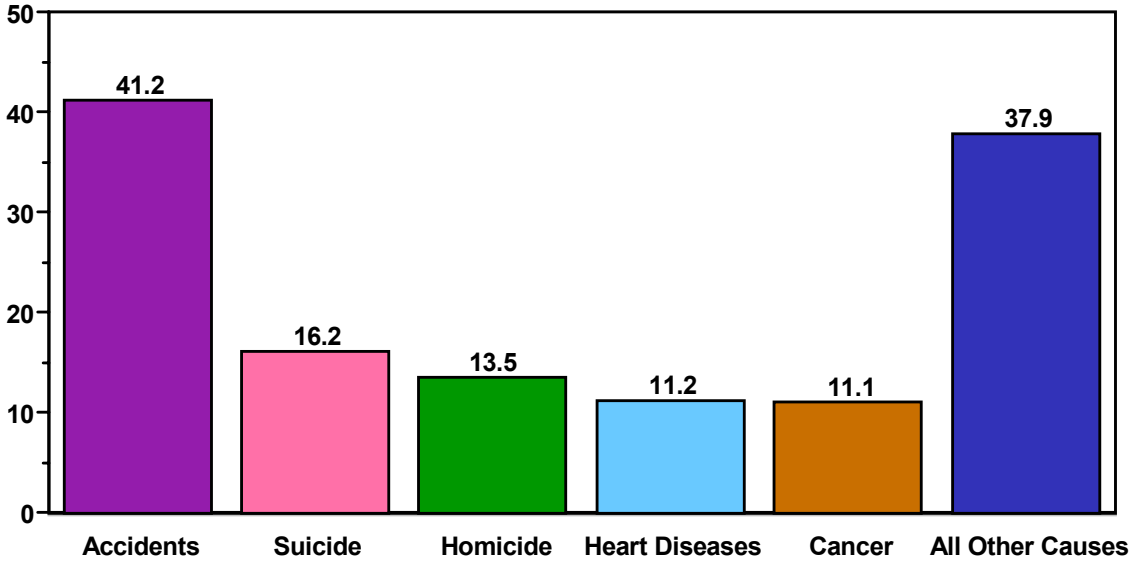
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Top Five Leading Causes of Death Among Young Adults, Ages 15-24, Tennessee, 2001[1]



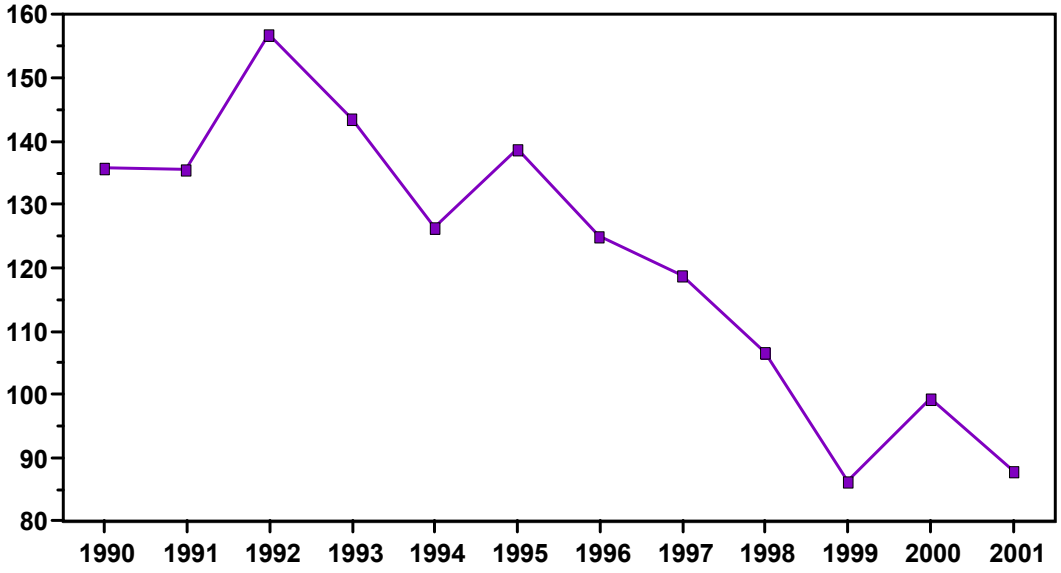
[1]Note: Death rates per 100,000 population are reported.
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Top Five Leading Causes of Death Among Young Adults, Ages 25-34, Tennessee, 2001[1]



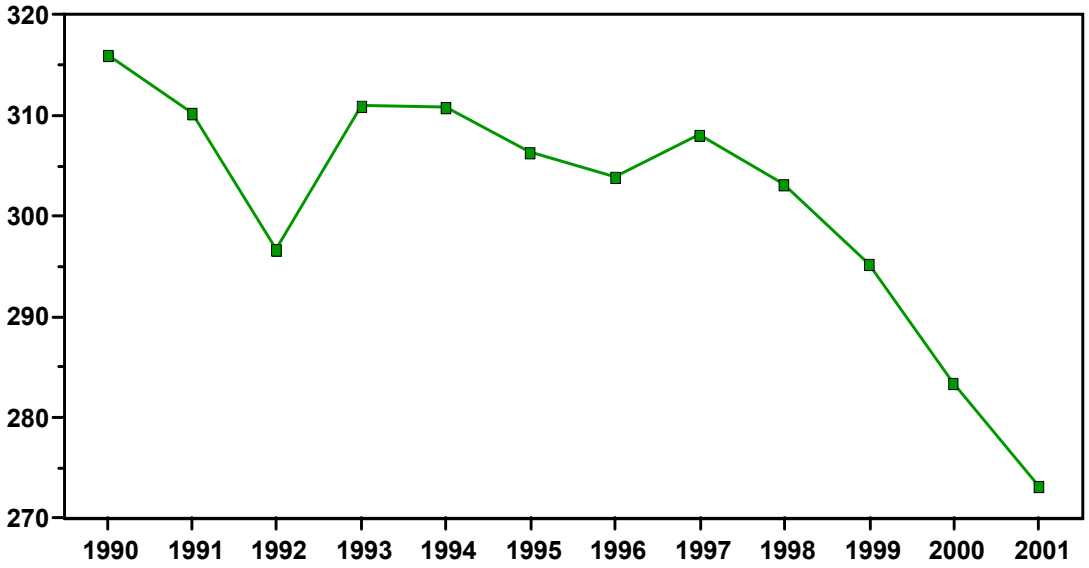
[1]Note: Death rates per 100,000 population are reported.
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Homicide Death Rates (per 100,000 Population) Among African-American Males, Ages 15-34, Tennessee, 1990-2001



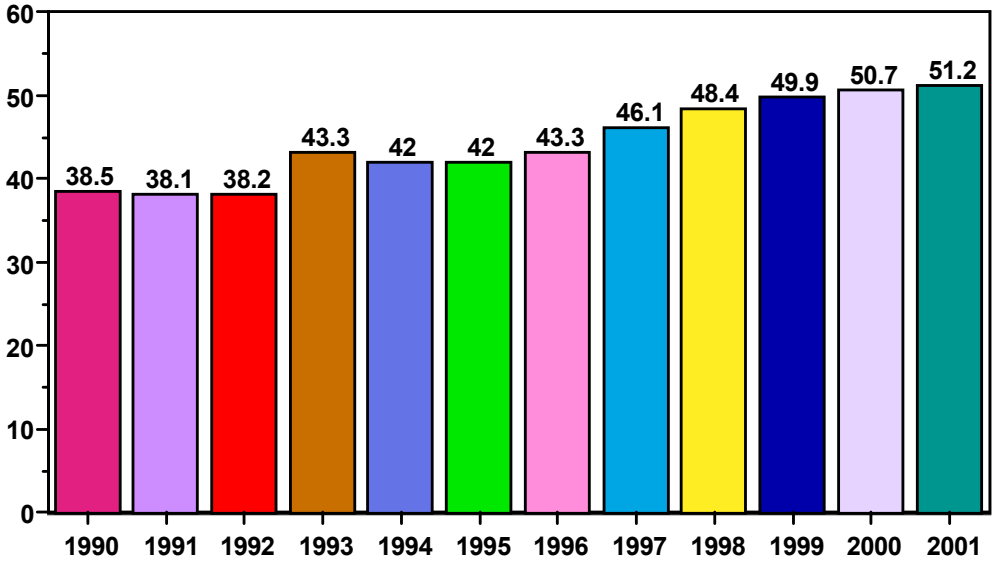
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Heart Disease Death Rates (per 100,000 Population), Tennessee, 1990-2001

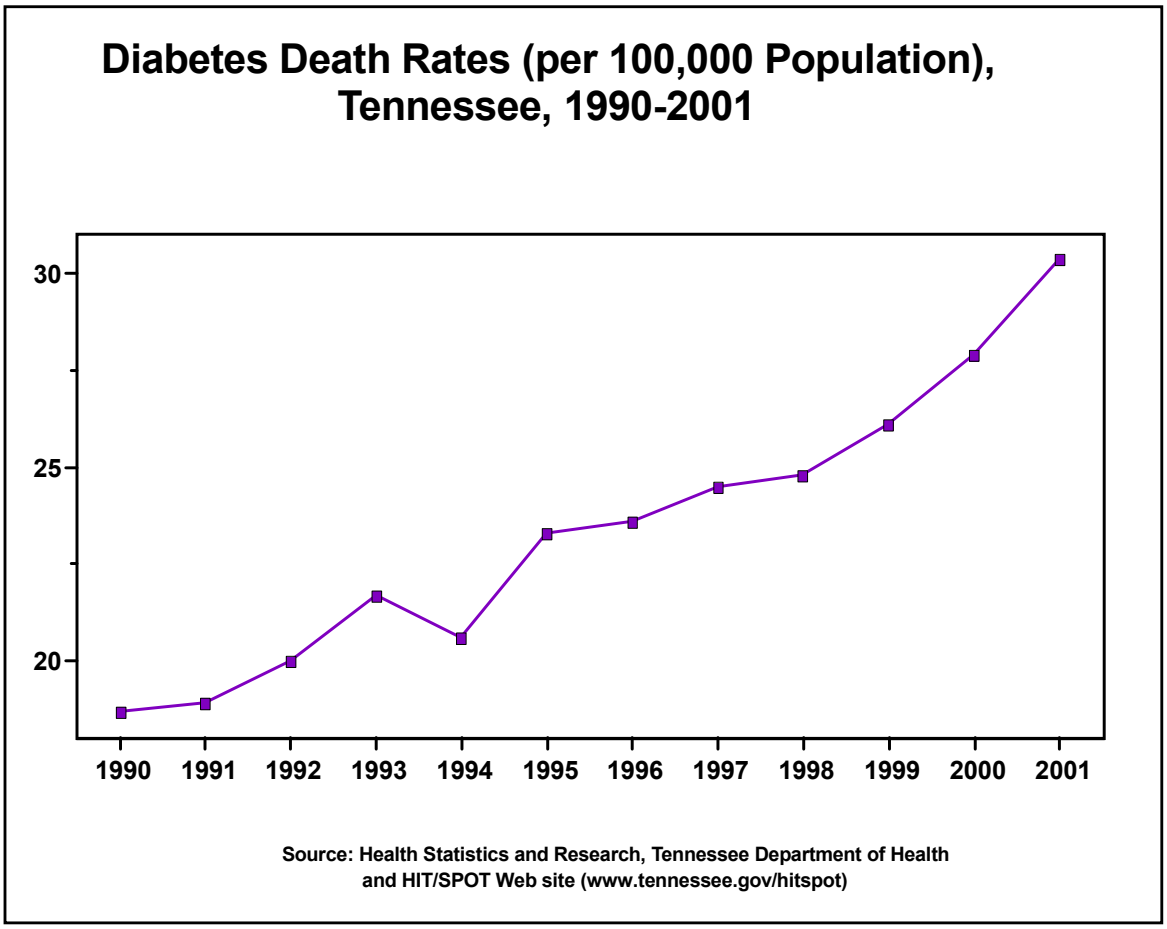


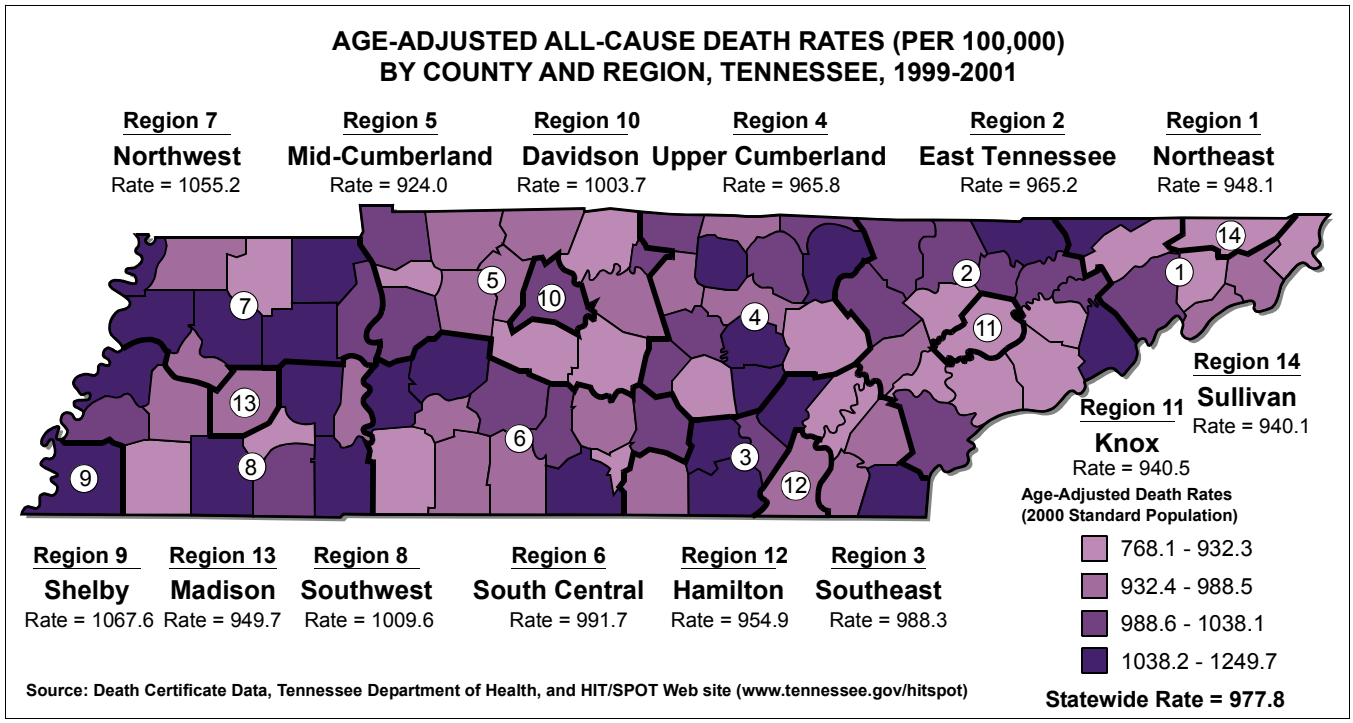
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

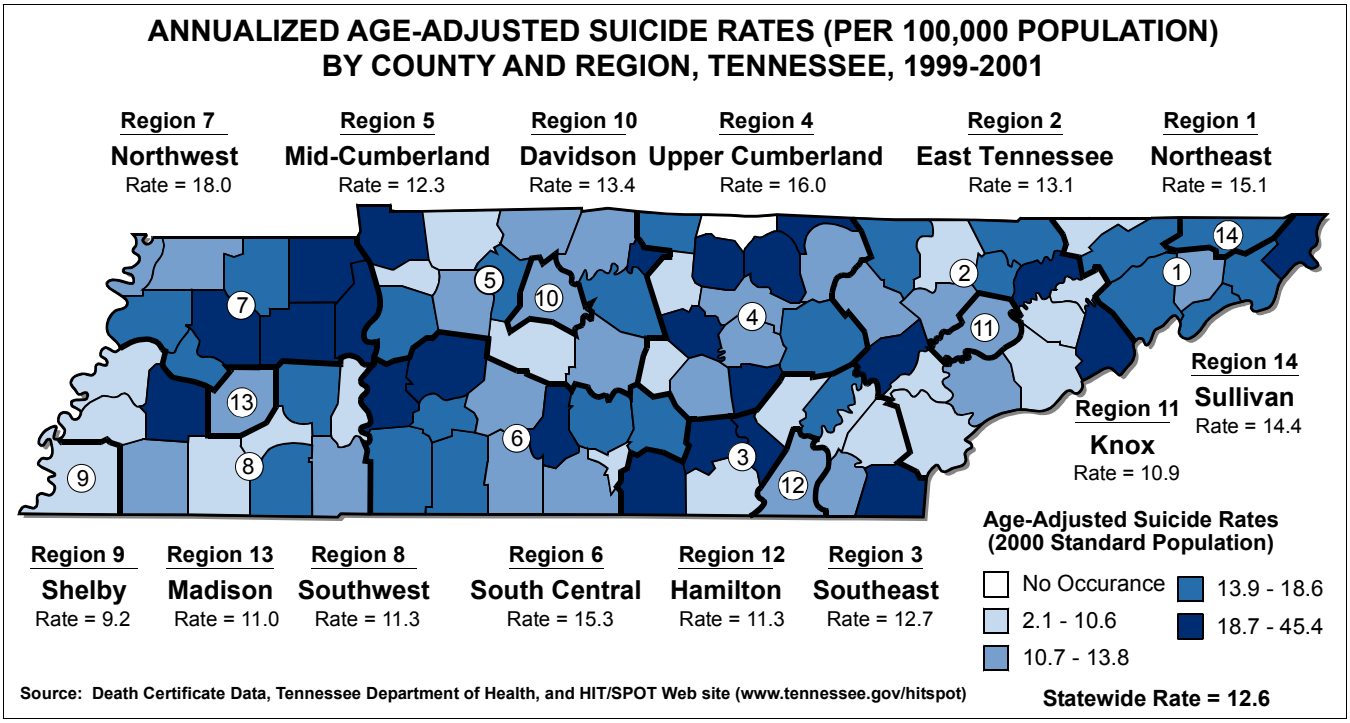
Chronic Lower Respiratory Disease (COPD) Death Rates (per 100,000 Population), Tennessee, 1990-2000

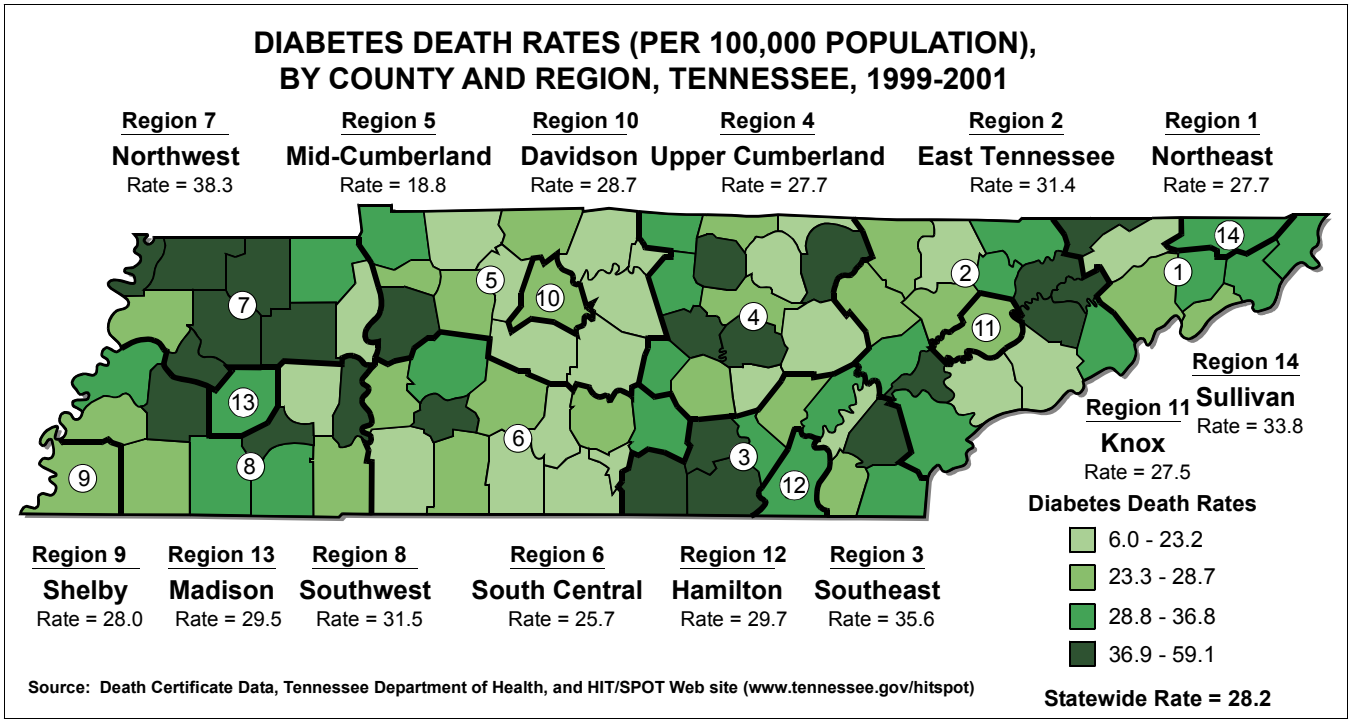


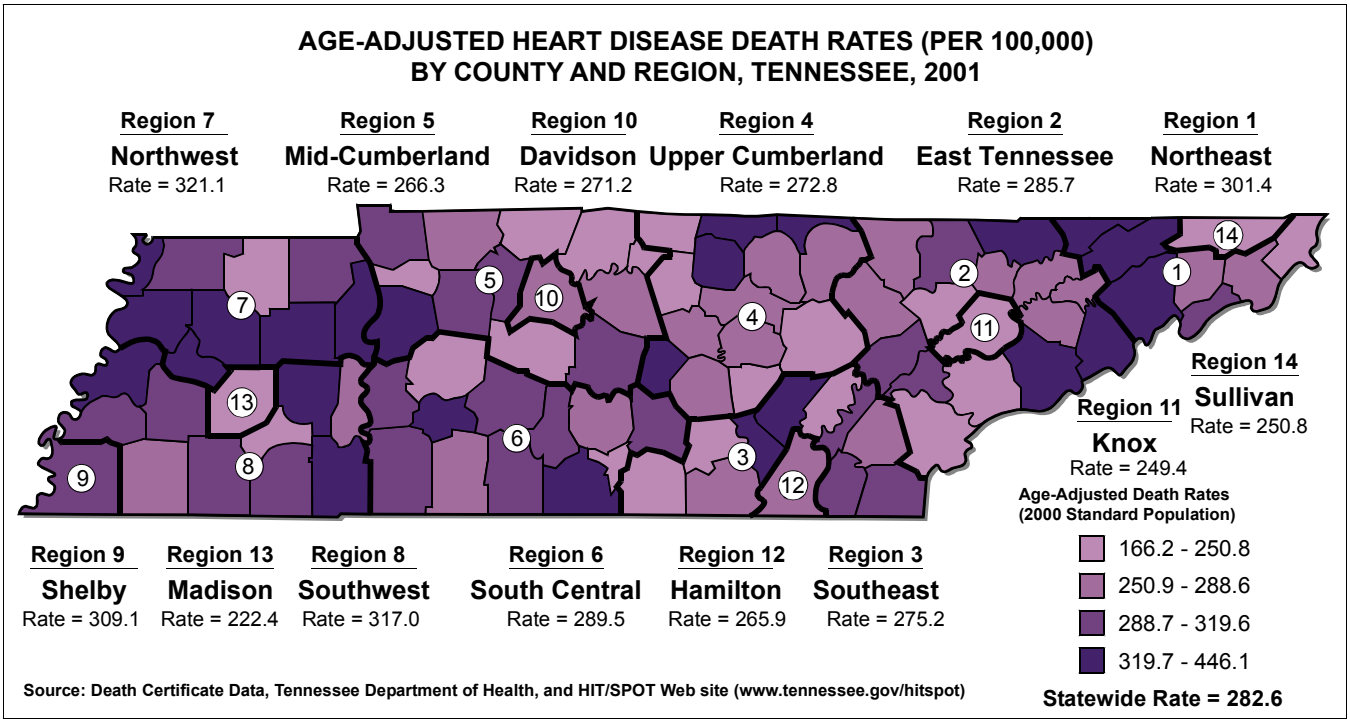
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

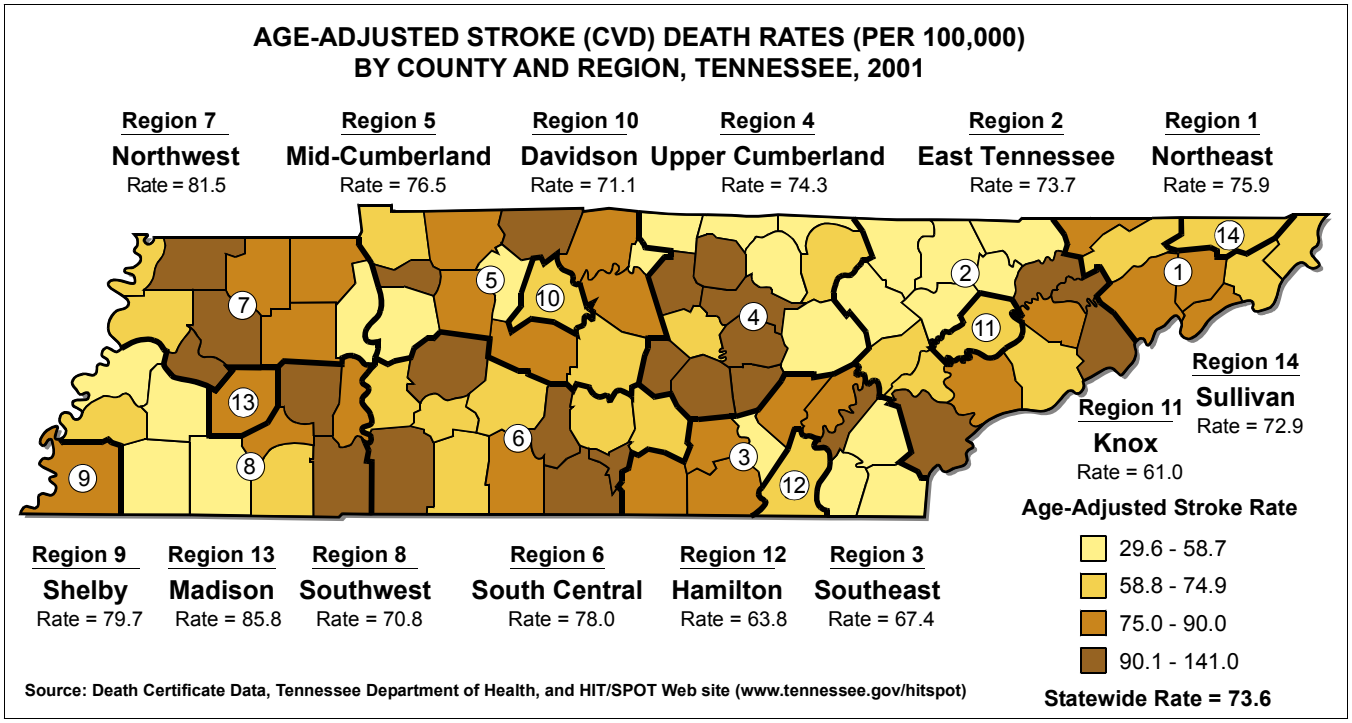

Diabetes Death Rates (per 100,000 Population), Tennessee, 1990-2001
30
25
20
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)


AGE-ADJUSTED ALL-CAUSE DEATH RATES (PER 100,000) BY COUNTY AND REGION, TENNESSEE, 1999-2001
Region 7
Northwest
Rate = 1055.2
Region 5
Mid-Cumberland
Rate = 924.0
Region 10
Davidson
Rate = 1003.7
Region 4
Upper Cumberland
Rate = 965.8
Region 2
East Tennessee
Rate = 965.2
Region 1
Northeast
Rate = 948.1
Region 14
Sullivan
Rate = 940.1
Region 11
Knox
Rate = 940.5
Region 9
Shelby
Rate = 1067.6
Region 13
Madison
Rate = 949.7
Region 8
Southwest
Rate = 1009.6
Region 6
South Central
Rate = 991.7
Region 12
Hamilton
Rate = 954.9
Region 3
Southeast
Rate = 988.3
Age-Adjusted Death Rates (2000 Standard Population)
768.1 - 932.3
932.4 - 988.5
988.6 - 1038.1
1038.2 - 1249.7
Statewide Rate = 977.8
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)


ANNUALIZED AGE-ADJUSTED SUICIDE RATES (PER 100,000 POPULATION)
BY COUNTY AND REGION, TENNESSEE, 1999-2001
Region 7
Northwest
Rate = 18.0
Region 5
Mid-Cumberland
Rate = 12.3
Region 10
Davidson
Rate = 13.4
Region 4
Upper Cumberland
Rate = 16.0
Region 2
East Tennessee
Rate = 13.1
Region 1
Northeast
Rate = 15.1
Region 14
Sullivan
Rate = 14.4
Region 11
Knox
Rate = 10.9
Region 9
Shelby
Rate = 9.2
Region 13
Madison
Rate = 11.0
Region 8
Southwest
Rate = 11.3
Region 6
South Central
Rate = 15.3
Region 12
Hamilton
Rate = 11.3
Region 3
Southeast
Rate = 12.7
Age-Adjusted Suicide Rates
(2000 Standard Population)
No Occurance
2.1 - 10.6
10.7 - 13.8
13.9 - 18.6
18.7 - 45.4
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)
Statewide Rate = 12.6


DIABETES DEATH RATES (PER 100,000 POPULATION),
BY COUNTY AND REGION, TENNESSEE, 1999-2001
Region 7
Northwest
Rate = 38.3
Region 5
Mid-Cumberland
Rate = 18.8
Region 10
Davidson
Rate = 28.7
Region 4
Upper Cumberland
Rate = 27.7
Region 2
East Tennessee
Rate = 31.4
Region 1
Northeast
Rate = 27.7
Region 14
Sullivan
Rate = 33.8
Region 11
Knox
Rate = 27.5
Region 9
Shelby
Rate = 28.0
Region 13
Madison
Rate = 29.5
Region 8
Southwest
Rate = 31.5
Region 6
South Central
Rate = 25.7
Region 12
Hamilton
Rate = 29.7
Region 3
Southeast
Rate = 35.6
Diabetes Death Rates
6.0 - 23.2
23.3 - 28.7
28.8 - 36.8
36.9 - 59.1
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)
Statewide Rate = 28.2


AGE-ADJUSTED HEART DISEASE DEATH RATES (PER 100,000)
BY COUNTY AND REGION, TENNESSEE, 2001
Region 7
Northwest
Rate = 321.1
Region 5
Mid-Cumberland
Rate = 266.3
Region 10
Davidson
Rate = 271.2
Region 4
Upper Cumberland
Rate = 272.8
Region 2
East Tennessee
Rate = 285.7
Region 1
Northeast
Rate = 301.4
Region 14
Sullivan
Rate = 250.8
Region 11
Knox
Rate = 249.4
Region 9
Shelby
Rate = 309.1
Region 13
Madison
Rate = 222.4
Region 8
Southwest
Rate = 317.0
Region 6
South Central
Rate = 289.5
Region 12
Hamilton
Rate = 265.9
Region 3
Southeast
Rate = 275.2
Age-Adjusted Death Rates
(2000 Standard Population)
166.2 - 250.8
250.9 - 288.6
288.7 - 319.6
319.7 - 446.1
Statewide Rate = 282.6
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)


AGE-ADJUSTED STROKE (CVD) DEATH RATES (PER 100,000)
BY COUNTY AND REGION, TENNESSEE, 2001
Region 7
Northwest
Rate = 81.5
Region 5
Mid-Cumberland
Rate = 76.5
Region 10
Davidson
Rate = 71.1
Region 4
Upper Cumberland
Rate = 74.3
Region 2
East Tennessee
Rate = 73.7
Region 1
Northeast
Rate = 75.9
Region 14
Sullivan
Rate = 72.9
Region 11
Knox
Rate = 61.0
Region 9
Shelby
Rate = 79.7
Region 13
Madison
Rate = 85.8
Region 8
Southwest
Rate = 70.8
Region 6
South Central
Rate = 78.0
Region 12
Hamilton
Rate = 63.8
Region 3
Southeast
Rate = 67.4
Age-Adjusted Stroke Rate
29.6 - 58.7
58.8 - 74.9
75.0 - 90.0
90.1 - 141.0
Statewide Rate = 73.6
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

PROFILING HEART DISEASE AND STROKE IN TENNESSEE AS LEADING CAUSES OF DEATH

- In 2001, heart disease[5] was the leading cause of death and stroke the third leading cause in Tennessee. Thus, 28.4% of 2001 deaths in Tennessee were due to diseases of the heart; 22.2% were due to malignant neoplasms or cancer; and cerebrovascular disease or stroke accounted for 7.3% of deaths.

- Heart disease death rates have declined in Tennessee, from 316.1 deaths per 100,000 in 1990 to 273.2 in 2001. All age-groups experienced the decline in heart disease death rates over the past 10 years, with the exception of those 18-39 years of age, for whom already low rates increased slightly. The largest decline in heart disease death rates occurred in the 65 and over age-group, and particularly among those aged 65-74 years.

- Age-adjusted death rates from heart disease based on the year 2000 standard million population show that blacks had substantially higher heart disease death rates than whites in 2001. Blacks' rates were 350.2 per 100,000, compared to 276.7 for whites.

- Age-adjusted heart disease death rates for Tennessee for 2001 show that males had higher heart disease death rates (351.2 per 100,000) than females (232.4 per 100,000).

- By gender and by race, black males had by far the highest age-adjusted heart disease death rates at 423.0 per 100,000, followed by white males at 346.8 and black females at 300.5. White females exhibited the lowest heart disease death rates at 225.1 deaths per 100,000 population.

- Heart disease death rates were very low for other races ñ at 47.4 per 100,000 overall, with lower rates for females than males at 35.7, compared to 63.9. Other races were mainly Hispanics in Tennessee, and their population is transient, with a young age structure.

- Overall, age-adjusted heart disease death rates for 2001 for nonmetropolitan and metropolitan regions of Tennessee were 287.4 and 275.6, respectively, compared to the age-adjusted rate of 282.6 for the state as a whole.

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[5]Diseases of the heart include ICD-10 codes, I00-I09, I11, I13, and I-20 through I-51. See Mortality Rates under SPOT at www.tennessee.gov/hitspot for data source.

- Three-year-averaged[6] heart disease death rates from 1999-2001 were highest in the Northwest Region of Tennessee at 337.4, followed by Shelby County at 331.8. The lowest regional rates for age-adjusted heart disease death rates were in Sullivan County at 244.1 and Madison County at 247.4.

- Counties with the highest age-adjusted heart disease death rates from 1999-2001 were Lauderdale, Lake, Pickett, Claiborne, and Carroll, while Houston, Williamson, Moore, Johnson and Chester Counties had the lowest heart disease death rates for the period.

- Heart disease morbidity data come from the 1998 Adult Health and Lifestyles Survey of 11,000 adults conducted by CHRG for TDH at the county level. These survey data[7] suggests that 10.1% of Tennesseans age 18 and over who participated in the survey had ever been diagnosed with heart disease, while 3.4% had been diagnosed within the past 12 months. The lifetime prevalence of heart disease in 1 in 10 Tennessee adults in 1998 compares to a lifetime prevalence of cancer in the survey respondents of 6.2% and of stroke at 1.9%. The past year prevalence of cancer and stroke was 1.4% and 0.3%, respectively.

- In general, lifetime heart disease prevalence rates were higher in nonmetropolitan than metropolitan regions. Thus, 11.2% of adults surveyed from nonmetropolitan, compared to 8.7% from metropolitan regions of Tennessee, reported ever having been diagnosed with heart disease.

- The regions with the highest lifetime prevalence of heart disease based on the survey were Northeast Tennessee at 13.8%, and Northwest and Sullivan at 12.9% each. The lowest regional lifetime prevalence rates were in Hamilton, Madison and Davidson Counties at 5.7% , 6.3%, and 6.4%, respectively.

- The lifetime prevalence of heart disease from the survey was highest in McNairy County (20.6%), Pickett County (20.5%), Jackson County (19.8%), Humphreys County (19.3%), and Campbell County (18%). The lowest lifetime prevalence rates of heart disease were reported for Rutherford County (2.8%), Tipton County (5.5%), Sequatchie County (5.6%), Hamilton County (5.7%) and Hawkins County (6.2%).

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[6] Three-year averaging eliminates some instability in rates attributable to small numbers of deaths in some counties, while age-adjustment reduces differences attributable to younger or older age structures in population subgroups, especially racial groups.

[7] These data are weighted.

- Subgroups in the population differed in some ways in self-reported heart disease prevalence[8]. While lifetime prevalence of heart disease in the survey was the same among females and males - 14.3% and 14%, respectively - differences by race were observed. Thus, a higher percentage of whites from the survey reported ever having been diagnosed with heart disease,14.2%, compared to 11.5% of blacks.

- Poverty, defined as having an annual household income of less than $15,000, substantially increased the risk of heart disease among Tennessee adults in 1998. Poverty was especially salient in higher rates of heart disease among senior black adults age 65 and over.

  - About three times the percentage of poor as non-poor whites and blacks reported heart disease (poor whites - 24.5% vs. non-poor whites - 10%; poor blacks - 20.1% vs. non-poor blacks - 7.7%).

  - Age was the great leveler here, however. In the 65 and over age-group, where heart disease was reported at similar levels regardless of race (by about 30-31% of both blacks and whites), 35-36% of those who were poor, compared to 23-25% of those who were not poor, reported heart disease.

- In 2001, the major components of heart disease mortality were ischemic heart disease (at a rate of 215.2 per 100,000), including death rates from acute myocardial infarction (MI) at a rate of 94, and other forms of chronic ischemic heart disease at 120.9. The larger category of other heart diseases (besides ischemic heart disease) occurred at a rate of 47.8 per 100,000, with heart failure at 9.3. Hypertensive heart disease death rates were observed at 16.2 per 100,000 in 2001.

- Deaths from diseases of the circulatory system encompass both heart disease and stroke deaths. Death rates for this general category of diseases were 383.7 per 100,000 in 2001, with rates of 376.4 and 388.9, respectively, for metropolitan and nonmetropolitan areas.

- Cerebrovascular disease (CVD) or stroke mortality declined between 1990 and 2001 in Tennessee by 10.5%, from 82.2 to 73.6 per 100,000.

- Stroke death rates were slightly higher in nonmetropolitan than metropolitan areas - at 75 and 71.7 per 100,000, respectively.

- Deaths from stroke differed by race in 2001, with 100.6 for blacks, 70.8 for whites and 20.5 for other races; however, there were no differences by gender overall, with rates of 72.9 for females and 73.0 for males.

  - Breaking down the data further, however, gender differences emerged among blacks but not whites for stroke mortality in 2001. Thus, rates for

[8] These data are unweighted, and therefore differ from those aggregated data previously reported.

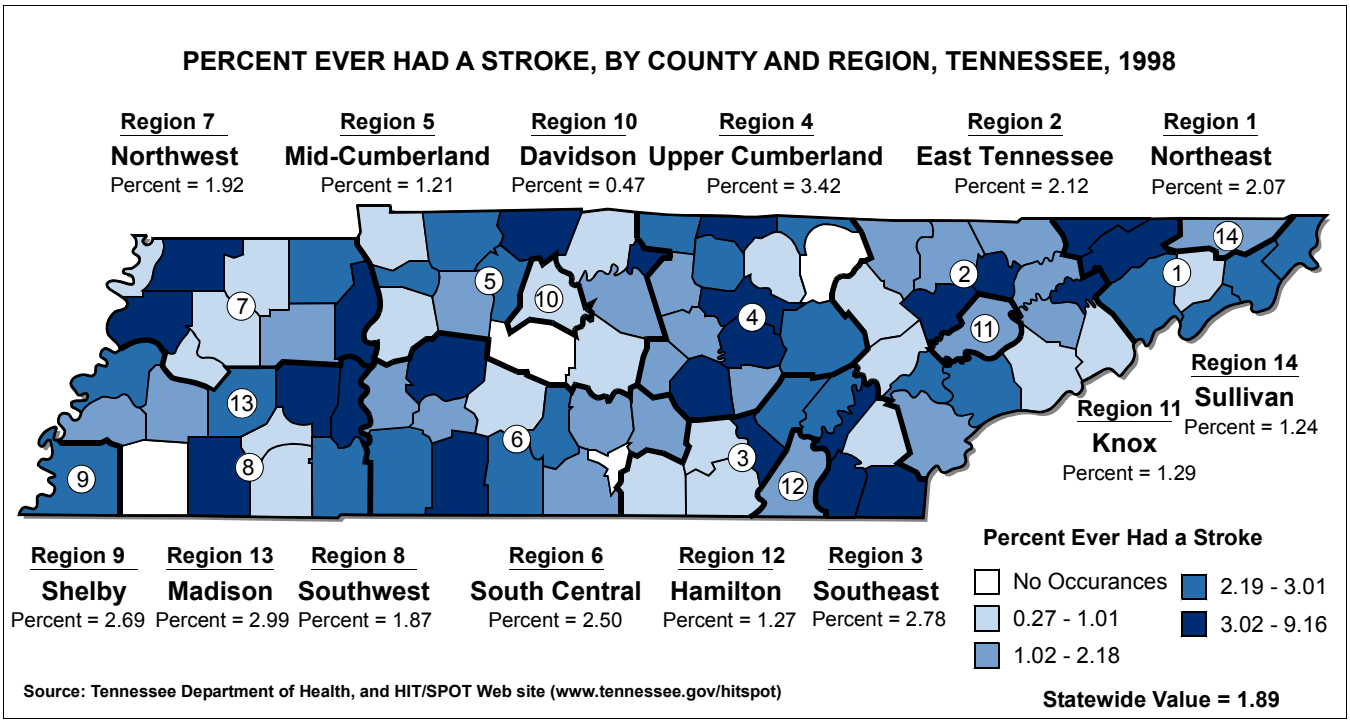
black males were 118.0, compared to 88.3 among black females; among white males and females, rates were 68.7 and 71.3, respectively.

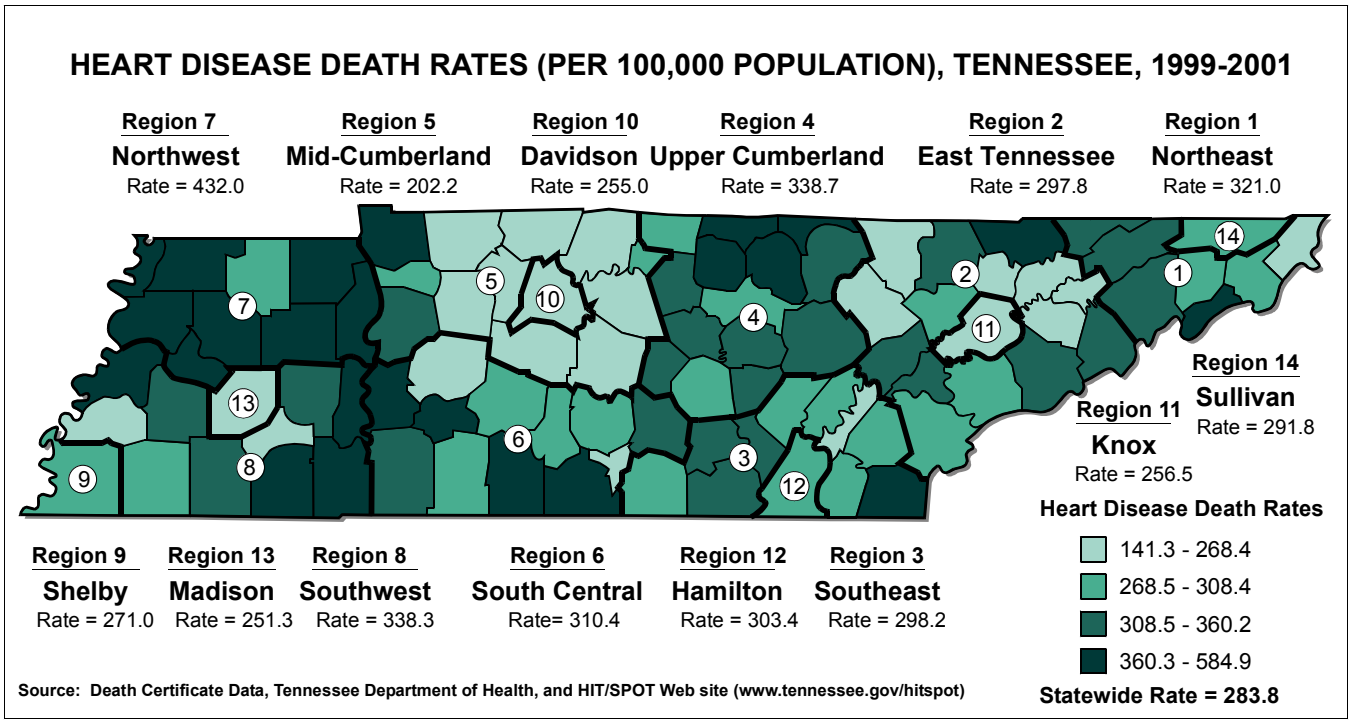
- Counties with the highest prevalence of stroke deaths in 1999-2001 were Henderson, Hardin and Hamblen (185.0, 119.8 and 117.3, respectively), while lowest stroke mortality was observed in Humphreys, Pickett and Lewis counties at 43, 39.5, and 38.9, respectively.

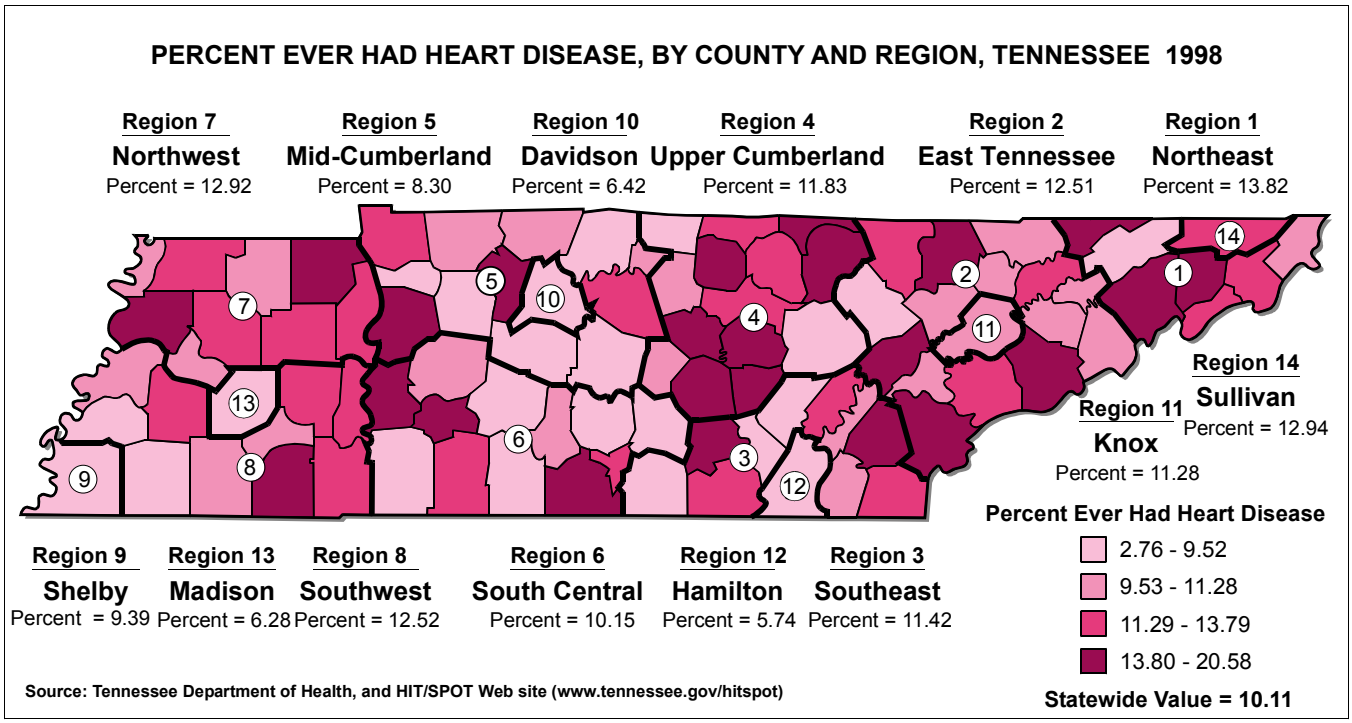
- The TDH regions with the highest and lowest stroke mortality rates were all metropolitan counties - namely, Madison (86.9) and Shelby (82.8) with the highest rates and Knox (57.3) and Hamilton with the lowest (64.7).

- Based on weighted data from the 1998 adult survey, 1.9% of adults reported ever having been diagnosed with or treated for a stroke (weighted data), with 3%, the unweighted prevalence rate. Again using unweighted data, by race, 2.8% of blacks and 3% of whites reported stroke, as did 1.8% of Hispanics, while 3.2% of females and 2.6% of males did so. Black males (3%) were second to white females (3.3%) in stroke prevalence, while black females (2.7%) and white males (2.5%) had lower rates.

- Finally, poverty makes a difference in lifetime prevalence of stroke, along with race and gender. The highest rates of stroke were observed among the poor, with 6.6% of white females who were poor reporting stroke, followed by 5.3% of black males in poverty , and 4.7% and 4.6% of white males and black females who were poor, respectively. By contrast, among the non-poor, the highest stroke rates were reported by black males (2.6%), followed by black females (2%), white males (1.9%), and white females (1.6%).


PERCENT EVER HAD A STROKE, BY COUNTY AND REGION, TENNESSEE, 1998
Region 7
Northwest
Percent = 1.92
Region 5
Mid-Cumberland
Percent = 1.21
Region 10
Davidson
Percent = 0.47
Region 4
Upper Cumberland
Percent = 3.42
Region 2
East Tennessee
Percent = 2.12
Region 1
Northeast
Percent = 2.07
Region 14
Sullivan
Percent = 1.24
Region 11
Knox
Percent = 1.29
Region 9
Shelby
Percent = 2.69
Region 13
Madison
Percent = 2.99
Region 8
Southwest
Percent = 1.87
Region 6
South Central
Percent = 2.50
Region 12
Hamilton
Percent = 1.27
Region 3
Southeast
Percent = 2.78
Percent Ever Had a Stroke
No Occurances
0.27 - 1.01
1.02 - 2.18
2.19 - 3.01
3.02 - 9.16
Source: Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)
Statewide Value = 1.89


HEART DISEASE DEATH RATES (PER 100,000 POPULATION), TENNESSEE, 1999-2001
Region 7
Northwest
Rate = 432.0
Region 5
Mid-Cumberland
Rate = 202.2
Region 10
Davidson
Rate = 255.0
Region 4
Upper Cumberland
Rate = 338.7
Region 2
East Tennessee
Rate = 297.8
Region 1
Northeast
Rate = 321.0
Region 14
Sullivan
Rate = 291.8
Region 11
Knox
Rate = 256.5
Region 9
Shelby
Rate = 271.0
Region 13
Madison
Rate = 251.3
Region 8
Southwest
Rate = 338.3
Region 6
South Central
Rate= 310.4
Region 12
Hamilton
Rate = 303.4
Region 3
Southeast
Rate = 298.2
Heart Disease Death Rates
141.3 - 268.4
268.5 - 308.4
308.5 - 360.2
360.3 - 584.9
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)
Statewide Rate = 283.8


PERCENT EVER HAD HEART DISEASE, BY COUNTY AND REGION, TENNESSEE 1998
Region 7
Northwest
Percent = 12.92
Region 5
Mid-Cumberland
Percent = 8.30
Region 10
Davidson
Percent = 6.42
Region 4
Upper Cumberland
Percent = 11.83
Region 2
East Tennessee
Percent = 12.51
Region 1
Northeast
Percent = 13.82
Region 14
Sullivan
Percent = 12.94
Region 11
Knox
Percent = 11.28
Region 9
Shelby
Percent = 9.39
Region 13
Madison
Percent = 6.28
Region 8
Southwest
Percent = 12.52
Region 6
South Central
Percent = 10.15
Region 12
Hamilton
Percent = 5.74
Region 3
Southeast
Percent = 11.42
Percent Ever Had Heart Disease
2.76 - 9.52
9.53 - 11.28
11.29 - 13.79
13.80 - 20.58
Statewide Value = 10.11
Source: Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

CHILDRENíS HEALTH AND WELL-BEING IN TENNESSEE

The TNKIDS Initiative

The TNKIDS Initiative has been an effort to better coordinate and improve services for children. The goal was to give all children the opportunity to be successful in life by offering a safe, healthy start and an excellent education. Collaborating within State government to accomplish this goal were the Departments of Health, Childrenís Services, Human Services, Education, Mental Health and Developmental Disabilities, as well as the Commission on Children and Youth, and the Council of Juvenile and Family Court Judges. The TNKIDS component of the Health Information Tennessee Web site has been one of the ways in which information sharing and exchange across State agencies could respond to and support the challenge to offer every child in the State a safe, healthy start and an excellent education.

The TNKIDS departments worked with the Community Health Research Group (CHRG) to establish the TNKIDS component of the Health Information Tennessee (HIT) Web site (www.tennessee.gov/hitspot). This Web site, using innovative interactive programming, contains:

- State and county health-related data
- Tennessee Kids Count reports
- Links to National Kids Count data
- Information similar to Kids Count data from the departments participating in the TNKIDS Initiative
- County and census tract mapping of geocoded information
- Extensive data specific to particular departments, including education and safety.

Some of the critical issues for children's health and well-being are addressed on HIT TNKIDS and will be summarized here.

Children in Poverty in Tennessee

- The percentage of children aged 0-17 at or below poverty level declined between 1990 and 2000, according to the U.S. Census, by 14.3%, from 21% in 1990 to 18% in 2000. Based on Census figures, 247,397 children and youth aged 0-17 were at or below poverty level in Tennessee in 2000.

  - In the 2000 Census, metropolitan regions of Tennessee showed higher child poverty rates than nonmetropolitan regions, at 20% and 16.5%, respectively. Tennessee health planning regions with the highest child poverty rates in 2000 were Shelby County (23.2%), followed by Northeast and Southwest Tennessee at 20.4% each, while the lowest rates were observed for the Mid-Cumberland Region (9.9%), followed by Knox County (14.9%).

- Tennessee counties with the highest percentages of children at or below poverty level were Hancock (37.7%), Lake (35.7%), and Campbell (32.4%) Counties, while Williamson (5.6%), Wilson (8.2%), and Cheatham (8.3%) Counties had the lowest percentages of children at or below poverty level at the latest census count.

- Based on proxy measures of poverty from state databases, there were declines in the percentages of children and youth receiving public assistance program services in Tennessee from 1996-2001.

  - One proxy measure of poverty is the percent of children from birth through age 17 receiving food stamps. Since 1996, this percentage has declined by 18.7%, from 21.4% to 17.4% in 2000. This decline is less than the 23.5% decline in the percent of the population of all ages receiving food stamps, from 11.9% in 1996 to 9.1% in 2000. Of those receiving food stamps in 2000 in Tennessee, about half (47%) were children and youth aged 0-17.

  - In 2000, counties with the highest percentage of children receiving food stamps were Hancock County (35.5%), Scott County (32.5%), Lake County (31%), and Grundy County (30.2%). Those with the lowest prevalence of children receiving food stamps were Wilson, Cheatham, and Williamson Counties, at 6.2%, 5.9%, and 2.2%, respectively.

- That child poverty may have been decreasing in Tennessee is also evident from the fact that the percentage of children aged 0-17 receiving Families First grant payments (formerly AFDC) declined from 13.4% in 1996 to 7.9% in 2000, an overall decline of 41%. In 1992, the rate was 13.8%.

  - Shelby, Hancock, and Davidson Counties had the highest percentage of children receiving Families First grant payments in 2000, at 18%, 13.2% and 11.8%, respectively. The lowest percentages were observed for Williamson, Cheatham and Wilson Counties, at 0.7%, 1.4%, and 1.9%, respectively.

- Another measure indicative of child poverty is the percentage of children aged 0-13 years enrolled in TennCare, Tennessee's Medicaid waiver program. This figure was 36.9% in 1997 and 40.4% in 2000 (data are not available for earlier years), suggesting some slight increase in TennCare coverage of children in Tennessee. Increases were also noted in the percentage of the population of all ages enrolled in TennCare from 22.9% in 1997 to 25.1% in 2000, an increase of 9.6%.

- Counties with the highest percentage of children aged 0-13 enrolled in TennCare in 2000 were in the eastern part of the State in East Tennessee in Hancock (68.7%), Fentress (65.5%), and Scott (64.7%) Counties.

- The percentage of all TennCare enrollees represented by children was 31.7% in 1997, 31.9% in 1998, 30.3% in 1999, and 30.8% in 2000.

- Like poverty, educational attainment among youth in Tennessee increased during the period studied here, between 1996 and 2000. Looking at school dropout cohort rates in 1996 compared to 2000, 16.2% of 9th grade students in Tennessee failed to finish 12th grade, compared to 14.2% in 2000. This represents a decline of 12.3% over the 5-year period.

- Data from the 1990 and 2000 Censuses show that 13.4% of Tennesseans aged 16-19 were high school dropouts in 1990, and 9.7% were dropouts in 2000. This represents a decline of 27.6% over the decade in this educational attainment measure.

  - According to the 2000 Census data, metropolitan regions had higher school dropout rates than nonmetropolitan regions at 10.9% versus 8.7%, respectively. Of TDH planning regions, Davidson and Shelby Counties were regions with the highest dropout rates, at 13.6% and 11.6%, respectively, while the South Central Regions followed with a rate of 11.2%. The lowest prevalence of dropout among 16-19 year olds in 2000 was in Knox County (6.4%) and Mid-Cumberland Tennessee (7.3%).

  - Counties with the highest school dropout rates according to this census measure were Lake (22%), Bedford (21.4%), and Johnson (18%) Counties, while the lowest dropout rates were observed for Houston (1.1%), Anderson (3.4%) and Williamson (3.8%) Counties.

Childrenís Health in Tennessee

Some critical measures of childrenís health and well-being have been improving in Tennessee. These include child death rates, teenage pregnancy and birth rates and child abuse and neglect rates.

- The child death rate (deaths per 100,000 persons aged 1-14 years) has been declining steadily in Tennessee since 1990, from 35.3 per 100,000 and 31.3 in 1992 to 22.6 in 2001. This amounts to a 36% decline overall.

- Birth rates among 15-17 year olds have also declined evenly from 1990 to 2001 by 31.2% (from 42.5 births per 1,000 females aged 15-17 years to 29.2 per 1,000, respectively), while adolescent birth rates have declined even more (by 33.9%). Adolescent birth rates declined from 17.7 per 1,000 females aged 10-17 to 11.7 per 1,000 in the period from 1990 to 2001.

- Rates of teenage pregnancy have declined dramatically, by 32.9% since 1992, from 55.6 per 1,000 females aged 15-17 to 37.3 in 2001. Details are provided in the relevant section of this report.

- Child abuse and neglect rates among children aged 0-17 have decreased somewhat since 1992, the first year for which there is data, from the rate in that year of 8.0 per 1,000 children aged 0-17 to 7.2 in 2000, a 10% decline. The decline followed peak rates of 9.3 in 1994 and 9.2 in 1995.

Other measures of child health and well-being in Tennessee either have not improved or have worsened slightly over time.

- Infant mortality rates (deaths to persons 0-1 years of age per 1,000 live births) similarly declined from 1990 from 10.3 per 1,000 to 9.4 in 1992 with a low of 7.7 in 1999. However, these rates began to rise in 2000 to 9.0 per 1,000 and were only slightly lower, at 8.7, in 2001. The overall decline of 15.5% obscures this recent upturn.

- Teen violent death rates (deaths per 100,000 youth aged 15-19 from accidents, homicide and suicide) have remained at about the same level in Tennessee from 75.0 in 1990 and 72.7 in 1992 to 72.9 in 2000; however, rates rose to a high of 88 in 1994 and 1995 before falling to current levels.

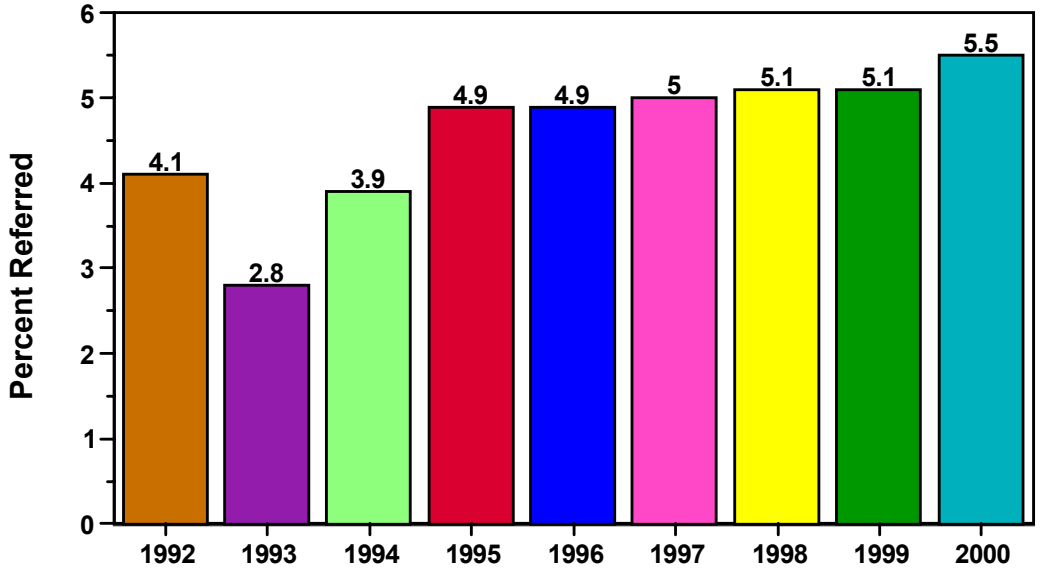
- The percentage of children aged 0-17 referred to juvenile courts has increased by 34.1% in the State since 1992, from 4.1% to 5.5% of children in 2000.

- The rate of commitment of children to state custody was 4.85 per 1,000 children aged 0-19 in 1997, after which it leveled off at 4.2-4.3 in 1998, 1999 and 2000.

These trends and the relationships between and among child health, poverty and welfare measures are available for custom querying on the Health Information Tennessee Web site at www.tennessee.gov/hitspot.

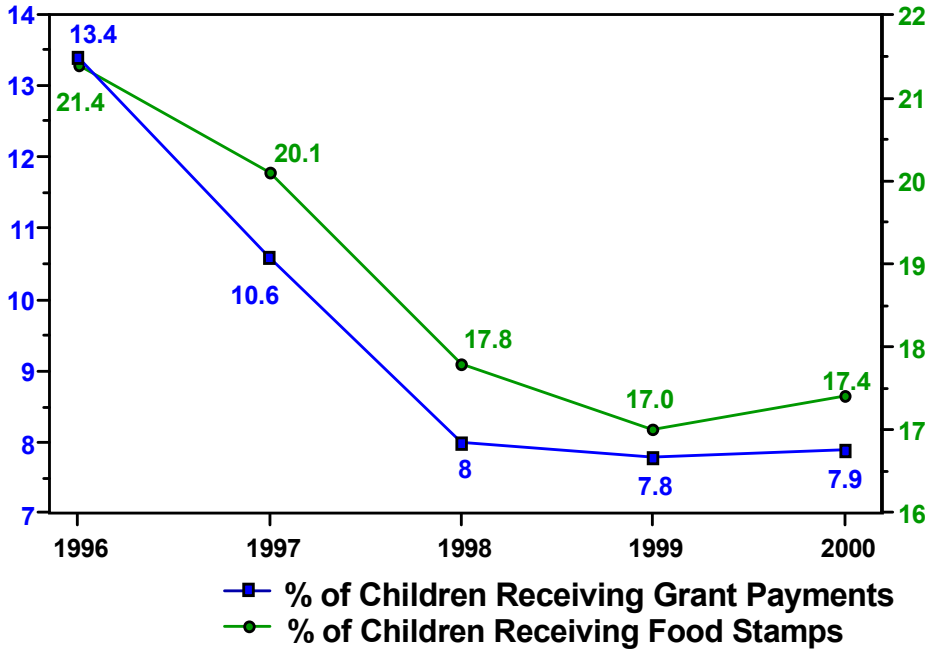
Source: Tennessee Commission on Children and Youth and TNKIDS under SPOT on the HITSPOT Web site (www.tennessee.gov/hitspot).

Percent of Children Ages 0-17 Referred to Juvenile Courts, Tennessee, 1992-2000

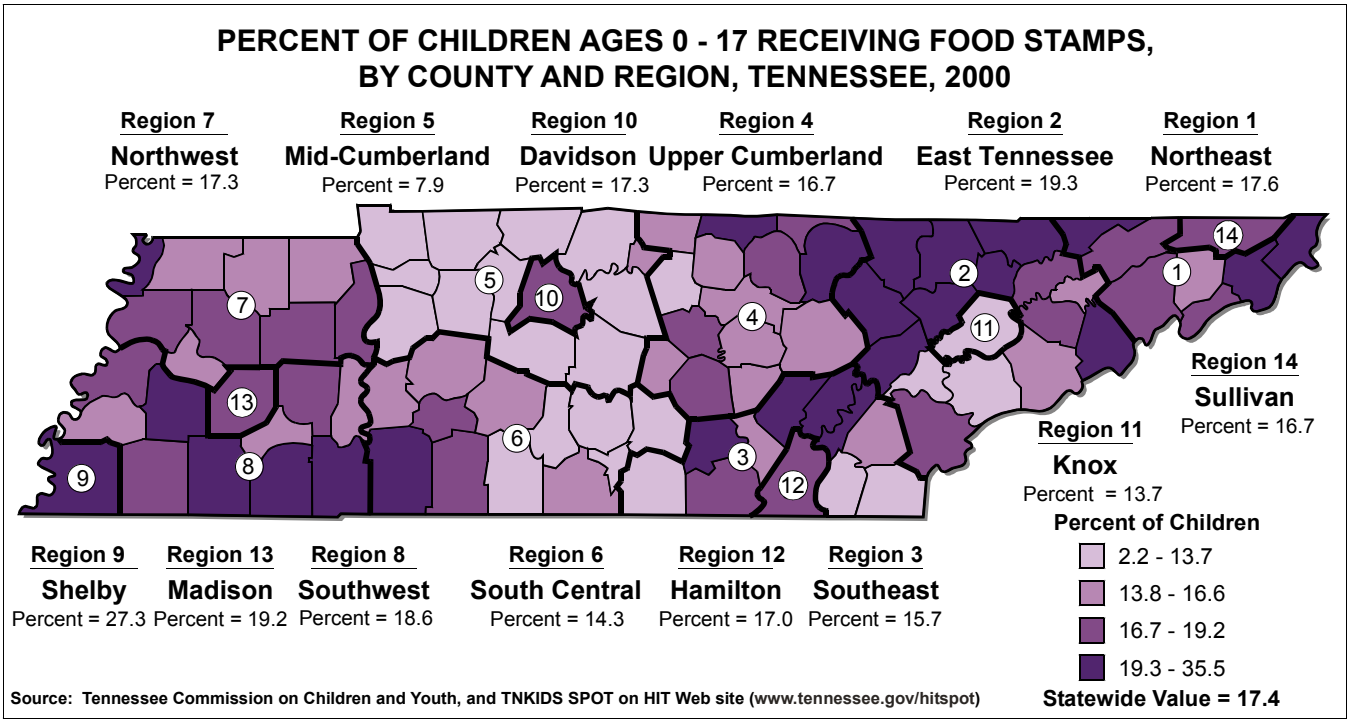


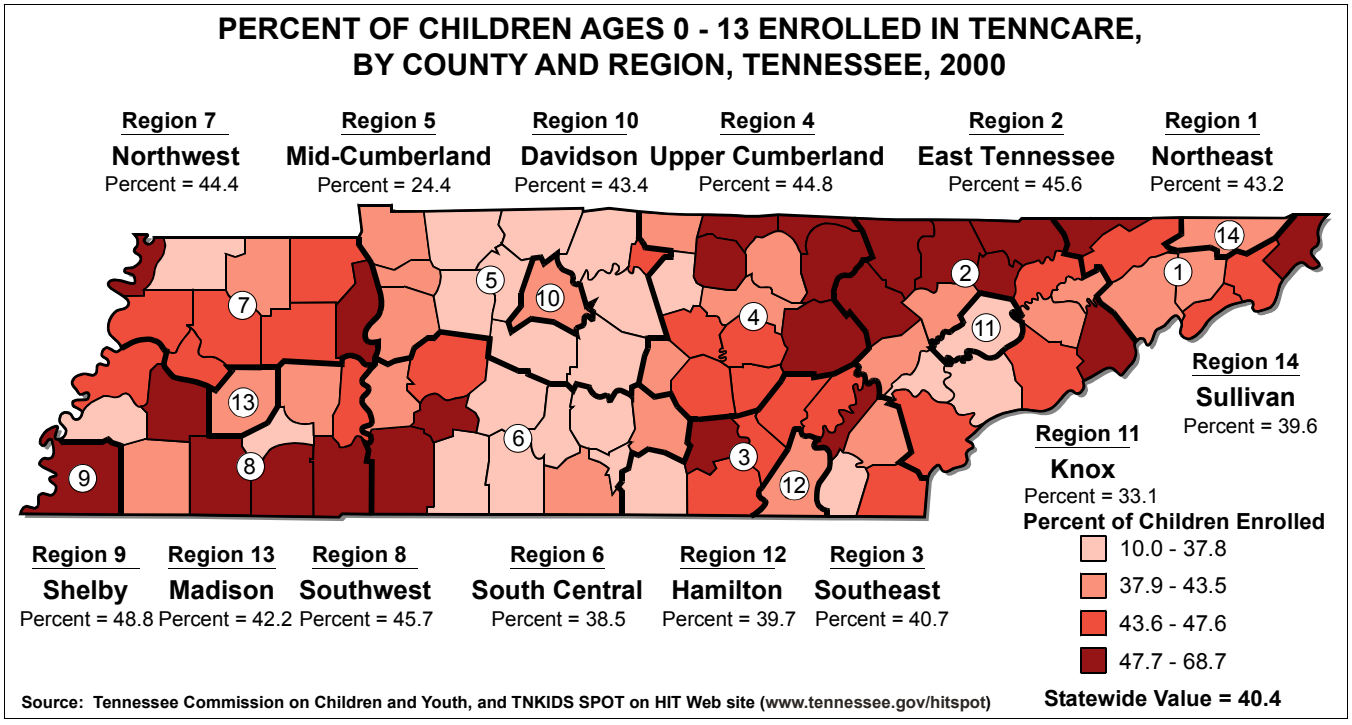
Source: Tennessee Commission on Children and Youth, and Health Information Tennessee Web site (www.tennessee.gov/hitspot)

Percent of Children Ages 0-17 Receiving Families First Grant Payments and Percent of Children Receiving Food Stamps, Tennessee, 1996-2000

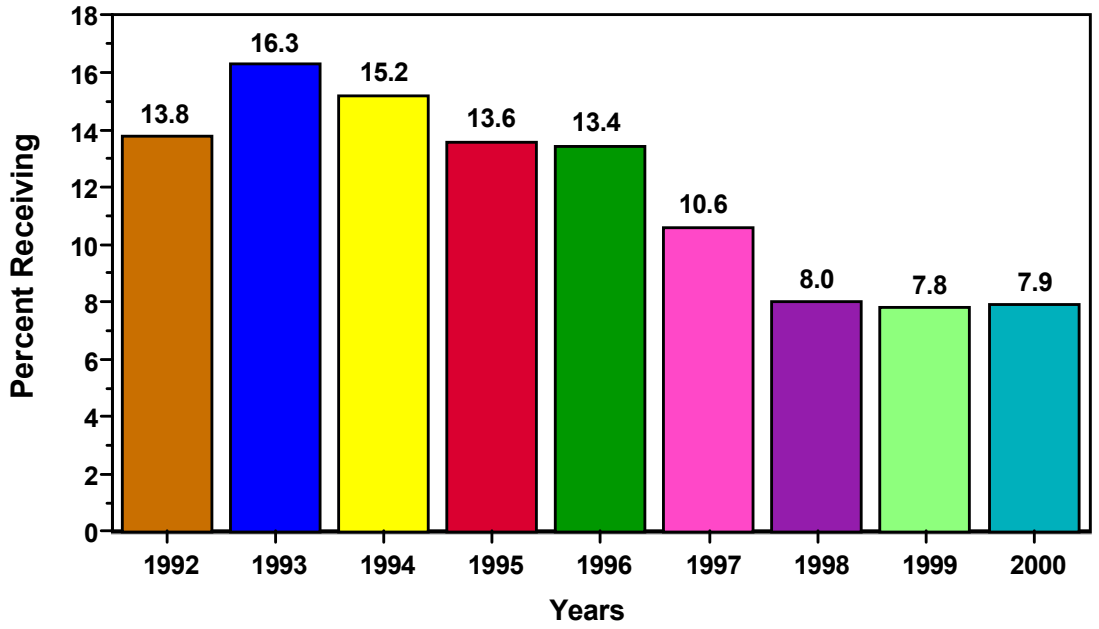


NOTE: Children are 0-17 years of age.
Source: Tennessee Commission on Children and Youth, and TNKIDS on HIT/SPOT Web site (www.tennessee.gov/hitspot)


PERCENT OF CHILDREN AGES 0 - 17 RECEIVING FOOD STAMPS,
BY COUNTY AND REGION, TENNESSEE, 2000
Region 7
Northwest
Percent = 17.3
Region 5
Mid-Cumberland
Percent = 7.9
Region 10
Davidson
Percent = 17.3
Region 4
Upper Cumberland
Percent = 16.7
Region 2
East Tennessee
Percent = 19.3
Region 1
Northeast
Percent = 17.6
Region 14
Sullivan
Percent = 16.7
Region 11
Knox
Percent = 13.7
Region 9
Shelby
Percent = 27.3
Region 13
Madison
Percent = 19.2
Region 8
Southwest
Percent = 18.6
Region 6
South Central
Percent = 14.3
Region 12
Hamilton
Percent = 17.0
Region 3
Southeast
Percent = 15.7
Percent of Children
2.2 - 13.7
13.8 - 16.6
16.7 - 19.2
19.3 - 35.5
Statewide Value = 17.4
Source: Tennessee Commission on Children and Youth, and TNKIDS SPOT on HIT Web site (www.tennessee.gov/hitspot)

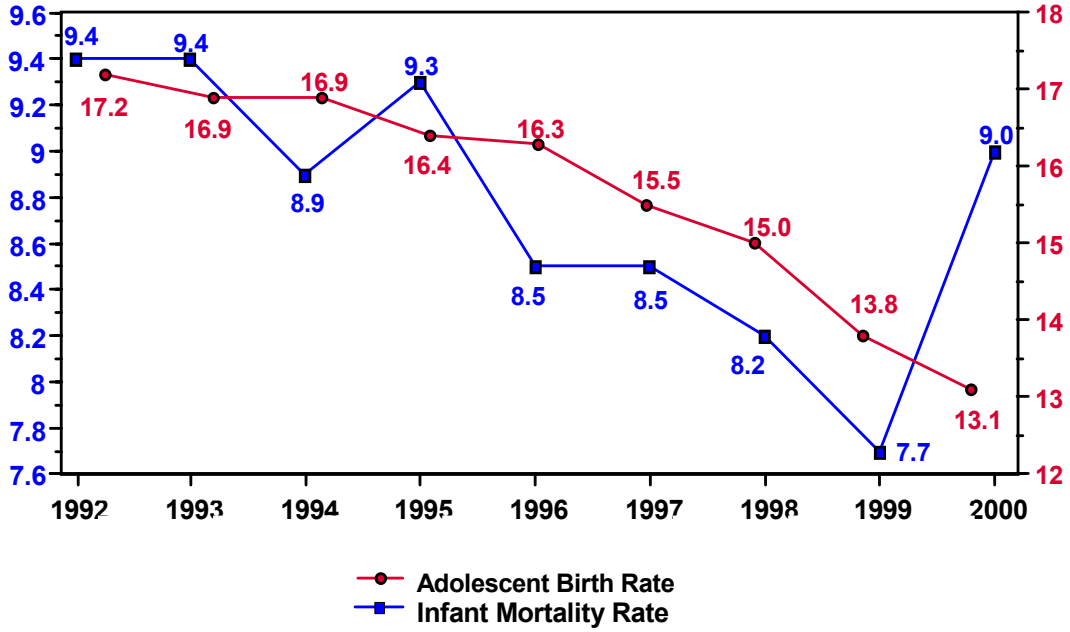

PERCENT OF CHILDREN AGES 0 - 13 ENROLLED IN TENNCARE,
BY COUNTY AND REGION, TENNESSEE, 2000
Region 7
Northwest
Percent = 44.4
Region 5
Mid-Cumberland
Percent = 24.4
Region 10
Davidson
Percent = 43.4
Region 4
Upper Cumberland
Percent = 44.8
Region 2
East Tennessee
Percent = 45.6
Region 1
Northeast
Percent = 43.2
Region 14
Sullivan
Percent = 39.6
Region 11
Knox
Percent = 33.1
Region 9
Shelby
Percent = 48.8
Region 13
Madison
Percent = 42.2
Region 8
Southwest
Percent = 45.7
Region 6
South Central
Percent = 38.5
Region 12
Hamilton
Percent = 39.7
Region 3
Southeast
Percent = 40.7
Percent of Children Enrolled
10.0 - 37.8
37.9 - 43.5
43.6 - 47.6
47.7 - 68.7
Statewide Value = 40.4
Source: Tennessee Commission on Children and Youth, and TNKIDS SPOT on HIT Web site (www.tennessee.gov/hitspot)

Percent of Children Ages 0-17 Receiving Families First Grant Payments, Tennessee, 1992-2000

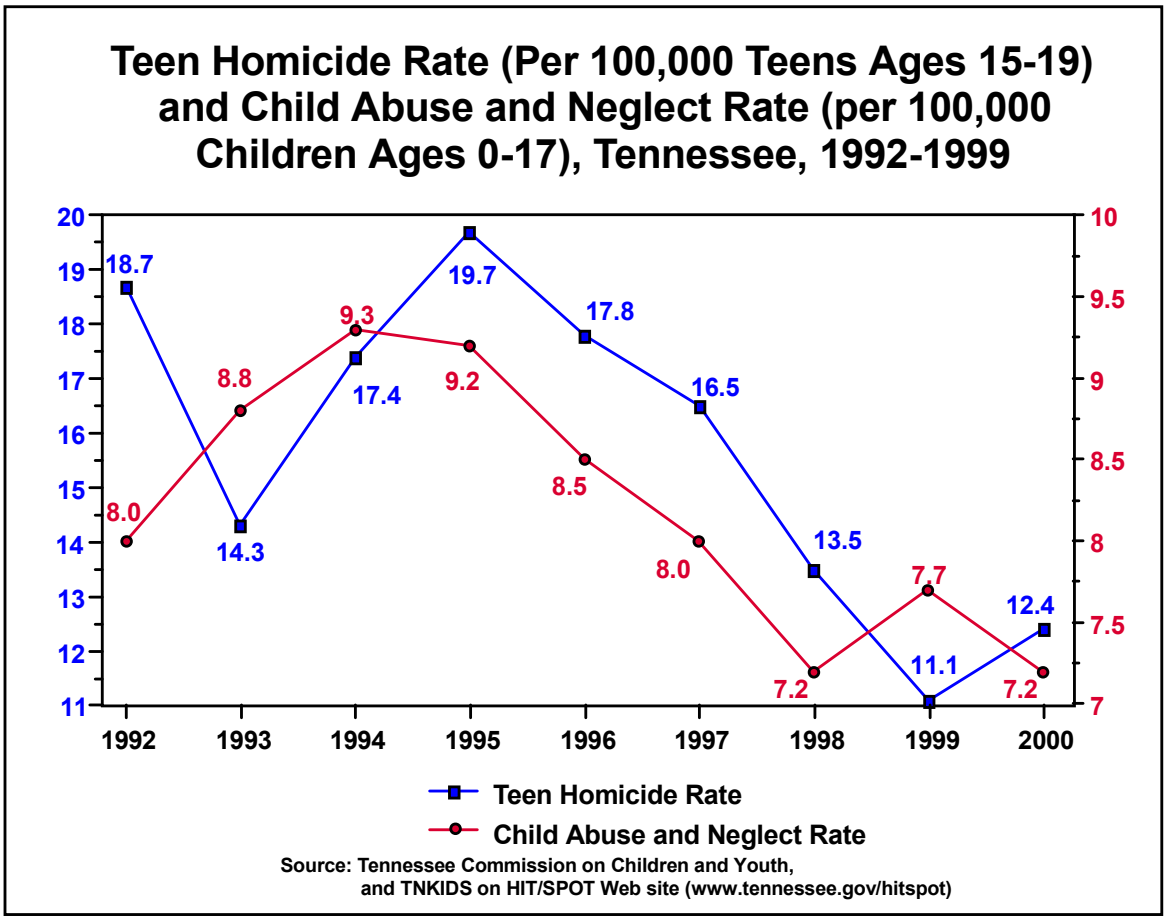


Source: Tennessee Commission on Children and Youth, and TNKIDS on Health Information Tennessee Web site at www.tennessee.gov/hitspot

Infant Mortality Rate (per 1,000 Live Births) and Adolescent Birth Rate (per 1,000 Females Ages 10-17), Tennessee, 1995-1999



Source: Tennessee Commission on Children and Youth, and TNKIDS on HIT/SPOT Web site (www.tennessee.gov/hitspot)


Teen Homicide Rate (Per 100,000 Teens Ages 15-19) and Child Abuse and Neglect Rate (per 100,000 Children Ages 0-17), Tennessee, 1992-1999
20
19
18
17
16
15
14
13
12
11
10
9.5
9
8.5
8
7.5
7
1992
1993
1994
1995
1996
1997
1998
1999
2000
18.7
14.3
17.4
19.7
17.8
16.5
13.5
11.1
12.4
8.0
8.8
9.3
9.2
8.5
8.0
7.2
7.7
7.2
Teen Homicide Rate
Child Abuse and Neglect Rate
Source: Tennessee Commission on Children and Youth,
and TNKIDS on HIT/SPOT Web site (www.tennessee.gov/hitspot)

YOUTH RISK BEHAVIOR SYSTEM (YRBS) TENNESSEE HIGH SCHOOL STUDENT SURVEY, 2001

In the late 1980s, public health researchers at the Centers for Disease Control and Prevention (CDC) created the Youth Risk Behavior Survey (YRBS) to assess and monitor trends in young peoples' health risk behaviors. In 2001, the Tennessee Department of Education administered the YRBS to 1,437 students at 36 Tennessee public high schools. Response rates were 56% overall, with 67% of schools and 84% of students responding. The 2001 YRBS data is unweighted, and the results cannot be generalized to the entire student population in grades 9-12. The sample was 49.5% female and 50.5% male. Ethnic/racial composition for the sample was 68.5% white, 24.8% black, 2.2% Hispanic/Latino, 2.7% other races, and 1.8% multiple races.

Behaviors that Contribute to Unintentional Injuries

Seatbelt Use

- The percentage of Tennessee students who reported not using seatbelts in a motor vehicle has steadily decreased from 1993 (31%) to 2001(18%). Males (22%) were much more likely not to wear a seatbelt than were females (13%) in 2001. Compared to data for the 2001 United States YRBS, a higher percentage of Tennessee students did not wear seatbelts. Tennessee students were 28% more likely not to wear seatbelts than their U.S. counterparts (14%).

Motorcycle Helmet Use

- In Tennessee, in 2001, of students who rode a motorcycle during the past 12 months, 33% rarely or never wore a helmet. Tennessee's percentage was somewhat lower than that for the U.S. (37%) and has remained constant since 1995. Males (37%) were much more likely not to wear a helmet than females (23%).

Bicycle Helmet Use

- Helmet use was rare when students were riding bicycles. In Tennessee, 89% of students did not wear helmets when operating a bicycle in the past 12 months, compared to 85% nationwide. There were no differences by gender or across grade levels.

Drinking and Driving

- In 2001, the same percentage (32.3%) of students in Tennessee and nationally reported that within the past 30 days, they rode one or more times in a car operated by someone who had been drinking alcohol. The percentage was only slightly higher for males (33.1%) than females (31.5%).

- Nearly fourteen percent of students had driven a car or other vehicle while or after drinking alcohol one or more times in the past 30 days, compared to 13% for the national student population in 2001. Males (18.7%) were more likely to report this activity than were females (9.1%). The percentages of students who had recently operated a vehicle while or after drinking alcohol increased by grade-level, from 8% of 9th graders to 23.2% of 12th graders. (This increase is partly attributable to increased exposure to driving with studentsí age.)

Behaviors that Contribute to Intentional Injuries

Physical Fighting

- In 2001, 30.4% of students had been in a physical fight in the past 12 months, and 11.7% of student respondents reported that they had been in a physical fight on school property. Males (36.8%) were more likely to have been in physical fights than were females (23.9%). The prevalence decreased from 39.1% among 9th graders to 31.1% among 10th graders, 27.1% among 11th graders and 21.2% among 12th graders. The 2001 national YRBS reports that 33% of students had been in a physical fight within 12 months of being surveyed, a slightly higher prevalence than for Tennessee.

- The percentage of Tennessee students who were seriously injured (requiring medical attention) one or more times in a physical fight in the previous 12 months was 3.7%. Nationally the percentage was 4%. In Tennessee, more males (4.5%) were injured in this way than females (2.7%). The highest prevalence of injury was observed among 9th graders (5.7%), and the lowest prevalence was 1.8% among 12th graders.

Weapon Carrying

- In Tennessee, 20.3% of students had carried a weapon in the previous 30 days, compared to 17% in the U.S. There was gender disparity in the percentage of Tennessee students who had carried a weapon -- e.g., a gun, knife, or club -- on one or more of the past 30 days; prevalence among males was 34.2% and among females 6.1%.

- About six percent of students (6.2%) had carried a gun on one or more of the past 30 days. Males (11%) did this much more frequently than females (0.9%) in Tennessee. Nationally, slightly fewer students (5.7%) had carried a gun.

School Safety and Weapons

- Of the Tennessee student respondents, 6.7% (11.4% of males and 1.9% of females) had carried a weapon to school, compared to 6.4% for the national student population in 2001. The prevalence was higher for 12th graders (8%) than students

in other grades (6.3% for 9th graders, 6.1% for 10th graders, 6.5% for 11th graders).

- Being threatened or injured with a weapon on school property during the preceding 12 months was much more common for males (10.8%) than for females (7.6%), with an overall prevalence of 9.3% of Tennessee students. The prevalence decreased from 10.5% among 9th graders and 10% among 10th graders to 9.1% and 6.7% among 11th and 12th graders, respectively.

- During the preceding 30 days, 7.4% of students in Tennessee and 6.6% of students nationwide did not attend school because they felt unsafe either at school or en route to or from school. Females (8.6%) were more likely than males (6.1%) to have missed school because they felt unsafe.

Violence in Relationships

- Nine percent of both male and female students had been intentionally hit, slapped, or physically hurt by a boyfriend or girlfriend during the previous 12 months in Tennessee, compared to 9.5% in the U.S. The rate was higher in females (10.1%) than males (7.7%). Twelfth graders (7.9%) showed the lowest percentage of being physically hurt and 10th graders (10.8%), the highest. Ninth (8.3%) and 11th (8.4%) graders fell in the middle range.

Forced Sexual Intercourse

- Eight-and-one-half percent of Tennessee students reported that at some time they had been forced to have sexual intercourse, close to the U.S. prevalence of 7.7%. Females (10.8%) were more likely to report unwanted sexual intercourse than males (6.2%). Twelfth graders (7.0%) reported the lowest prevalence of unwanted sexual intercourse, compared to ninth (8.6%), tenth (8.9%), and eleventh (9.1%) graders.

Depression, Suicidal Ideation, Planning, and Attempts

- Thirty percent of high school students in Tennessee reported that they had feelings of sadness or hopelessness almost every day for two or more consecutive weeks, and that these feelings caused them to stop doing some of their usual activities, compared to 28% nationwide. These feelings were much more prevalent among females (38%) than among males (22%).

- In both Tennessee and nationwide, 19% of students had considered attempting suicide within the past 12 months. In Tennessee, suicidal ideation was much more prevalent among females (22%) than males (16%). In addition, white students (20.4%) were more likely to consider suicide than black students (14.7%).

- Fourteen percent of students had planned a suicide attempt within the previous 12 months. This is slightly below the 2001 national prevalence (14.8%). It is 18% less than the Tennessee percentage in 1995 (17%). In 2001 in Tennessee, females (17%) were more likely to have planned a suicide attempt than males (11%). White students (14%) were more likely to have planned a suicide attempt than black students (11%).

- In Tennessee, 8.6% of students had actually attempted suicide one or more times during the preceding year, close to the figure for the U.S. (8.8%). In 2001, Tennessee females (10.7%) were more likely to have made suicide attempts than males (6.4%).

- In Tennessee, 2.6% of students made a suicide attempt during the past 12 months resulting in an injury, poisoning or overdose that had to be treated by a doctor or nurse. The percentages of students injured and requiring such medical treatment were similar for males and females (2.3% and 2.7%, respectively). These data are in line with the 2001 U.S. prevalence (2.6%).

Youth Alcohol, Tobacco, and Other Drug Use

Tobacco, Alcohol, and Other Drugs on School Property

- In 2001, in Tennessee and nationwide, 9.7% of students had smoked cigarettes on school property within the past 30 days, down from 14% in 1999. A higher percentage of males (11.3%) had smoked cigarettes on school grounds in the past 30 days than females (8.1%). White students (11.7%) reported a much higher prevalence than black students (4.6%).

- Overall, 3.9% of students (5.3% of males and 2.6% of females) had drunk alcohol on school property in the past 30 days in Tennessee. The prevalence for the U.S. is 4.9%. By race, 3.6% of white students had drunk alcohol on school property in the past 30 days, compared to 4.9% of black students.

- In the preceding 30 days, 3.7% of students reported using marijuana on school grounds - males (5%) at more than twice the prevalence of females (2%). Nationally, a higher percentage of students (5.4%) reported this behavior than in Tennessee. By race, 5.7% of black students in Tennessee reported using marijuana on school property, compared to 3.0% for white students in Tennessee.

- In 2001, 28% of Tennessee students, compared to 28.5% in the U.S., were offered, sold, or given illegal drugs on school property in the preceding 12 months. Males (32%) were more often involved in illegal drug distribution and sales activities than females (22.5%). The prevalence for whites was 28.2%, compared to 26.3% for blacks.

Tobacco Use

Cigarette Use

- In 2001, 67% of Tennessee high school students and 64% of U.S. high school students had tried smoking cigarettes during their lifetimes. A slightly higher percentage of males (68%) had tried smoking, compared with females (66%).

- Of the total Tennessee student respondents, 29% had smoked cigarettes in the previous 30 days, about the same proportion as nationally (28.5%). By gender, 30% of males and 28% of females had smoked in the past 30 days. Black students (12%) had recently smoked in approximately one-third the proportion of white students (36%). By grade level, a steady increase was observed in the percentage of respondents who reported recent smoking: 9th graders, 23%; 10th graders, 27%; 11th graders, 31%; 12th graders, 37%.

- Sixteen percent of Tennessee students had smoked on at least 20 or more of the past 30 days, compared to 14% nationally. By gender, 17.7% of males and 13.5% of females had done so. Nearly four times more white students (19.5%) than black students (4.6%) reported smoking on at least 20 of the past 30 days.

- Ten percent of students had purchased cigarettes at a store or gas station within the past 30 days (12.8% of males and 7.8% of females). Twelfth graders were much more likely to purchase cigarettes than other students (25%, compared to 10.5% of 11th graders, 4.5% of 10th graders, and 3.6% of 9th graders).

- Of those students below 18 years, which is the legal age to purchase tobacco, 22% were able to purchase cigarettes in a store or gas station. Nationally, 19% of students reported purchasing their own cigarettes in a store or gas station. Male students (28%) in Tennessee were more likely to do so than females (16%). Older students (aged 16 or 17) (27.5%) were more than twice as likely to purchase cigarettes thus as younger students (age 15 or under) (27.5% and 11%, respectively).

- Ten percent of students had purchased cigarettes in a store or gas station within the past 30 days, and were not asked to show proof of age. Among students who were current smokers, 70% had purchased their own cigarettes without being asked for proof of age, but the number of youth doing so was small.

- In 2001, the overall percentage of students who were, or had ever been, regular cigarette smokers (at least one cigarette per day for 30 days) was 22.3%. White students (28%) were about four times more likely to be, or to have been, regular cigarette smokers than black students (7.1%), with no gender differences. By grade level, a steady increase was observed in regular cigarette smokers: 9th graders, 17.8%; 10th graders, 21.8%; 11th graders, 23.7%; 12th graders, 27.2%.

- Finally, 53.6% of Tennessee students had tried, at some time, to quit smoking cigarettes, increased from 38% in 1999. The prevalence in males is 50%, compared to 57% in females.

Cigars, Cigarillos, or Little Cigars

- On one or more of the 30 days preceding the survey, 17% of Tennessee students had smoked at least one cigar, cigarillo, or little cigar, compared to 15% nationally. Twice as many males (22%) had used these tobacco products as females (11%). The highest prevalence was observed among 12th graders (21%, compared to 15% of 9th graders, 14% of 10th graders, and 18% of 11th graders).

Chewing Tobacco or Snuff Use

- In 2001, 12% of students had used chewing tobacco or snuff at least once in the past 30 days, and 7.2% had used smokeless tobacco on school grounds within the past 30 days. The highest 30-day prevalence rate for smokeless tobacco use was observed for males (22% compared to 1.7% for females), for whites (15.3%) compared to 2.3% for blacks, and for 12th graders (15.2% compared to the range of 10% to 12% among students in other grades). Students' 30-day use of smokeless tobacco was higher in Tennessee than in the U.S. (8.2%).

<u>Early Introduction to Tobacco, Alcohol, and Other Drugs</u>

- In 2001, 26% of students in Tennessee reported that, before age 13, they had smoked a whole cigarette, compared to 22% of students nationwide. In Tennessee, a higher percentage of males (29%) had tried smoking at an early age compared with females (23%). There are also differences in percentages by race/ethnicity. Seventeen percent of black students reported trying smoking before age 13, compared with 29% of white respondents.

- In both the U.S. and Tennessee, 29.1% of students had their first drink of alcohol (more than just a "taste") before age 13. The proportion of males (34.6%) was higher than females (23.5%).

- In Tennessee, 12.2% of students had tried marijuana by age 13. Nearly sixteen percent of males, and 8.5% of females, reported early marijuana use in Tennessee in 2001. Nationally, the percentage of students reporting early marijuana use was 10.2%.

Alcohol Use and Heavy/Binge Drinking

- The lifetime prevalence of alcohol use among Tennessee high school students in 2001 was 75%, compared to 78% nationally. Seventy-five percent of males reported lifetime alcohol use, compared to 74% of females. White students (77%) were more likely to have used alcohol than their black counterparts (69%).

- Within the previous 30 days, 44% of students in Tennessee drank alcohol (one or more drinks) on at least a single occasion, compared to 50% of students nationwide. A slightly higher proportion of males (45%) than females (43%) had used alcohol in the past 30 days. A lower percentage of black students (36%) than white students (47.5%) had drunk alcohol in that period. The 30-day prevalence of alcohol use increased by grade level, from 34% among 9th graders, to 52% among 12th graders. The rates for 10th and 11th graders fell in the middle range, at 45.5% and 48%, respectively.

- Twenty-seven percent of Tennessee students and 31.5% of U.S. students reported heavy, or "binge," drinking within the past 30 days. "Binge" drinking is defined as consumption of five or more drinks of alcohol on a single occasion. Males (30%) were more likely to have drunk heavily than were females (25%). Heavy or "binge" drinking was higher for 12th graders (36%) than for other students in other grades (20% - 28%). Binge drinking among black students (16%) was half as high as among white students (32%).

Marijuana Use

- The lifetime prevalence of marijuana use among Tennessee students is 47%. More males (51%) have tried marijuana than females (43%). The lifetime prevalence for marijuana use increases by grade level: 9th, 38%; 10th, 46%; 11th, 53%; 12th, 55%.

- In 2001, 24% percent of students, both in Tennessee and the U.S., reported that they had used marijuana within the past 30 days. Marijuana use was more prevalent among Tennessee males (27%) than females (21%). There was no difference by race/ethnicity.

Cocaine Use

- In 2001, 9.3% of students reported using powder, freebase, or crack cocaine during their lifetimes. This rate is down from the rate in 1999 (10%), but still up from the 1997 YRBS percentage of 7% and the 1995 percentage of 5.9%. In terms of studentsí lifetime prevalence of cocaine use, more males (10.5%) than females (8.3%) had used various forms of the drug. Lifetime prevalence for Tennessee students is nearly the same as the prevalence for the nation (9.4%).

- Around 3.7% of respondents reported that they had used cocaine recently, that is, within 30 days of the survey. Five percent of male respondents reported recent cocaine use, as did 2.4% of female respondents. A higher percentage of whites (4.1%) reported recent cocaine use than did blacks (3.6%).

Other Drug Use

- Fourteen percent of Tennessee students reported that at some time in their lives, they had inhaled fumes from glue, aerosol spray cans, or other paints and sprays, and that by inhaling these fumes, they intended to become intoxicated. This percentage is down from 1999 when this percentage was 19%. By gender, 13.5% of males and 14.2% of females reported engaging in this activity in 2001. The use of inhalants was much more prevalent among white students (17%) than black students (6%).

- In the past 30 days, 3.8% of students in Tennessee had sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high (i.e. used inhalants). In the U.S., the percentage was 4.7%. Among Tennessee respondents, males were slightly more likely to have used inhalants in the past 30 days, at 4.3%, compared to 3.3% among females.

- Tennessee students' lifetime prevalence of heroin use is 2.9%, compared to 3.1% nationwide. Heroin use in males (3.5%) was slightly higher than females (2.4%).

- Lifetime methamphetamine use for Tennessee high school students was 11% in 2001. By gender, 11.4% of males were lifetime methamphetamine users, compared to 10.5% of females. Methamphetamine use was four times higher among white students (12.7%) than among black students (4%). The national lifetime prevalence was 9.8%.

- Approximately seven percent of high school students (6.6%) claimed to have taken steroid pills or shots without a doctor's prescription (abuse) one or more times during their lives. More males (7.6%) than females (5.7%) illegally used steroids. Nationally, in 2001, 5% of students had used steroids without a doctor's prescription in their lifetimes.

- About 2.4% of Tennessee students reported they had used a needle to inject an illegal drug into their bodies. This percentage is comparable to the national YRBS percentage of 2.3%. Among Tennessee high school students in 2001, 3% of males and 2% of females reported intravenous drug use during their lifetimes.

Activities to Maintain Tennessee High School Students' Health

Physical Activity

- In 2001, 61% of Tennessee high school students and 65% of those in the U.S. participated in physical activities that made them sweat and breathe hard for at least 20 minutes on three or more of the past 7 days. Such participation was higher among males (71%) than females (51%). The prevalence declined by grade level, such that 66% of 9th graders and 62% and 63% of 10th and 11th graders, respectively, participated in this level of physical activity, compared to 54% of 12th graders.

- In 2001, 25.4% of students in Tennessee, and about the same proportion (25.5%) of students in the U.S., participated in physical activity that did not make them sweat or breathe hard for at least 30 minutes per day, five or more days a week. In Tennessee, the prevalence was much higher among females, at 22%, compared to 9% among male students.

- Around half (51%) of students engaged in physical exercise for strengthening or toning muscles 3 or more days a week; 62% of males and 39% of females participated in this type of activity.

- In Tennessee and in the U.S., on an average 2001 school day, 45% of students watched three or more hours of TV per day. By gender, 48% of males and 41% of females watched two hours or less of TV. Older students tended to watch less TV than younger students. The percentages for 12th, 11th, 10th and 9th graders were 34%, 43%, 52% and 47.5%, respectively.

- Of the Tennessee students surveyed, 42% overall -- 46% of males and 37% of females -- attended physical education classes on one or more days during the school week. Tennessee 9th graders had the highest prevalence (66%) among all grade levels. For 10th, 11th and 12th graders, the percentages were 24%, 22% and 44%, respectively.

- The proportion of students who attended a physical education class daily was 26% in Tennessee and 32% nationwide. Thirty-one percent of males and 20% of females were participating in daily physical education. Ninth graders (37%) were the group most involved in daily physical education, and this percentage steeply declined in subsequent grade levels: 24% among 10th graders, and 17% and 19% among 11th and 12th graders, respectively.

- In Tennessee, 51% of students had played on one or more sports teams during the past 12 months, compared to 55% of students nationwide. Of the total student respondents, 57% of males and 44% of females participated in group sports

activities. Not much difference was observed between white students (51.1%) and black students (50.7%).

Diet and Nutrition

- In the week prior to the survey, 82% of students ate fruit one or more times during the past seven days. A somewhat higher percentage of females (84%) had consumed fruit than males (80%). White students (84%) were more likely to consume fruit than black students (75%).

- Of the overall student sample, 59% had eaten green salad one or more times during the past 7 days. Males (55%) were less likely to have eaten salad than females (63%). Black students (46%) were less likely than white students (63%) to have eaten green salad in the past week.

- Forty-two percent of students ate carrots one or more times in the preceding week. Forty percent of males and 43% of females had eaten carrots. Black (28%) and white (46%) students were different on 7-day rates for having eaten carrots.

- In 2001, 20% of students had eaten more than five servings of fruits and vegetables per day in the preceding 7 days, compared to 21% of students nationwide. The rate for males was 24%, compared to 17% for females. There was no difference between racial groups.

- The 7-day consumption rate of 3 or more glasses of milk a day was 15% in Tennessee, compared to 16% in the U.S.. Twenty-one percent of males and 9% of females drank 3 or more glasses of milk a day during the 7 days preceding the survey.

Dieting and Perceptions of Body Weight among Tennessee High School Students

- In 2001, 14% of Tennessee high school students were at risk for becoming overweight[9]. Males (16%) were more likely to be at risk for being overweight than were females (12%). By race, 15.6% of black students were at risk for becoming overweight, compared to 13.7% of white students.

[9]Students who were at or above the 85th percentile but below the 95th percentile for body mass index by age and sex based on reference data from the National Health and Nutrition Examination Survey I.

- Thirteen percent of Tennessee students (16% of males and 10% of females), were designated as overweight [10], compared to 14% in the U.S. black students (19.1%) had a higher prevalence of overweight than white students (11.9%).

- Concerning students' perceptions of their own bodies, 30% of students designated themselves as slightly or very overweight. Females (37%) were much more likely to make this designation than were males (23%). A higher percentage (31.5%) of white students described themselves as slightly or more than slightly overweight than black students (26.4%).

- Forty-four percent of students were trying to lose weight in 2001. More than twice as high a percentage of females (61%) as males (27%) reported trying to lose weight.

- During the 30 days preceding the survey, 57% of students reported that they had exercised to lose weight or to keep from gaining weight. Forty-six percent of males and 69% of females reported exercising to lose or maintain weight.

- Forty-two percent of students ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight in the past 30 days. Females (59%) were much more likely to alter their dietary habits in these ways to lose weight than were males (26%).

- Fourteen percent of students went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days. Seven percent of males and 21% of females reported this behavior.

- Of the total respondent group, 11% reported that they had taken diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days. Seven percent of males and 15% of females reported this behavior. The prevalence was 12.1% for white students, compared to 8% for black students.

- During the 30 days preceding the survey, 6% of students reported that they had taken laxatives or vomited to keep from gaining weight or to lose weight. Females (7%) were more likely to report this behavior than males (4%). White students (6%) were more likely to use these means of weight control than were black students (4.2%). Tenth graders (8%) showed the highest prevalence, with 12th graders at 4%, 11th graders at 5% and 9th graders at 5.5%.

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[10]Students who were at or above the 95th percentile for body mass index by age and sex based on reference from the National Health and Nutrition Examination Survey I.

Students' Sexual Behaviors Contributing to Unintended Pregnancy and STDs

- Fifty-one percent of the Tennessee students surveyed in 2001 had engaged in sexual intercourse during their lifetimes. The prevalence in males was 54% compared to 49% in females. In the U.S., the prevalence was lower at 46%. The lifetime prevalence for Tennessee students had stabilized in 2001, after it dropped notably from 1993 (62%), and 1995 (61%), to 1997 (53%). Ninth graders (36%) had the lowest proportion of students who had engaged in sexual intercourse. This proportion increased for students in the 10th (50%) and 11th and 12th (at 62% each) grades. Black students (70%) had higher lifetime prevalence of sexual intercourse than white students (45%).

- In Tennessee, 9% of students had sexual intercourse before age 13, compared to 6.6% nationwide in 2001. The proportion of males (12.2%) initiating sexual intercourse before age 13 was higher than the proportion of females (5.9%) doing so. Black students (17.7%) were more likely to report having sexual intercourse before age 13 than were white students (5.8%).

- Sixteen percent of students in Tennessee, and 14% of students nationwide, reported that they had been with four or more sexual partners since they began having sexual intercourse. More males (20%) than females (12.4%) reported having been with four or more sexual partners. Students in 12th (20.1%) and 11th (20.4%) grades were more likely to have had more sexual partners than 10th (15.5%) and 9th (10.8%) graders. A higher proportion of black students (29%) than white students (12%) reported four or more sexual partners.

- Among student respondents in Tennessee, 36% reported having sexual intercourse with one or more partners in the past 3 months, compared to 33.4% nationwide. No difference in prevalence was observed by gender. Black students (51%) reported this behavior more often than white students (32%). Ninth graders (25%) were least likely to report this behavior, with increasing percentages of 10th (34%), 11th (44%), and 12th (46%) graders reporting sexual intercourse in the past 3 months.

- Among the group of students in Tennessee who had engaged in sexual intercourse within the past 3 months, 22% had drunk alcohol or used drugs before their most recent sexual intercourse, compared to 26% nationwide. Male students (27%) reported using alcohol or other drugs before intercourse more often than female students (17%). White students (25%) were more likely to use alcohol or other drugs before sexual intercourse than black students (15%).

- In 2001, 88% of Tennessee high school students had been taught about AIDS or HIV infection in school. Percentages are consistent by gender and across race. However, fewer 9th graders (81%) had learned about AIDS or HIV infection in school compared with other grades (87% of 10th graders, 93% of 11th graders, and 92% of 12th graders).

Students' Use of Birth Control

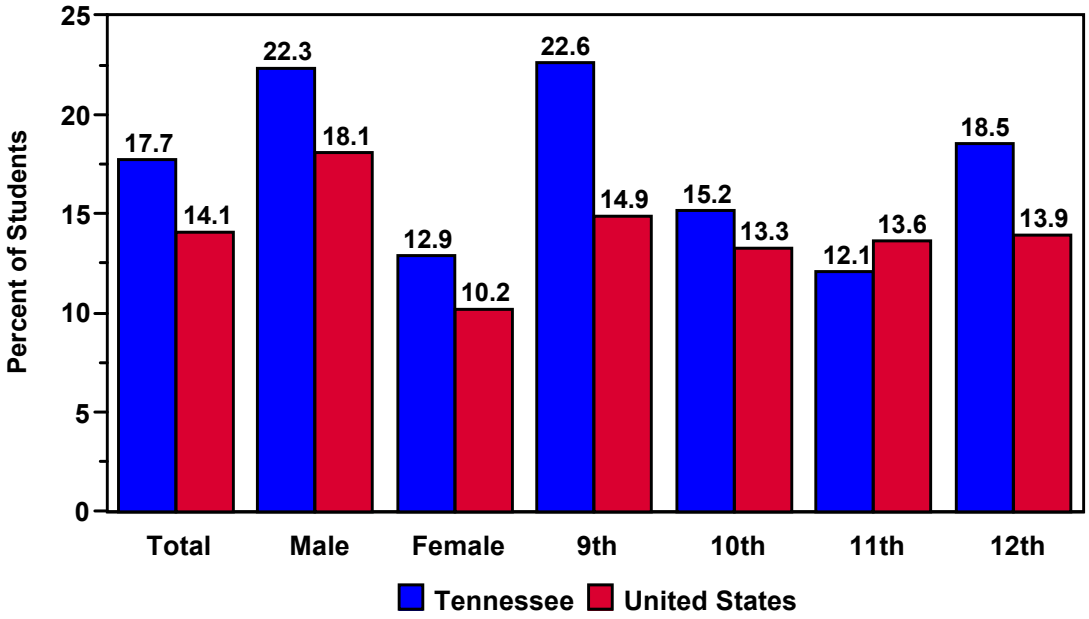
- Among the Tennessee students who had sexual intercourse in the preceding 3 months, 57% used a condom, compared to 63% nationally. Males (63%) reported using condoms during their last sexual intercourse more often than females (51%), and black students (70%) more than white students (51%).

- Of the Tennessee students who had sexual intercourse during the past 3 months, 17% reported that birth control pills were being used by female partners during their last sexual intercourse, compared to 18% nationally. Fewer males (15%) reported use of birth control pills by female partners than did females (19%). In addition, black students (13%) were less likely to use birth control pills than were white students (20%), and students in lower grades were less likely to use them than students in higher grades. The rates were 13.5% for 10th graders, 20.5% for 11th graders, and 22.9% for 12th graders.

- The lifetime prevalence of students who had been pregnant or who had gotten someone pregnant one or more times was 6%. This prevalence was higher in Tennessee than in the U.S. in 2001 (4.6%). By gender, 4.3% of males reported getting a female partner pregnant, whereas 7.5% of female students reported having had a pregnancy. By race, 11.5% of white males and 3.8% of black males reported getting a female partner pregnant.

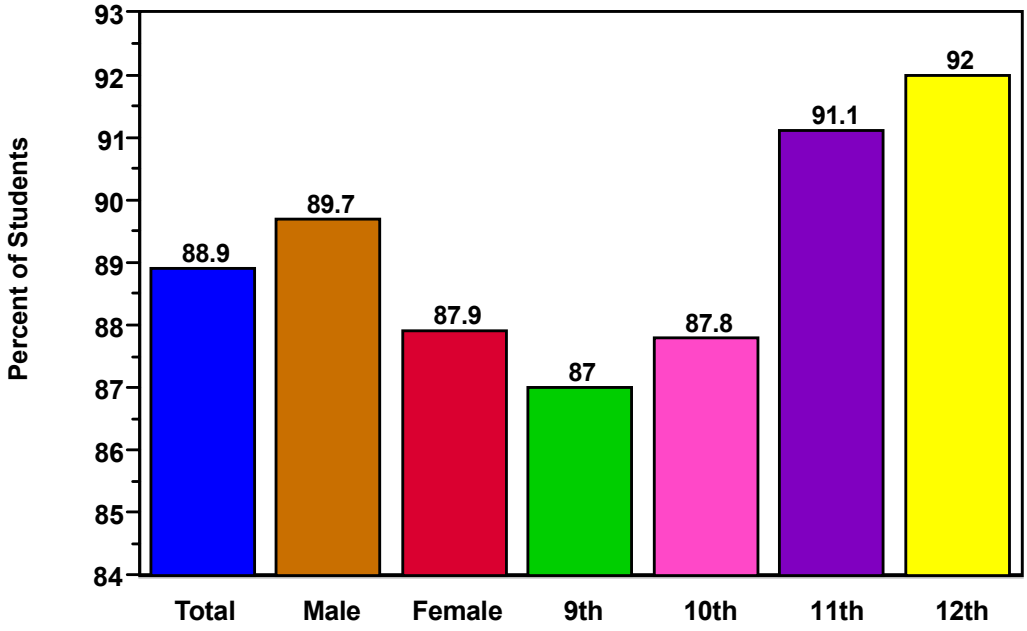
Source: State of Tennessee: Youth Risk Behavior Surveillance System, Tennessee Department of Health, 1993-2001 (excluding Nashville); National: Youth Risk Behavior Surveillance System, CDC, 2001.

Percent of Students Who Never or Rarely Wore a Seat Belt While Riding in a Car Driven by Someone Else, Tennessee and United States, 2001



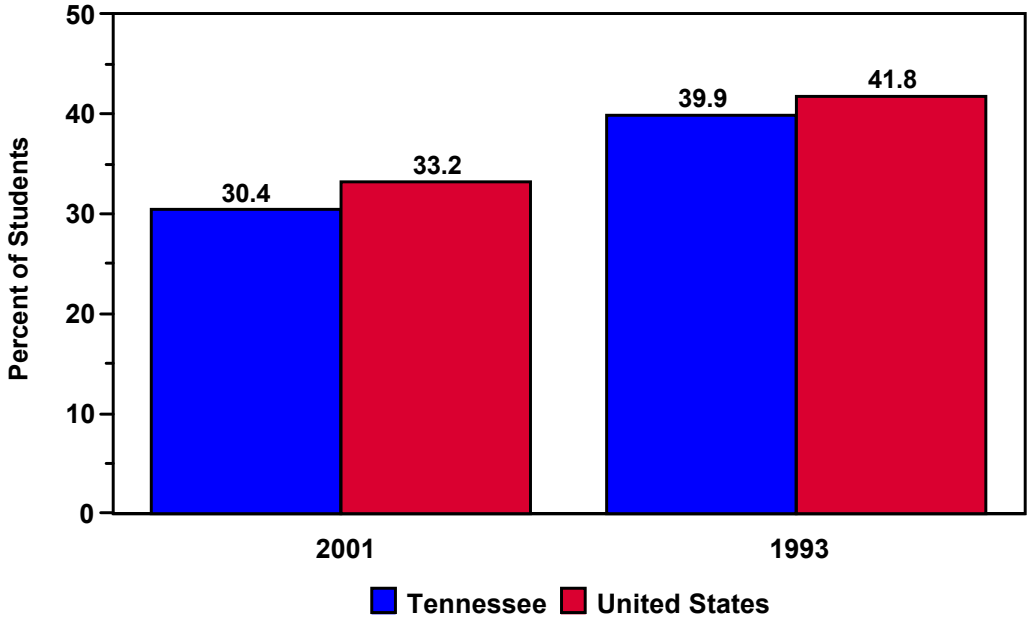
Source: 2001 Tennessee (Excluding Nashville) YRBSS Results - Q10 - Unweighted, Tennessee Department of Education. YRBSS, US, 2001.

Percent of Students Who Never or Rarely Wore a Bicycle Helmet While Riding a Bicycle During the Past 12 Months, Tennessee, 2001



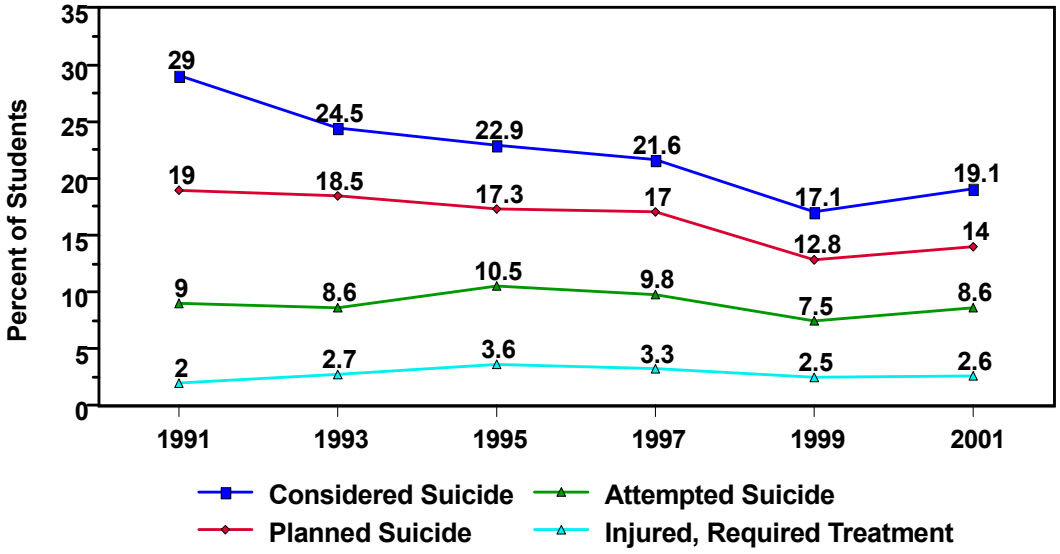
Source: 2001 Tennessee (Excluding Nashville) YRBSS Results - Q10 - Unweighted, Tennessee Department of Education.

Percent of Students Who Engaged in a Physical Fight in the Past 12 Months, Tennessee and United States, 2001 and 1993



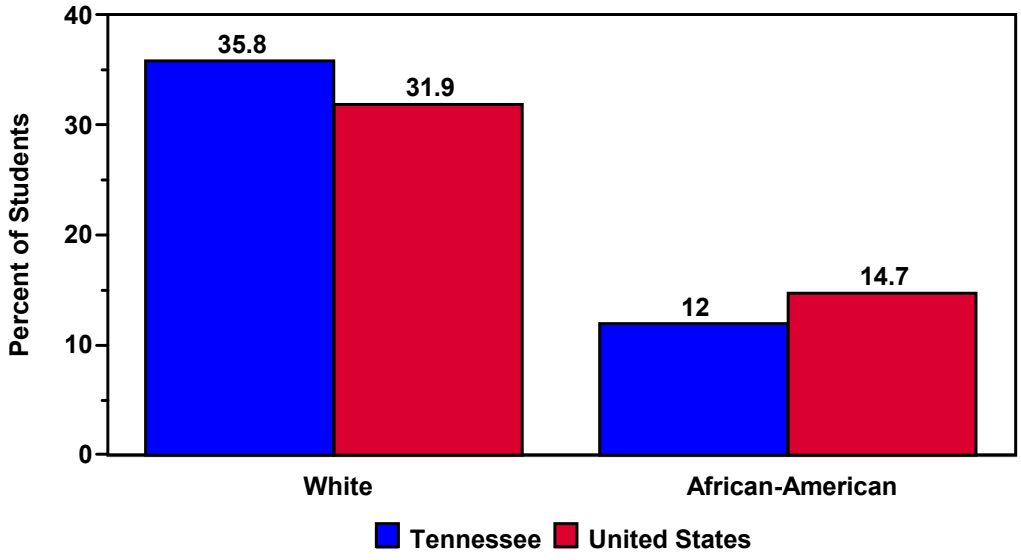
Note: YRBSS, Tennessee, 2001, data are unweighted, 1993, data are weighted.
Source: YRBSS, US, 2001; YRBSS, Tennessee, 2001, 1993, Tennessee Department of Health.

Changes in Suicidal Ideation and Behavior During the Past 12 Months Among Tennessee High School Students, 1991-2001



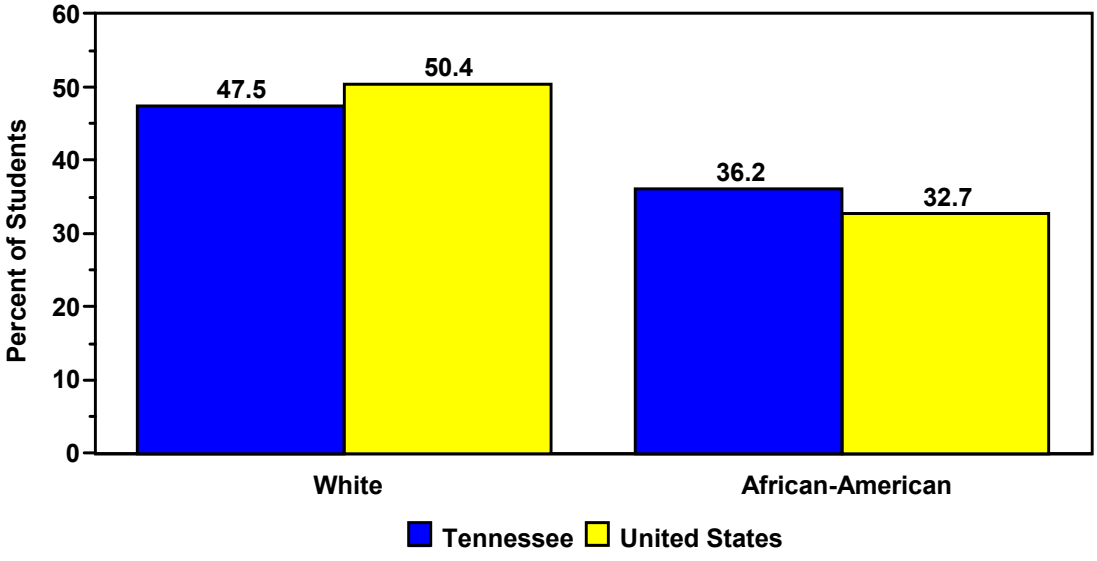
Note: YRBSS, Tennessee, 1991, 1995, 1997, 2001 data are unweighted.
Source: YRBSS, US, 2001; YRBSS, Tennessee, 2001, 1993, Tennessee Department of Health.

30-Day Prevalence of Cigarette Smoking Among High School by Race, Tennessee and the United States, 2001



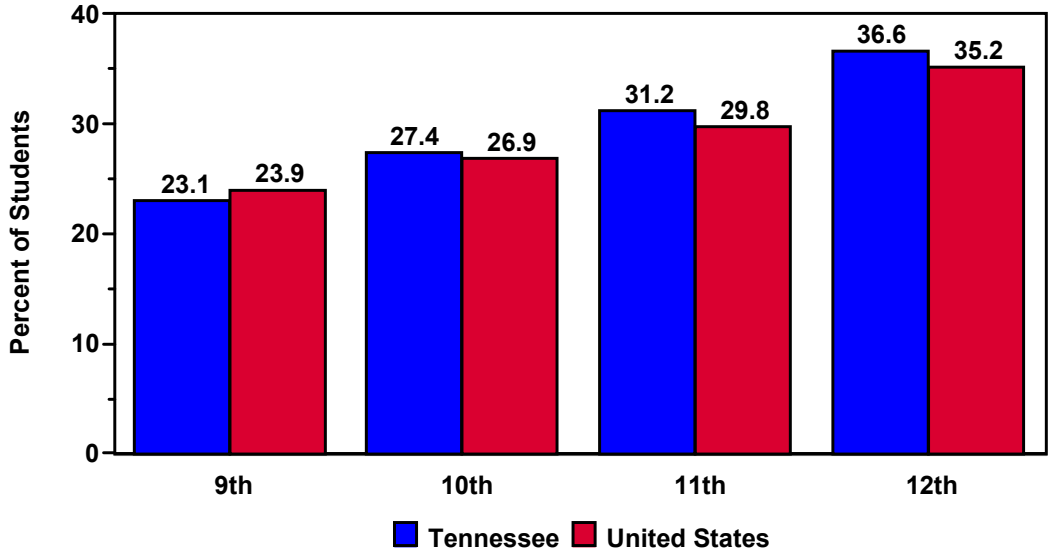
Source: US, YRBSS, 2001, CDC; Tennessee, 2001, Tennessee Department of Health.

Percentage of Students Who Drank at Least One Drink of Alcohol on One or More of the Past 30 Days by Race, Tennessee and the United States, 2001



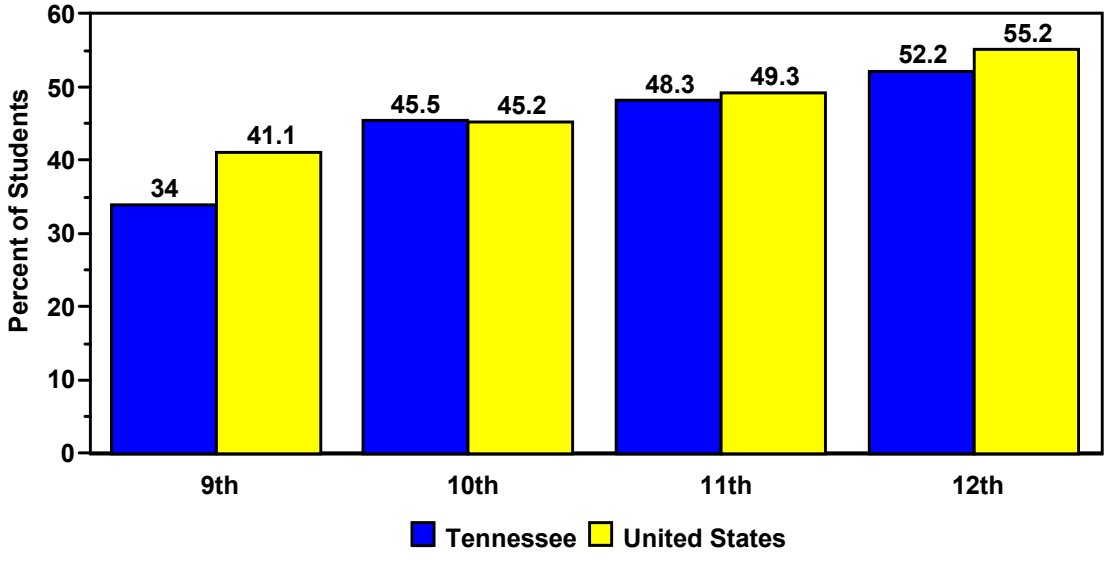
Source: US, YRBSS, 2001, CDC; Tennessee, 2001, Tennessee Department of Health.

30-Day Prevalence of Cigarette Smoking Among High School Students by Grade-Level, Tennessee and the United States, 2001



Source: US, YRBSS, 2001, CDC; Tennessee, 2001, Tennessee Department of Health.

Percentage of Students who Drank at Least one Drink of Alcohol on One or More of the Past 30 Days by Grade-Level, Tennessee and the United States, 2001



Source: US, YRBSS, 2001, CDC; Tennessee, 2001, Tennessee Department of Health.

SCHOOL HEALTH, TENNESSEE, 1993-1994 to 2001-2002

The Prevalence of Disabilities among Students

- Of 900,510 students in Tennessee schools in school year 2001-2002 (estimated by average daily membership), close to 1 in 14 was learning-disabled. A total of 64,235 or 7.1% of students were learning-disabled in Tennessee. This total represents a 12.3% decrease from a prevalence of 8.1% in 1993-94.

- Counties with the highest prevalence of learning-disabled students in 2001-2002 were Grundy and Overton Counties, at 18.5% and 13.5%, respectively. Haywood and Pickett Counties had the lowest percentages of learning-disabled students, at 2.4% and 4.4%, respectively. Of the 14 TDH regions, Madison County had the highest prevalence of learning disability in students at 12.1%, followed by Northeast Tennessee at 9.1%. The regions with the lowest prevalence were Shelby County at 5.5% and Southwest Tennessee at 6%.

- Students with conditions making them eligible for school-based special education services as a percentage of all students (estimated by average daily membership in Tennessee schools) in 2001-2002 is as follows:

  - 7.1% of students were reported as learning disabled
  - 4.6% as speech- or language-impaired
  - 2.3% as mentally retarded or emotionally disturbed
  - 2.3% as gifted
  - 1.5% as health-impaired or physically impaired
  - 0.3% as hearing-impaired and/or visually impaired and
  - 1.6% as having other disabilities[11].

- The prevalence of these conditions has remained stable from 1993-94 to 2001-2002. However, the prevalence of students who are classified as learning-disabled has declined from 8.1% to 7.1% or by 12.3% over the period.

- In Tennessee in 2001-2002, 13,180 school children, or 1.46% of all students, were reported as either health-impaired or physically impaired. The percentage of students who were health-impaired or physically impaired in 2001-2 had decreased slightly from a previous high in 1997-98 of 1.52%, although the 2001-2 figure was higher than that in 1993-94 (0.97%).

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[11]These categories are taken directly from data provided by the Tennessee Department of Education at www.state.tn.us/education, and they are used uncritically and non-pejoratively here. Definitions are available at www.tennessee.gov/hitspot/definitions.PDF.

- The highest percentages of students who were health-impaired or physically impaired attended schools in Warren County (3.3%), followed by Smith County (3.2%) The lowest percentages of health-impaired students were in Lake County (0.11%) and Benton County (0.12%). Regions with the highest prevalence of health- or physically impaired students were Sullivan County (2.36%) and Hamilton County (1.95%), while Northwest Tennessee and Shelby County had the lowest prevalence at 0.95% and 1.07%, respectively.

Special Education Services by Types of Disability

- In Tennessee, around 1 in 5 students in grades K-12 received special education services (this total includes gifted students as well as those with disabilities). In 2001-2002, 177,225 students received these services in Tennessee schools.

- The percentage of students receiving special education services has remained relatively stable, from 19.2% in 1993-94 to 19.7% in 2001-2002.

- Overall, Grundy (32.7%) and Madison (28.3%) Counties had the highest percentage of students receiving special education services (including gifted students). Chester and Polk Counties both had 13.8%, the lowest rate.

- The highest percentage of Tennessee students receiving special education services were learning disabled - 36.2%. Counties with the highest percentage of students receiving special education services who were learning-disabled were Wayne and Moore Counties, at 59.2% and 59.0%, respectively. Counties with the lowest prevalence were Haywood and Lake Counties, at 12.6% and 20.5%, respectively.

- The second highest percentage of students receiving special education services were those with speech impairment at 15.5%.

- Mentally retarded students represented 9.2% of students receiving special education services[12], while language-impaired students made up 8.0% of special education students in Tennessee in 2001-2002.

- In 2001-2002, 6.7% of special education students were health-impaired.

- The percentage of students receiving special education services for developmental delays (3.5%) in 2001-2 increased dramatically from 1993-94 when the rate was 1.0%.

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[12]The definitions of "gifted," "mentally retarded," and "developmentally delayed," among other terms, are set by the Tennessee Department of Education; different terms may be used by other departments. Tennessee Department of Education definitions are available at www.tennessee.gov/hitspot/definitions.PDF.

- The percentages for emotionally disturbed and functionally delayed were 2.7% and 2.3%, respectively.

- About 1% each of special education students were either multi-disabled (1.1%) or physically impaired (0.8%).

- Less than 1% of students receiving special education services were autistic (0.85%), deaf (0.1%), hearing impaired (0.7%), blind (0.1%), visually impaired (0.4%) or had experienced traumatic brain injury (0.2%).

- A total of 20,643 students or 11.6% were classified as gifted in 2001-2002. The highest percentages of gifted students were in Sullivan County (5.3%) and Overton County (5.1%), compared to 2.3% of students statewide who were gifted. Shelby County and Sullivan County had the highest percentage of students receiving special education services who were gifted, at 22.3% and 22%, respectively. Three counties had no students receiving such services: Jackson, Lake and Pickett.

Student Transportation Injuries

- Total student accidents per 10,000 students enrolled in transportation services was 13.8 in 2001-2002, down by 5.5%, from a rate of 14.6 in 1993-94. Clay and Cumberland Counties had the highest prevalence of student accidents per 10,000 students enrolled for transportation, at 61.5 and 49.2 respectively. Twenty counties had no accidents that year.

- Total student accidents per 10,000 students transported 1.5 miles or more was 17.7, compared to 17.3 in 1993-94. Clay County at 97.7 and Greene County at 56.7 had very high prevalence of student accident rates per 10,000 students transported 1.5 miles or more in 2001-2002, compared to the statewide rate. In 2001-2002, some counties had no property damage or injury accidents involving students enrolled for transportation. These were Bledsoe, Campbell, Cannon, Franklin, Gibson, Grundy, Hancock, Houston, Lake, Lewis, Marion, Moore, Overton, Perry, Pickett, Sequatchie, Trousdale and Union Counties.

- Students treated and released for transportation injuries per 10,000 students enrolled for transportation services reached a prevalence of 4.75 in 2001-02, compared to 3.2 in 1993-94. This total represents an increase of 48.4%.

- The rate for students treated and released for transportation injuries per 10,000 transported 1.5 miles or more was 6.1 in 2001-2002, an increase of 60.5%, compared to the rate of 3.8 in 1993-94.

Students Eligible for Free or Reduced Cost Lunches

- An important measure of poverty is the percent of students eligible for free or reduced-cost lunches. A total of 42.9% of Tennessee students were eligible for this program in 2000-2001.

- By far the highest percentages of students eligible for this program were in Fayette and Hancock Counties at 83.5% and 80.5% of students, respectively, in 2000-2001. Williamson County had by far the lowest prevalence at 8.0% of students, followed by Wilson at 19.6%.

- The percentage of students eligible to receive free or reduced-cost lunches increased steadily from 37.9% of students in 1993-94 to 42.9% in 2000-2001, a rise of 13%.

Student-to-Teacher Ratios in Tennessee

- In 2001-2002, the student-to-teacher ratio for both elementary and secondary schools was 15.4 students per teacher.

- Student-to-teacher ratios in Tennessee have declined more for elementary students and teachers (by 13.5%) than for high school students and teachers (by 9.4%) from 1993-94 to 2001-2002, respectively.

Students per Health Personnel

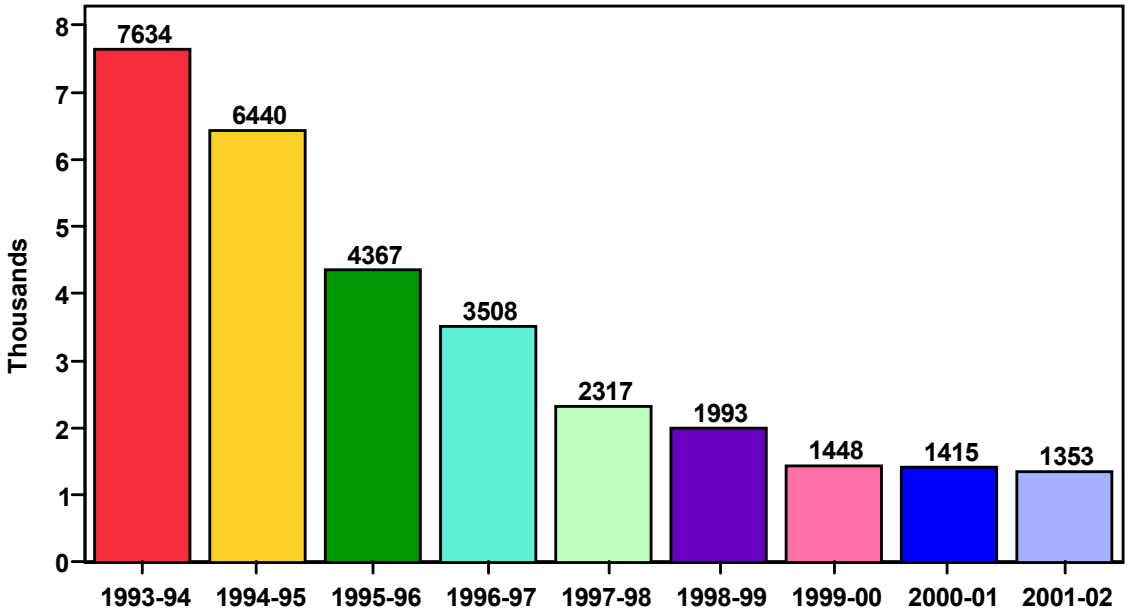
- The number of students per health personnel has been dropping steadily and dramatically since 1993-4 when there were 7,634 students per health personnel compared to 1,353 in 2001-2. This represents an 82.3% decrease over the eight-year period.

- Counties with the highest number of students per health personnel were Hamblen, Haywood and Shelby Counties at 4,463, 3,568, and 3,518, respectively. The lowest number of students per health personnel was observed for Macon and Henry Counties at 447 and 458, respectively. Several counties reported having no health personnel; these included Crockett, Davidson, Decatur, Hancock, Houston, Pickett and Van Buren Counties.

- Metropolitan counties had higher numbers of students per health personnel than nonmetropolitan counties (2,453 and 1,043, respectively), while regions with the highest rates were Shelby at 3,518 and Hamilton at 2,139 compared to the lowest rates for Sullivan (738) and Madison (854) Counties. Davidson County schools reported no such personnel for 2001-2.

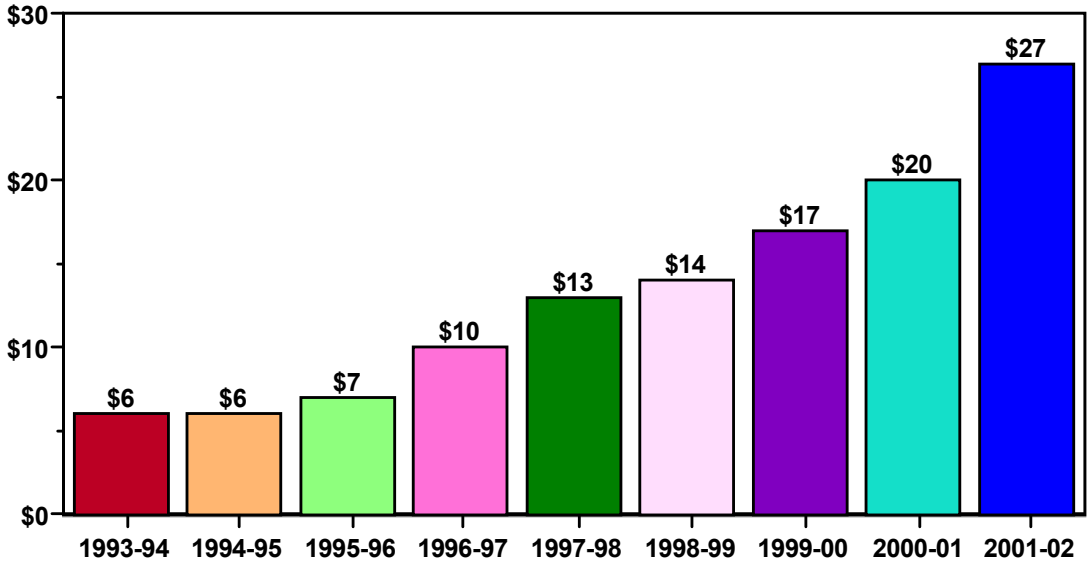
Source: Tennessee Department of Education Annual Statistical Report, 2001-2002 and under 'Schools' on the HIT web site.

Number of Students per Health Personnel, Tennessee, 1993-94 to 2001-02



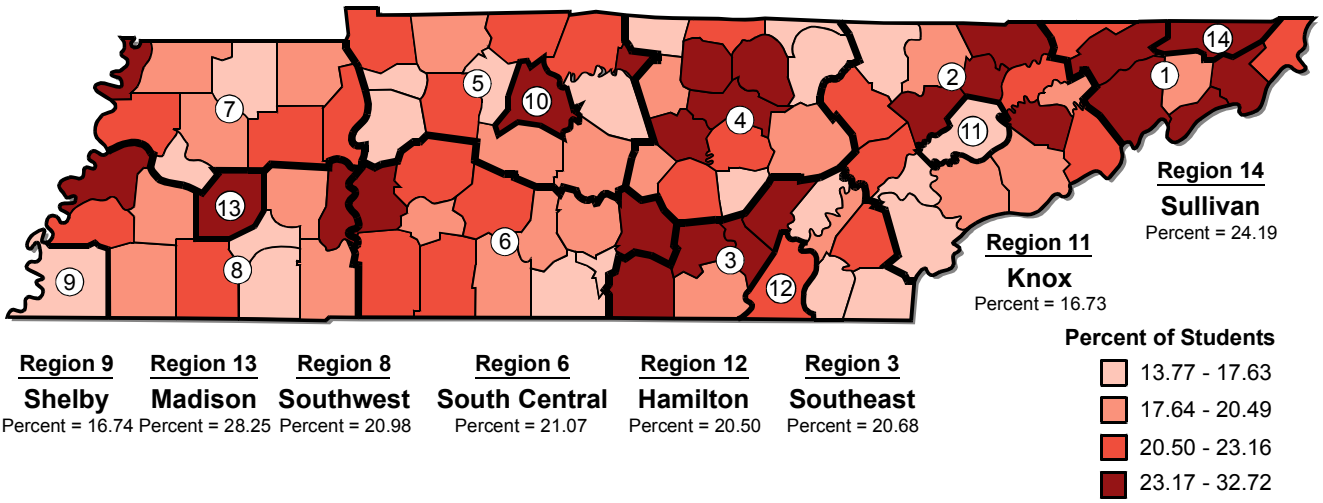
Source: Annual Statistical Reports, Tennessee Department of Education and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Expenditures for Student Health Services per Student, Tennessee, 1993-94 to 2001-02



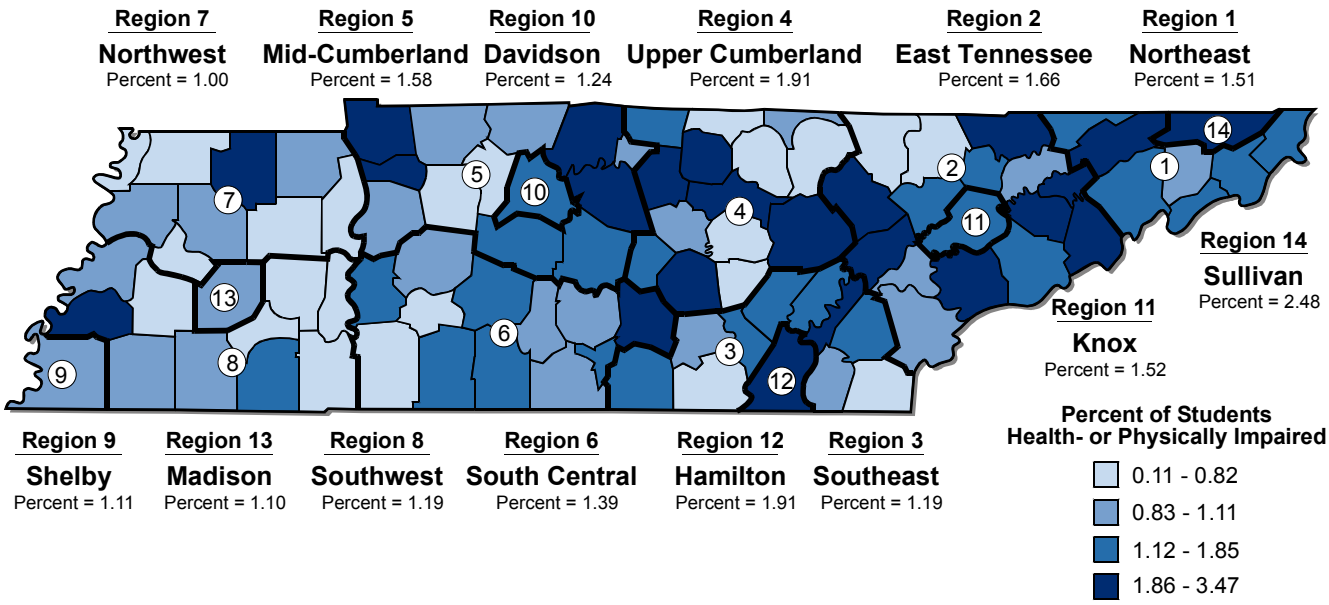
Source: Annual Statistical Reports, Tennessee Department of Education and HIT/SPOT Web site (www.tennessee.gov/hitspot)

PERCENT OF STUDENTS RECEIVING SPECIAL EDUCATION SERVICES (INCLUDES GIFTED STUDENTS), BY COUNTY AND REGION, TENNESSEE, 2001-2002



Source: Annual Statistical Reports, Tennessee Department of Education, and HIT/SPOT Web site (www.tennessee.gov/hitspot) **Statewide Percent = 19.68**

PERCENT OF STUDENTS WHO ARE HEALTH-IMPAIRED OR PHYSICALLY IMPAIRED BY COUNTY AND REGION, TENNESSEE, 2000-2001 SCHOOL YEAR



Source: Annual Statistical Reports, Tennessee Department of Education, and HIT/SPOT Web site (www.tennessee.gov/hitspot) **Statewide Percent = 1.44**

TENNESSEE MIDDLE SCHOOL HEALTH SURVEY, 2001-2002

The Tennessee Middle School Survey is a cross-sectional survey of approximately 44,000 middle school students (grades 6 through 8) in 165 randomly selected Tennessee public schools in 13 Tennessee health department regions in 2002 (Davidson County did not participate).

Studentsí Health Status

- Overall, 13% of students described their general health status as fair or poor. 51% were female, 49% male. In terms of race[13], black and white had the same proportion of students who rated their health as fair or poor (13%).

- Twelve percent of students reported having physical health problems or disabling conditions that kept them from doing normal activities[14]. White students were significantly less likely than black students to report these problems (10% vs. 16%, respectively).

- In the 12 months preceding the survey, 16% of students had been taken to an emergency room for an illness. Black students (23%) were significantly more likely than white students (14%) to have been taken to an emergency room for an illness in the last 12 months. Similarly, females (18%) were more likely than males (15%) to have visited an emergency room in the last year for an illness.

- Visiting an emergency room for an injury in the 12 months preceding the survey was reported by 23% of the middle school students surveyed. White students (24%) were more likely than black students (20%) to have been taken to an emergency room for an injury. Males (27%) were more likely than females (20%) to have been taken to an emergency room for an injury.

- Six percent of students had been hospitalized at least one night for an illness in the 12 months prior to the survey. Black students (9%) were almost twice as likely as white students (5%) to have spent at least one night in a hospital for an illness. There were no significant gender differences.

- Six percent of students had been hospitalized for an injury at least one night in the 12 months preceding the survey. Black students (7%) were slightly more likely than white students (5%) to have been hospitalized for an injury. Similarly, males (7%) were more likely than females (4%) to have been hospitalized for an injury.

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[13]Race has three modalities: "black", "white" and "other". The modality "other"î will not be analyzed in this chapter given its heterogeneity and the interpretation difficulties resulting from it.

[14]Survey question: "Do you now have any physical health problems or disabling conditions that keep you from doing normal activities?"

- In 2002, 8% of students used a prescription drug or "pill" for hyperactivity (ADD or ADHD). Males were twice as likely as females to use these drugs (10% vs. 5%, respectively). Hispanic students were also more likely to have been using drugs prescribed to treat hyperactivity (11% vs. 8% of non-Hispanic students).

- In terms of psychological well-being, 11% of students said they often felt very depressed. Females (14%) were significantly more likely than males (9%) to have often felt very depressed. The tendency to feel depressed increased with grade level, from 9% among 6th graders to 11% among 7th graders and 13% among 8th graders.

- Among Tennessee middle school students, 7% reported that they had attempted suicide at least once in their lifetimes[15]. The prevalence of suicide attempts increased by grade level, from 5% of 6th graders to 7% of 7th graders to 10% of 8th graders.

Alcohol, Tobacco and Other Drug Use Prevalence

Cigarettes

- The lifetime prevalence ("ever smoked") of cigarette smoking among Tennessee middle school students is 28%, while 19% of students reported smoking cigarettes in the 12 months preceding the survey. Smoking cigarettes in the past 30 days was reported by 13% of the students. Females were as likely to smoke as males, and white students (14%) more likely to smoke than black students (10%).

- Three percent of middle school students surveyed were current smokers (defined as having smoked cigarettes on 20 or more days of the last 30 days).

  - The percentage of current smokers increased by grade level from 1% of 6th graders to 3% of 7th graders to 6% of 8th graders.

  - White students (4%) were significantly more likely to be current cigarette smokers than black students (1%). Similarly, Hispanic students had a higher tendency to be current smokers than non-Hispanic students (5% vs. 3%, respectively).

  - There was no significant gender difference in the percentage of current cigarette smokers.

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[15] Survey question: "Have you ever attempted suicide?"

Alcoholic Beverages

- Among Tennessee middle school students, 38% reported lifetime alcohol use[16]. While 26% of students stated that they had drunk alcohol in the 12 months preceding the survey, 18% had drunk alcohol in the past 30 days. Daily drinking of alcoholic beverages in the last 30 days was reported by less than 1% (0.4%) of the students.

  - The percentage of 30-day alcohol drinkers was strongly associated with grade level. Students in higher grades were more likely to have drunk alcohol in the last 30 days. Thus, 11% of 6th graders compared to 17% of 7th graders and 25% of 8th graders were current alcohol users.

  - Hispanic students had a higher 30-day drinking prevalence than non-Hispanic students (23% vs. 17%, respectively). Black students had a slightly higher prevalence of 30-day alcohol use than white students (19% vs. 17%, respectively).

  - There was no significant gender difference in the current alcohol use status of these students. Males were no more likely to report current alcohol use than females, regardless of grade level.

- Approximately 15% of students said that they had gotten drunk or intoxicated from drinking alcohol at least once in their lifetimes[17]. Ever being drunk or intoxicated was strongly associated with grade level, with prevalence increasing from 8% in the 6th grade to 14% in the 7th grade and 22% in the 8th grade.

- Hispanic students (18%) had a higher tendency than non-Hispanic students (14%) to have been drunk or intoxicated at least once. White students (15%) were more likely to have ever been drunk or intoxicated than black students (12%).

- Again, males and females did not significantly differ in their propensity to have been drunk or intoxicated at least once from drinking alcohol.

Marijuana

- Fifteen percent of Tennessee middle school students reported using marijuana at least once in their lifetimes, while 11% had used marijuana in the 12 months preceding the survey. Eight percent of students had used marijuana in the past 30

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[16] Survey question: "Have you had any alcoholic beverages (beer, wine, wine coolers or liquor) to drink - more than a few sips... ever? / in the last 12 months? / in the last 30 days?"

[17] Survey question: "Have you ever gotten drunk or felt very high or intoxicated from drinking alcohol?"

days. Daily marijuana use in the last 30 days was reported by less than 1% (0.8%) of the students.

- In contrast to cigarette and alcohol use for which there were no significant gender differences, males were more likely than females to have used marijuana in the last 30 days (9% vs. 6%, respectively).

  - A higher percentage of students in higher grades had used marijuana in the past 30 days than students in lower grades. Thus, only 4% of 6th graders compared to 7% of 7th graders and 12% of 8th graders reported current marijuana use.

  - Hispanic students (12%) had higher 30-day marijuana use prevalence than non-Hispanic students (7%). No significant differences were observed between black and white students.

Cocaine

- Four percent of Tennessee middle school students reported having ever used cocaine or crack[18]. In the 12 months preceding the survey, 3% of students used cocaine or crack, while 2% of students had used cocaine or crack in the past 30 days.

- Males were about twice as likely to have used cocaine or crack in the past 30 days then females (2% vs. 1%, respectively).

- Black and white students were equally likely to have used cocaine or crack in the previous 30 days (2%). Hispanic students were twice as likely to have used cocaine or crack as non-Hispanic students (4% vs. 2%, respectively).

- Using cocaine or crack was also associated with grade level, increasing from a 30-day use prevalence of 2% among 6th graders and 3% among 7th graders to 5% among 8th graders.

Inhalants and Other Drugs

- Among Tennessee middle school students, 9% reported using inhalants at least once in their lifetimes[19]. Seven percent reported inhalant use in the 12 months prior to the survey, and 6% reported use in the past 30 days.

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[18] Survey question: "Have you ever used cocaine or crack..... ever? / in the last 12 months? / in the last 30 days?"

[19] Survey question: "Have you ever used substances you "sniff" paint thinners, glue, gasoline, white-out, butane, aerosol sprays,..... ever? / in the last 12 months? / in the last 30 days?"

- Six percent of students surveyed reported having ever used hallucinogens, such as LSD and PCP[20]. The 12-month and 30-day prevalence of hallucinogen use among these middle school students was 5% and 4%, respectively.

- Relative to their use of other drugs[21] than those mentioned above including ecstasy, ice (crystal methamphetamine) and heroin, 4% of students reported ever having used such drugs; 3% reported using other drugs in the past 12 months; and only slightly less than 3% reported doing so in the past 30 days.

Prescription Drug Abuse (Use for Non-Medical Purposes)

- Seven percent of Tennessee middle school students surveyed reported having used prescription drugs for non-medical purposes (defined here as ìprescription drug abuseî) at least once in their lifetimes[22], while 5% had abused prescription drugs in the past 12 months, compared to 3% in the past 30 days.

  - Students in higher grades were more likely to report prescription drug abuse in the past 30 days than students in lower grades. The prevalence of prescription drug abuse among 6th graders was 1%, among 7th graders, 3%, and among 8th graders, 5%.

  - Males and females did not differ in their propensity to have abused prescription drugs in the last 30 days.

  - Hispanic students (5%) were more likely to have abused prescription drugs than non-Hispanic students (3%) in the last 30 days. White students (3%) were more likely to have abused prescription drugs than black students (2%).

Risk Factors in Alcohol and Other Drug Use among Tennessee Middle School Students

This section looks at bivariate relationships between selected indicators and alcohol and other drug use in the last 30 days.

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[20]Survey question: "Have you ever used LSD (acid) or other hallucinogens such as peyote, jimson weed, mushrooms, PCP (angel dust), ... ever? / in the last 12 months? / in the last 30 days?"

[21]Survey question: "Have you ever used other illegal drugs such as ecstasy, ice (crystal meth), heroin (smack, horse, skag), ... ever? / in the last 12 months? / in the last 30 days?"

[22]Survey question: "Have you taken any prescription drugs or ìpillsî just to get high or for non-medical purposes, on your own, without a doctorís prescription..... ever? / in the last 12 months? / in the last 30 days?"

Poverty

- Poverty (defined as receiving some form of public assistance or living in public housing) significantly increased the likelihood of alcohol and other drug (AOD) use in the last 30 days among these middle school students (see Table 1).

Table 1. Percentage of 30-Day AOD Use Among Middle School Students by Substance and Poverty Status.

Substance	Not Poor	Poor	Increased Likelihood of Being a 30-Day User
Marijuana	6.5	11.0	1.7 times more likely
Cocaine/Crack	1.6	2.4	1.5 times more likely
Hallucinogens	3.4	4.8	1.4 times more likely
Other Illegal Drugs	2.7	3.7	1.4 times more likely
Alcohol	16.5	21.4	1.3 times more likely
Inhalants	5.4	7.0	1.3 times more likely

Family Environment

- Students living in a family setting different from a two-parent family were more likely to have used AOD in the last 30 days. There was a higher probability of use of every substance among the students not living in a two-parent family (see Table 2).

Table 2. Percentage of 30-Day AOD Users Among Middle School Students by Substance and Family Setting.

Substance	Two-Parent Family	Other Family Setting	Increased Likelihood of Being a 30-Day User
Marijuana	5.9	11.7	2.0 times more likely
Hallucinogens	3.0	5.0	1.7 times more likely
Alcohol	15.4	22.4	1.5 times more likely
Cocaine/Crack	1.6	2.5	1.5 times more likely
Other Illegal Drugs	2.5	3.5	1.4 times more likely
Inhalants	5.5	6.7	1.2 times more likely

- Having a family member who was reported to have a severe problem with drugs or alcohol[23] was very strongly associated with the propensity to use AOD in the last 30 days for every substance (see Table 3).

Table 3. Percentage of 30-day AOD Users Among Middle School Students by Substance and Family AOD Problem.

Substance	No family members with Past Severe AOD Problems	One or More Family Member(s) had a Severe AOD Problem	Increased Likelihood of Being a 30-Day User
Other Illegal Drugs	1.6	5.7	3.5 times more likely
Hallucinogens	2.1	7.1	3.4 times more likely
Marijuana	4.6	14.7	3.2 times more likely
Inhalants	4.0	11.0	2.8 times more likely
Cocaine/Crack	1.2	3.2	2.6 times more likely
Alcohol	12.5	29.6	2.4 times more likely

Neighborhood and Friends

- Living in a neighborhood or area the students considered was characterized ìvery wellî or ìsomewhat wellî by crime and/or drug selling[24] was associated with higher probability of AOD use in the last 30 days. Again, this result was found for every substance (see Table 4).

[23]Survey question: "Has anyone in your family had a severe alcohol or drug problem?"

[24]Survey question: "How well do crime and/or drug selling describe your neighborhood, or the area where you live? very well / somewhat well / not well / not at all "

Table 4. Percentage of 30-Day AOD Users Among Middle School Students by Substance and Characterization of Neighborhood by Crime/Drug Selling.

Substance	Neighborhood Not at All or Not Well Characterized by Crime and/or Drug Selling	Neighborhood Somewhat or Very Well Characterized by Crime and/or Drug Selling	Increased Likelihood of Being a 30-Day User
Other Illegal Drugs	1.6	8.0	5.0 times more likely
Marijuana	4.6	21.1	4.6 times more likely
Hallucinogens	2.1	9.9	4.6 times more likely
Cocaine/Crack	1.1	4.8	4.3 times more likely
Inhalants	4.4	12.4	2.8 times more likely
Alcohol	13.8	33.6	2.4 times more likely

- Among middle school students, those who reported having one or more close friends with an AOD problem[25] were more likely themselves to have used AOD in the 30 days preceding the survey than those whose friends did not have these problems (see Table 5).

Table 5. Percentage of 30-Day AOD Users Among Middle School Students by Substance and Close Friend(s) Having an AOD Problem.

Substance	No Close Friends with AOD Problem	Close Friend/s with an AOD Problem	Increased Likelihood of Being a 30-Day User
Other Illegal Drugs	1.5	11.9	7.9 times more likely
Cocaine/Crack	1.0	7.6	7.3 times more likely
Hallucinogens	2.1	14.6	7.1 times more likely
Marijuana	4.6	29.3	6.4 times more likely
Inhalants	4.2	17.9	4.2 times more likely
Alcohol	13.5	45.7	3.4 times more likely

[25]Survey question: "Do you think one or more of your close friends is drinking too much or has a problem with alcohol? / is using or abusing drugs other than alcohol?"

Extracurricular Activities

- Overall, middle school students who did not participate in any extracurricular supervised activities[26] were more likely to have used AOD in the last 30 days than those who participated in at least one extracurricular, supervised activity. This result was true for every substance (see Table 6).

Table 6. Percentage of 30-Day AOD Users Among Middle School Students by Substance and Participation in Extracurricular Activities.

Substance	Participation in Extracurricular Activities	No Participation in Extracurricular Activities	Increased Likelihood of Being a 30-Day User
Cocaine/Crack	1.5	3.0	2.0 times more likely
Hallucinogens	3.0	6.0	2.0 times more likely
Other Illegal Drugs	2.3	4.7	2.0 times more likely
Marijuana	6.5	12.5	1.9 times more likely
Alcohol	16.0	23.3	1.5 times more likely
Inhalants	5.6	7.3	1.3 times more likely

School Performance

- Students with low GPA's (D or F) were more likely to have used AOD in the last 30 days than students with higher GPA's (A, B and C's). This result was true for every substance (see Table 7).

[26]Activities including sport team, scouting, boys and girls club, 4-H clubs, service clubs or music/art/drama club.

Table 7. Percentage of 30-Day AOD Users among Middle School Students by Substance and GPA.

Substance	GPA=A's,B's,C's	GPA=D or F	Increased Likelihood of Being a 30-Day User
Marijuana	6.2	23.4	3.8 times more likely
Hallucinogens	2.9	10.9	3.8 times more likely
Cocaine/Crack	1.5	5.5	3.6 times more likely
Other Illegal Drugs	2.3	7.9	3.4 times more likely
Alcohol	15.9	34.8	2.2 times more likely
Inhalants	5.4	11.3	2.1 times more likely

Exposure to Alcohol, Tobacco and Other Drug Treatment

- Two percent of Tennessee middle school students surveyed reported having received treatment or counseling outside school for an alcohol problem at least once. Close to 3% of the students reported having received treatment or counseling outside school for a drug problem at least once.

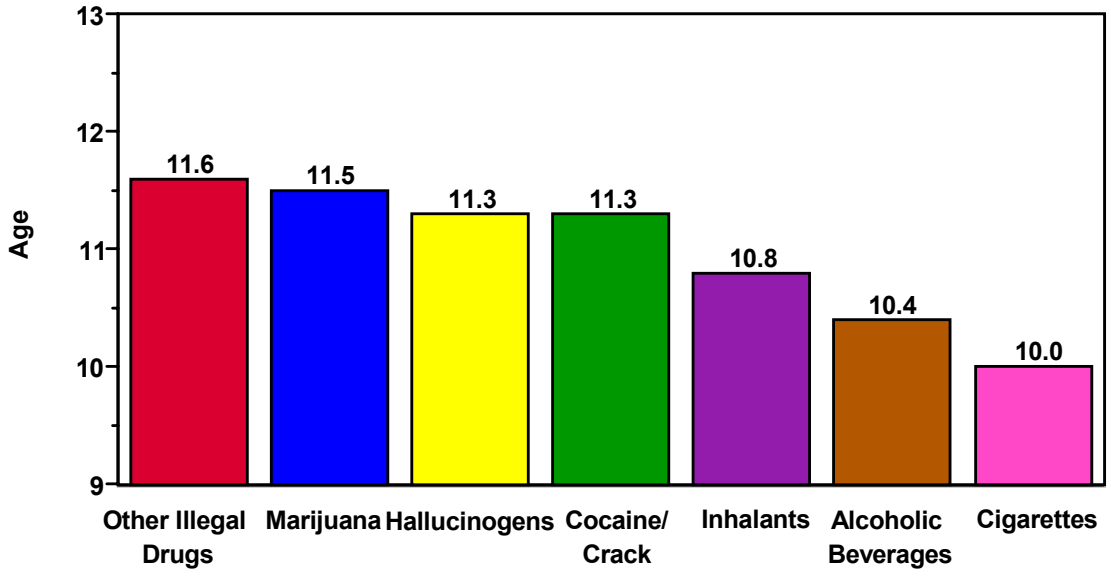
  - Males (3%) were significantly more likely than females (1%) to have been involved in treatment or counseling for alcohol problems. The corresponding proportions of students treated for drug problems were 4% males and 2% females.

  - Hispanic students (5%) were more likely than non-Hispanic students (2%) to have been involved in treatment or counseling for alcohol problems. The same was found for treatment for drug problems, which was reported by 7% of the Hispanic students and 3% of non-Hispanic students.

  - White and black students did not differ significantly in terms of percentage who received treatment or counseling for a drug or alcohol problem.

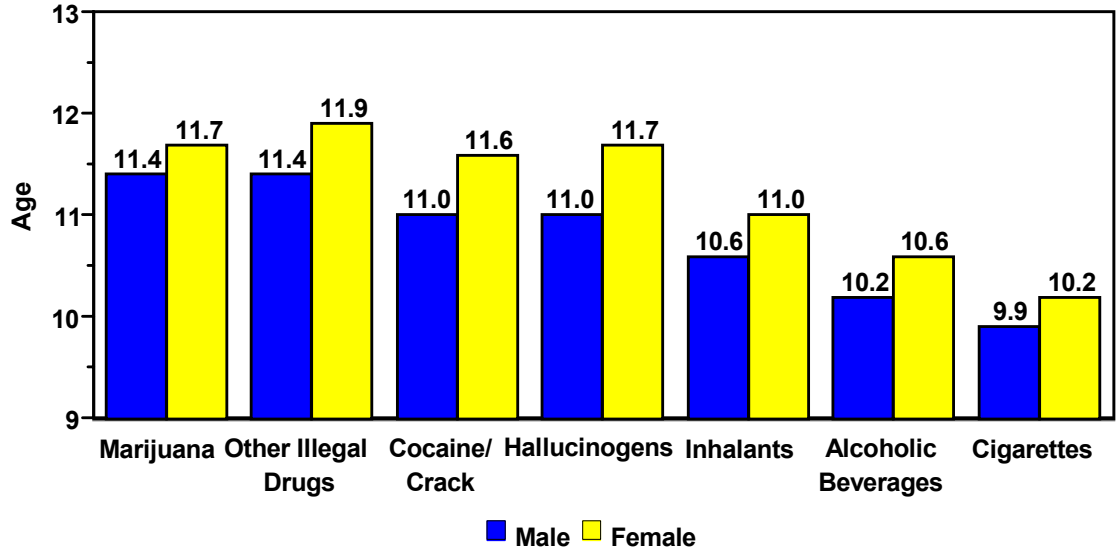
Source: Middle School Health Survey 2001-2002 Report (weighted data), CHRG and Tennessee Department of Health, and under Reports and SPOT Surveys on the HIT Web site.

Mean Age at First ATOD Use, by Substance Among Middle School Students, Tennessee, 2001-2002



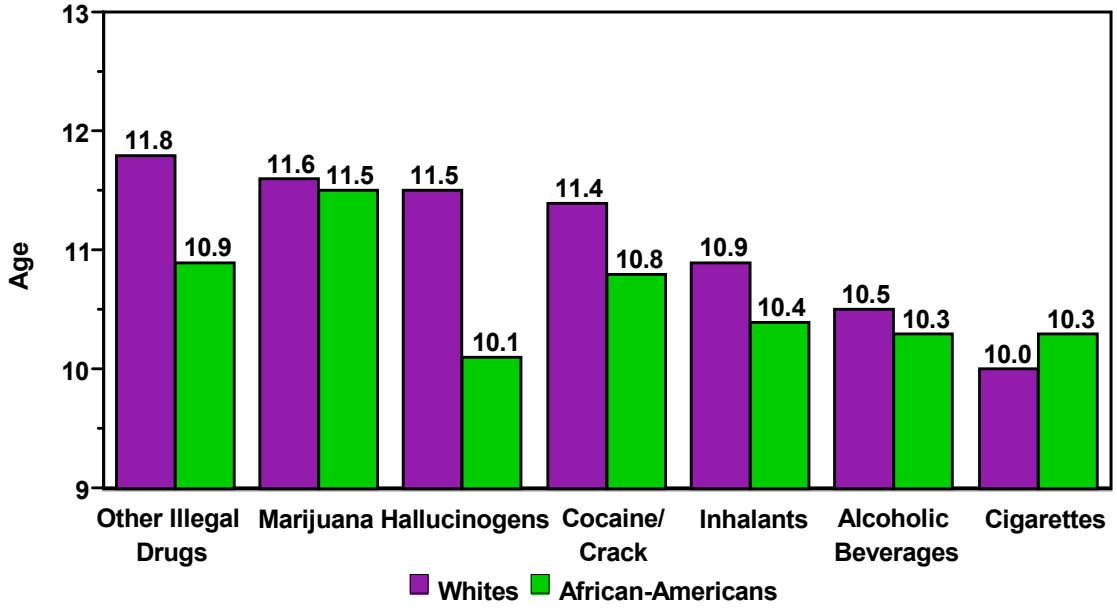
Source: Tennessee Middle School Health Survey 2001-2002 - Weighted Data, CHRG and Tennessee Department of Health.

Mean Age at First ATOD Use, by Gender and Substance Among Middle School Students, Tennessee, 2001-2002



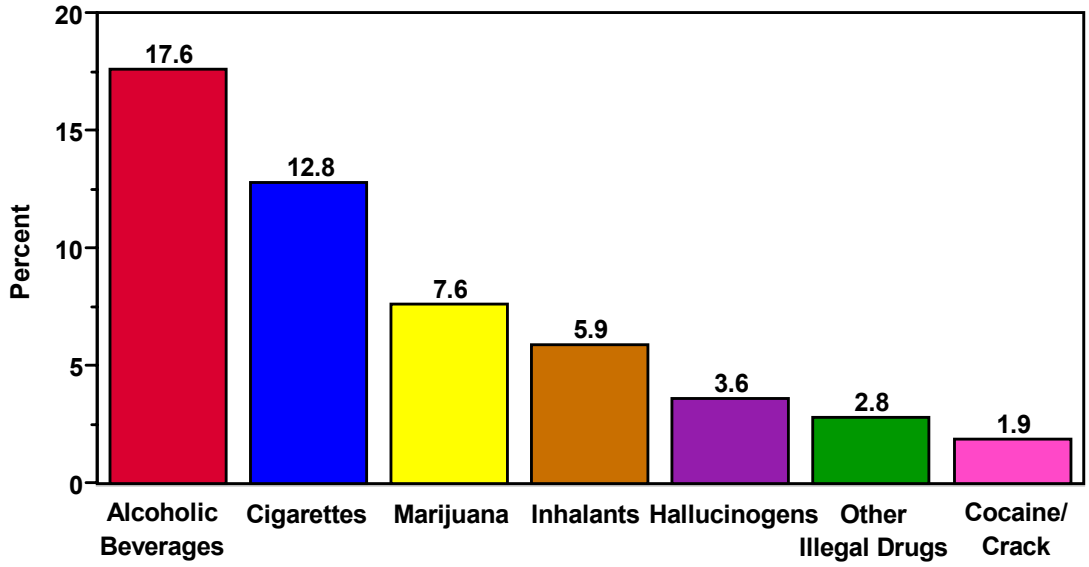
Source: Tennessee Middle School Health Survey 2001-2002 - Weighted Data, CHRG and Tennessee Department of Health.

Mean Age at First ATOD Use, by Race and Substance Among Middle School Students, Tennessee, 2001-2002

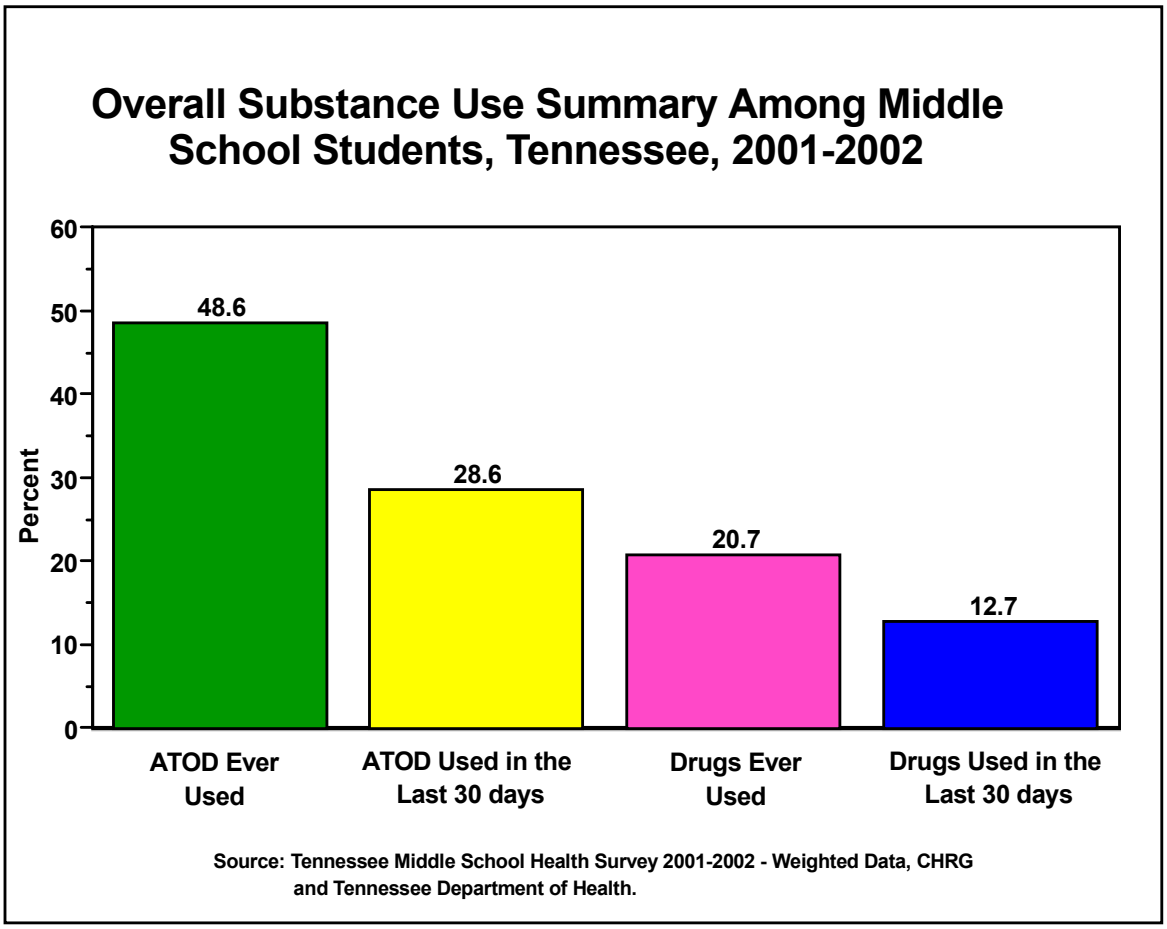


Source: Tennessee Middle School Health Survey 2001-2002 - Weighted Data, CHRG and Tennessee Department of Health.

Percent ATOD Users in the Last 30 Days, by Substance Among Middle School Students, Tennessee, 2001-2002



Source: Tennessee Middle School Health Survey 2001-2002 - Weighted Data, CHRG and Tennessee Department of Health.


Overall Substance Use Summary Among Middle School Students, Tennessee, 2001-2002
Percent
60
50
40
30
20
10
0
48.6
28.6
20.7
12.7
ATOD Ever Used
ATOD Used in the Last 30 days
Drugs Ever Used
Drugs Used in the Last 30 days
Source: Tennessee Middle School Health Survey 2001-2002 - Weighted Data, CHRG and Tennessee Department of Health.

ADULT HEALTH STATUS IN TENNESSEE BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS), 2001

The BRFSS is a nationwide telephone survey of adults age 18 or older that is conducted annually by the Centers for Disease Control and Prevention (CDC). For the 2001 Tennessee sample, collected by the Tennessee Department of Health (TDH), 2,924 adults living in households were interviewed. Study sample percentages by category were as follows: 52.5% females and 47.5% males; 83% whites, 13% blacks, and 2% Hispanics. The data reported are based on weighted percentages, and are therefore able to be generalized to the Tennessee adult population living in households.

Health Access

- In 2001, 11% of adult Tennesseans reported that they had no health insurance coverage compared to 13% nationwide. Males were more likely than females to be without health insurance (14% vs. 8%). Blacks were more likely to be uninsured than whites (14% vs. 10%).

  - Persons who were age 65 years and over were least likely to be without health insurance (3%), followed by those aged 45-54 (9%), 55-65 (10%), 35-44 (12%), and 25-34 (13%). Adults between 18 and 24 years of age were most likely to be without health insurance (19%).

  - As income decreased, the lack of health insurance coverage dramatically increased. While only 5.4% of those in the highest income bracket (≥$50,000 per year) reported that they had no health insurance, 21% of those in the lowest income bracket (< $15,000) reported lack of coverage.

  - The higher the educational level attained, the less likely were adults to report being without health insurance. Among college graduates, 4.6% lacked health insurance, while the prevalence increased to 12% among those who had graduated from high school, and to15% among those who did not finish high school.

General Health Status

- Overall, 20% of Tennessee adults age 18 years and over described their general health status as fair or poor in 2001, compared to 14% nationwide. Females (21%) were more likely than males (19%) to perceive their health as fair or poor. Blacks were more likely than whites to describe their health as fair or poor (23% vs. 20%).

  - While only 4% of adults between the ages of 18 and 24 perceived their health as fair or poor, the prevalence increased to 7%, 12% and 25% for adults aged 25-34, 35-44 and 45-54, respectively. For people more than 55

years of age, more than 35% reported their general health status as fair or poor.

- Fair or poor health was associated with income level. Only 7% of those with annual household incomes in the highest income bracket (≥$50,000 per year) perceived their health as fair or poor, while 41% of those with annual incomes of less than $15,000 described their health as fair and poor.

- People with lower educational attainment were more likely to report their health status as fair or poor. Forty-eight percent of those without a high school degree perceived their health status as fair or poor. The rate dropped to 21% of those with a high school degree, 13% among those with some post-high school education, and 9% of those with a college or higher degree.

Morbidity

Diabetes

- In 2001, approximately 8% of adult Tennesseans reported having ever been told by a health professional that they have diabetes[27], compared to 6.5% nationwide. The prevalence has continued to increase since 1997 when it was 4%.

  - There was no difference in diabetes prevalence by gender, with males and females both at 8%.

  - A slightly higher percentage of blacks than whites reported having been diagnosed with diabetes (9% vs. 8%).

  - The lifetime prevalence of diabetes increased by age, with less than 1% (0.5%) of the youngest age-group, 18-24 year olds, reporting diabetes, compared to 3% of the 25-44 year age-group; 9% of those aged 45-64, 15% of those aged 55-64, and 16.5% of those age 65 and over.

  - The lifetime prevalence of diabetes appeared to be inversely associated with both income and education. The lower the income or the less well-educated, the more likely an individual was to report having been diagnosed with diabetes.

    -- The reported levels were 12% and 9%, respectively, among groups with annual household incomes below $15,000 and between $15,000 and $24,999. This compares to 4% - 5.5% prevalence rates among groups with household incomes at or above $25,000.

[27] Does not include pregnancy-related diabetes.

-- Five percent of adults with post-high school education reported diabetes, compared to 9% of those with high school degrees and 13% of those having less than a high school education.

Hypertension

- In 2001, 29% of Tennessee adults reported having ever been told that they have high blood pressure by a doctor, compared to 26% nationwide. More females reported having high blood pressure (30%) than males (28%); and prevalence among blacks (35%) was higher than that among whites (29%).

  - The reported prevalence of hypertension increased with age, from 6% of adults aged 18-24 years, to 17% of those aged 25-44, 39% of those age 45-64, and 56% of those age 65 and older.

Asthma

- In 2001, 9% of Tennessee adults reported having ever been told that they have asthma by a doctor, compared to 11% in the U.S. More females reported having been diagnosed with asthma (11%) than males (7%). Blacks (10%) were slightly more likely to report being diagnosed with asthma than whites (9%).

  - The reported lifetime prevalence of asthma was inversely associated with income level. The highest prevalence (20%) was reported by those with annual household income levels below $15,000, followed by those with income levels between $15,000 and $24,999 (11.5%). The prevalence dropped to 7-8% in those adults with incomes of $25,000 or more.

Utilization of Preventive Services

Flu Immunization

- In 2001, 33% of Tennessee adults reported that they had received a flu shot within the past 12 months, compared to 32% nationwide. The rates were 32.5% for males, 34% for females, 34% for whites, and 28% for blacks. Fully 66% of respondents age 65 and older had recently received a flu shot.

Pneumonia Vaccination

- In 2001, 20% of adult Tennesseans reported that they had received a pneumonia vaccination, compared to 22% in the U.S. The rates were similar by gender, at 19% for males, 20% for females, but were higher for whites, at 21%, than for blacks, at 16%. More than half (55%) for respondents age 65 and older had received a pneumonia vaccination.

Cholesterol Screening

- In 2001, 73% of adult Tennesseans reported that they had ever had their blood cholesterol checked, compared to 77% nationwide. The cholesterol screening occurred within the past year for 77% of adults and within the past two years for an additional 14% of adults.

  - Thirty-three percent of adults were told by a doctor or other health professional that their blood cholesterol was high. The rates were 36% for males, 31% for females, 35% for whites and 23.5% for blacks.

  - Nine percent of adults aged 18-24 reported high cholesterol. The prevalence rose to 22% among the 25-44 age-group, and to 41% among adults age 45 or older.

Mammograms and Clinical Breast Examinations

- In 2001, 20% of females age 40 and over reported never having had a mammogram and breast exam. By age-group, the rates of never having had a mammogram and breast examination were 20% for females aged 40-49, 15% for females aged 50-64, and 25% for females age 65 and older.

  - Also, 24% of females age 40 and over reported not having a mammogram in the past two years. By age-group, the rates were 25% for females aged 40-49, 18% for females aged 50-64, and 28.5% for females 65 and older.

Pap Smears

- In 2001, 12% of female respondents, age 18 and older, reported that they had not had a Pap smear within the past 3 years. Nine percent of females aged 18-34 had not had Pap smear exams within the past 3 years, compared to 7% of females aged 35-49, 13% for females aged 50-64, and 32% for females 65 and older.

Risk Factors for Disease and Injury

Weight

- Based on the Body Mass Index (BMI)[28], 35% of adult Tennesseans sampled in the 2001 BRFSS were overweight (defined as having a BMI between 25.0 and 29.9), while 23% were obese (defined as having a BMI of 30.0 or more). In the U.S., the prevalence of overweight and obese adults was 37% and 21%, respectively.

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[28]BMI is defined as weight in kilograms divided by height in meters, squared.

- A higher percentage of males (42%) than females (29%) was classified as overweight; however, levels of obesity were similar by gender (24% obese males vs. 23% obese females).

  - The rates for obese adults in Tennessee by age-group were 20% among those aged 18-34, 26% among those aged 35-49, 28% among those aged 50-64, and 19% among those age 65 and older. The rates of overweight were lowest in the youngest age-group, aged 18-34 (28%). Overweight prevalence was similar among the other three age-groups (39%, 39% and 38%, respectively).

Physical Activity

- In Tennessee in 2001, about 35% of adults reported that they had not participated in any physical activity in the past 30 days, compared to 26% nationwide. More females (39%) spent no leisure time on physical activity (were physically inactive) than males (31%), and more blacks (42.5%) were physically inactive than whites (34%).

  - Approximately 47% of respondents age 65 or older reported that they were physically inactive, compared to 44.5% of those aged 55-64, 36.5% of those aged 45-54, and 28% of those under 45 years of age.

  - Tennessee adults with lower incomes and less education were more likely to report being physically inactive. In households with incomes of $50,000 or more per year, 17% of respondents reported that they had not participated in any physical activity in the past 30 days, compared to 31% of those with household incomes between $25,000 and $50,000, and 46% of those living in households with annual incomes of less than $25,000. By educational level, only 18% of college graduates did not participate in any physical activity, compared to 62% of those with less than a high school education. The prevalence of physical inactivity among those who were high school graduates and those who had some post-high school education was in the middle of the range, at 27% and 41%, respectively.

Diet/Nutrition

- The Food and Drug Administration recommends consuming five or more fruits and vegetables a day to reduce the risk of certain chronic diseases, including cancer and heart disease. In 2001, only 37% of adult Tennesseans complied with this recommendation.

- More females (40%) were consuming the recommended quantity of fruits and vegetables than males (34%).

- Compliance levels ranged from 45% among senior adults age 65 and older to 41% among adults aged 50-64, down to 33% among those aged 35-49, and 34% among young adults aged 18-34.

Smoking

- Current smokers were defined as persons who reported ever smoking 100 cigarettes or more in their lifetime and who smoked at the time of the survey either every day or some days. In 2001, 24% of Tennessee adults were current smokers, compared to 23% of U.S. adults. Somewhat higher percentages of males were current smokers (26%) than females (23%).

  - The prevalence of current smoking by age-group was 28% among adults age 18-34, 30% among those aged 35-49, 24% among those aged 50-64, and 9.5% among adults age 65 and older.

Binge Drinking of Alcoholic Beverages

- Binge drinking (sometimes referred to as heavy drinking) is defined as having 5 or more drinks on one occasion. In 2001, 7% of Tennessee adults reported engaging in binge drinking one or more times during the past 30 days. This percentage is considerably lower than the current binge drinking prevalence for the U.S. of 15%.

  - Much higher percentages of males were binge drinkers (12%) than females (2%). Blacks (10.5%) were more likely to be binge drinkers than whites (6%). The prevalence by age-group declined from 13% among those aged 18-34, to 6% among those aged 35-49 and 4% among those aged 50-64, to 2% among adults age 65 and older.

Chronic Drinking of Alcoholic Beverages

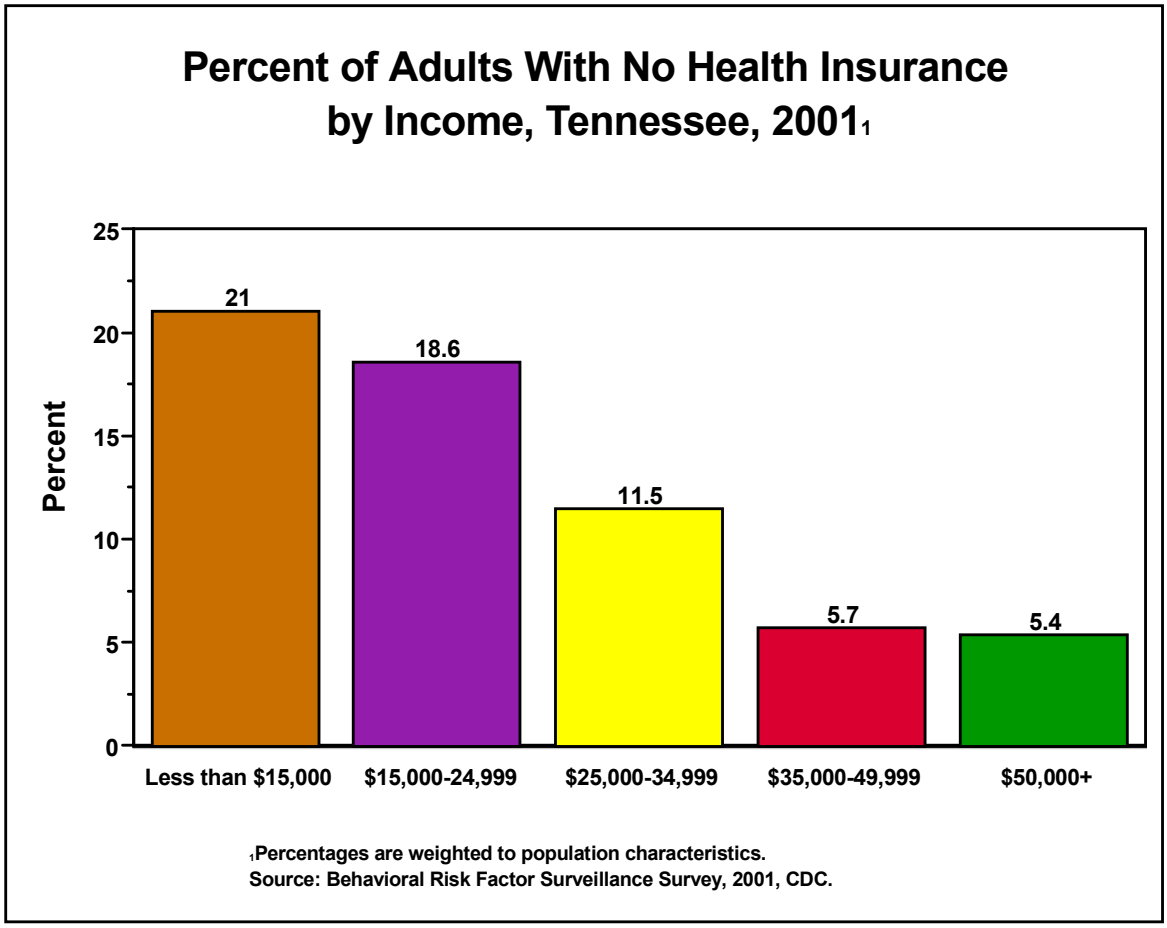
- Chronic drinking is defined as having an average of 2 or more alcoholic drinks per day, i.e., 60 or more alcoholic drinks in 30 days. In 2001, 2.5% of Tennessee adults reported chronic drinking, compared to 5% nationwide. Somewhat higher percentages of males were chronic drinkers (3%) than females (2%). Reported chronic drinking was slightly higher among blacks (18.5%) than whites (16.9%). While 3% each of adults aged 18-34 and aged 35-49 reported chronic drinking, percentages declined in the older age-groups to 2% among adults aged 50-64, and 1% among those age 65 and older.

AIDS Risk

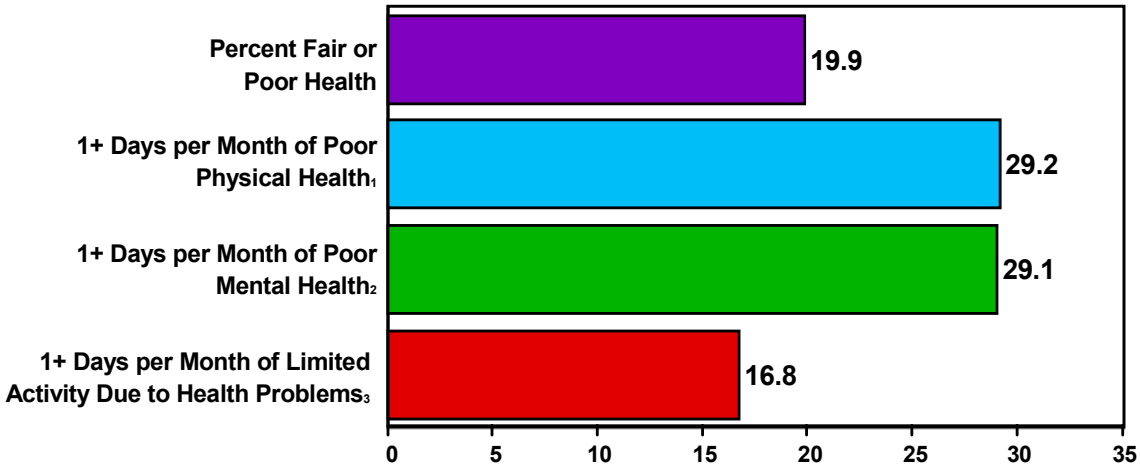
- 2001 HIV/AIDS prevalence data was not available at the time of this report. In 2000, about 6% of Tennesseans 18 to 64 years of age perceived a medium-to-high risk of getting infected with HIV, the virus that causes AIDS. While 7% of males

perceived a medium-to-high risk of AIDS, 5.5% of females perceived the same risk. The perceived risk was more pronounced among blacks than whites, with 10% of blacks and 5% of whites perceiving a medium-to-high level of risk of AIDS.

Source: Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System Online Prevalence Data, 1995-2001 <www.cdc.gov/brfss>.



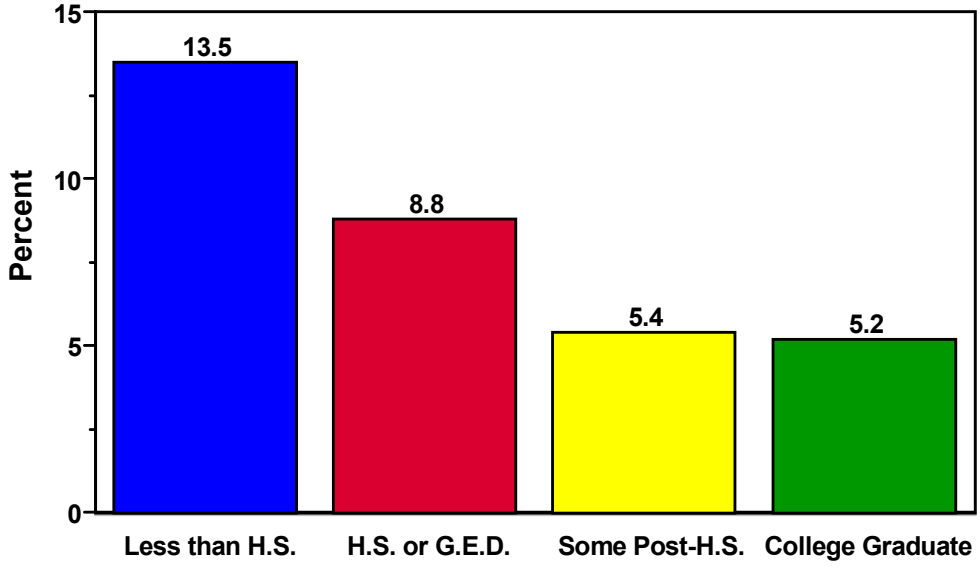
Health Status Among Tennessee Adults, 2001



[1] For how many days during the past 30 days was your physical health not good?
[2] For how many days during the past 30 days was your mental health not good?
[3] For how many days of the last 30 did poor physical or mental health keep you from doing your usual activities?

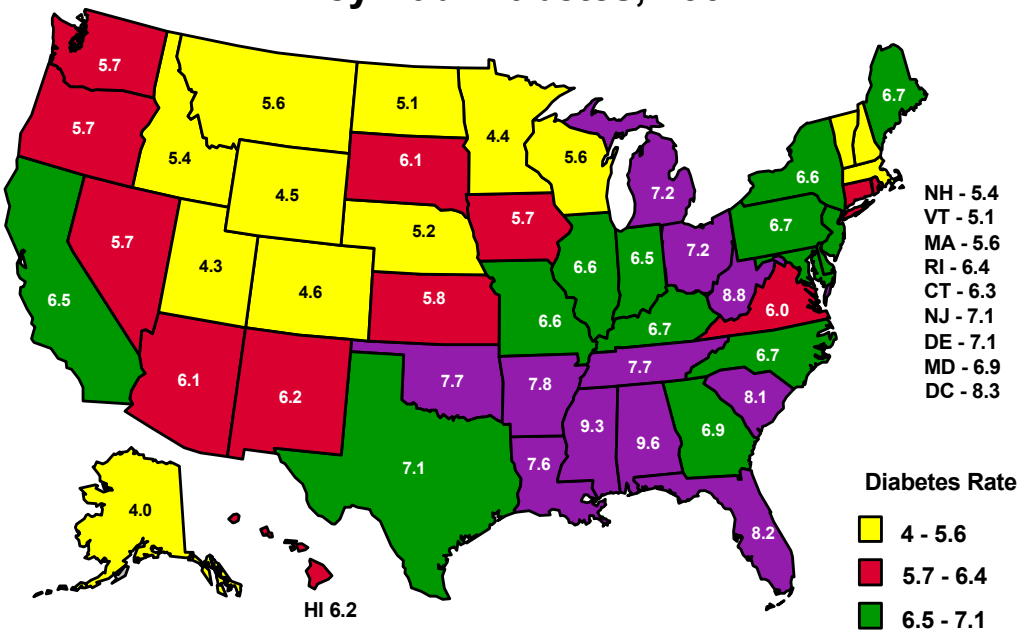
Source: Behavioral Risk Factor Surveillance Survey, 2001, CDC.

Percent of Adults With Diabetes (Not Pregnancy-Related) by Education, Tennessee, 2001[1]



[1]Percentages are weighted to population characteristics.
Source: Behavioral Risk Factor Surveillance Survey, 2001, CDC.

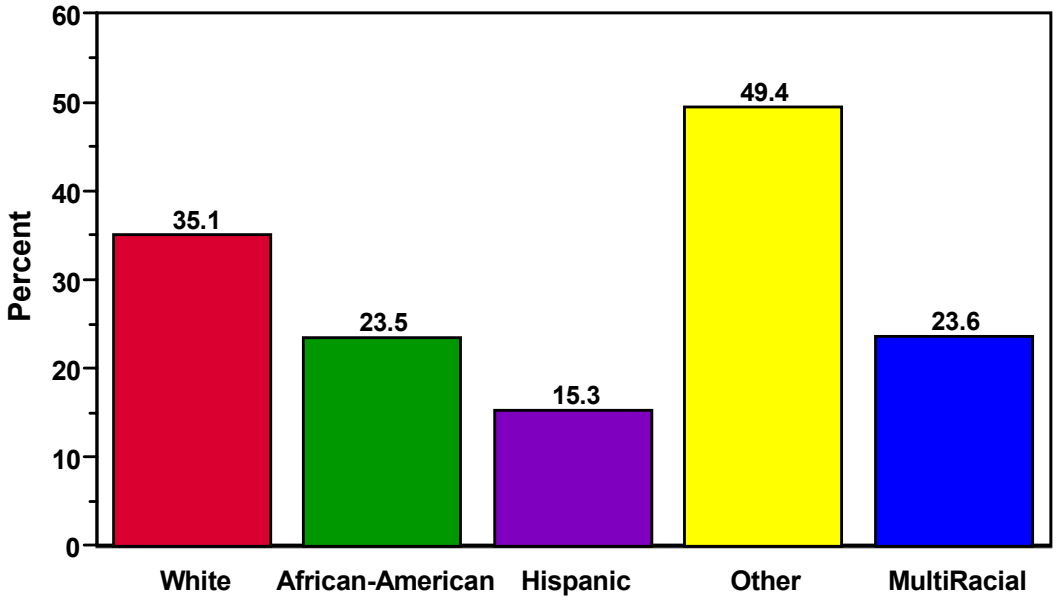
Percentage of Adults Told by a Doctor That They Had Diabetes, 2001



Tennessee - 7.7; United States - 6.5

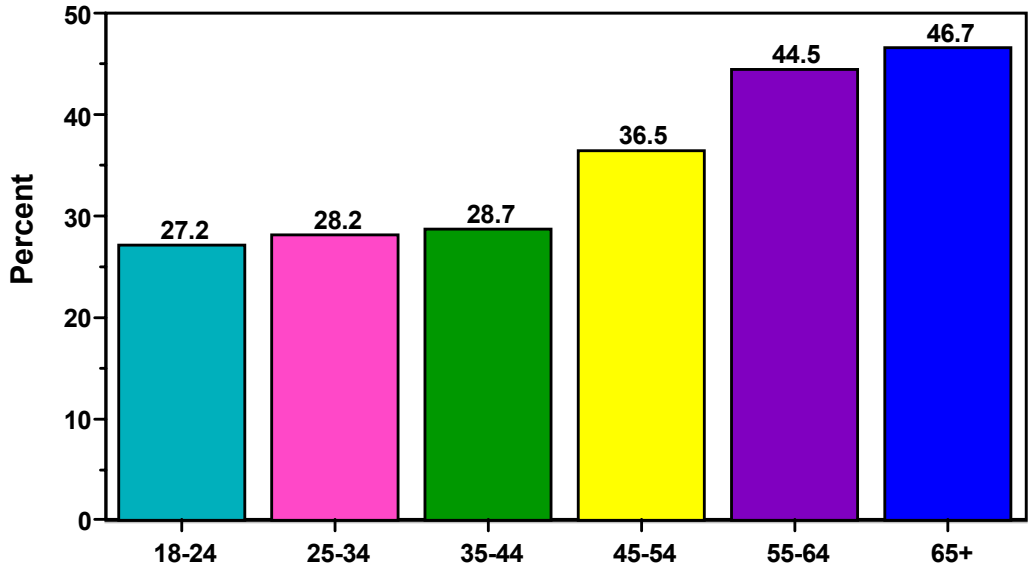
Source: Behavioral Risk Factor Surveillance Survey, 2001, CDC.

Percent of Adults With High Blood Cholesterol, Tennessee, 2001



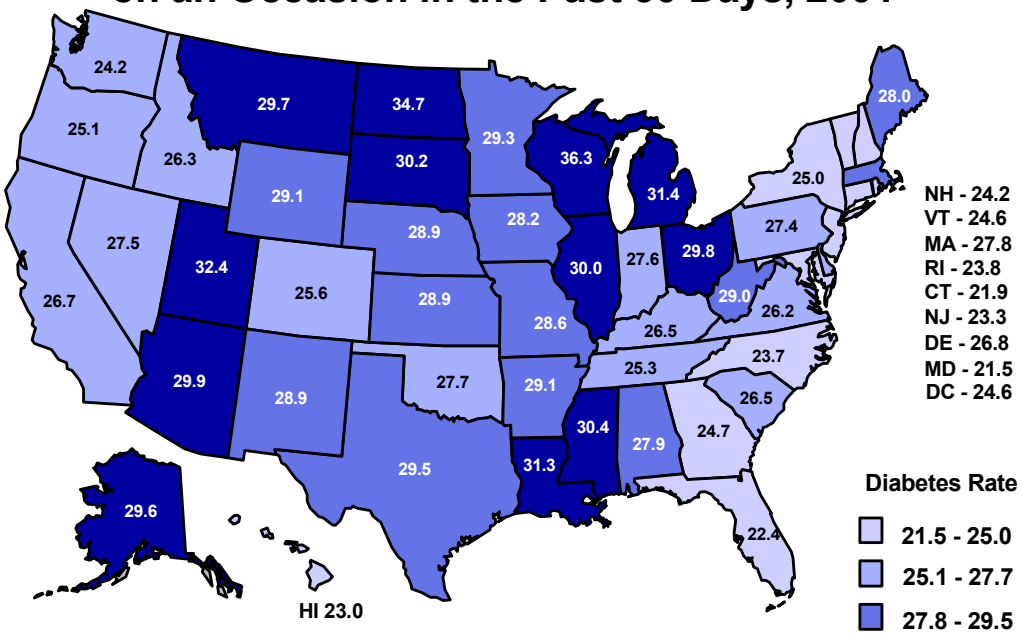
[1]Percentages are weighted to population characteristics.
Source: Behavioral Risk Factor Surveillance Survey, 2001, CDC.

Percent of Adults Who Are Physically Inactive by Age-Group, Tennessee, 2001[1]



[1]Percentages are weighted to population characteristics.
Source: Behavioral Risk Factor Surveillance Survey, 2001, CDC.

Percent of Adults Drinking 5 or more of Alcohol on an Occasion in the Past 30 Days, 2001



Tennessee - 25.3; United States - 27.8

Source: Behavioral Risk Factor Surveillance Survey, 2001, CDC.

MORTALITY AND MORBIDITY AMONG SENIORS AGE 65 AND OVER IN TENNESSEE

Mortality

- The population of seniors increased by 13.7% between the two Census years of 1990 and 2000, from 618,818 to 703,311, respectively.

- The leading causes of death among seniors in Tennessee in 2001 were first heart disease, followed by cancer. The third overall leading cause of death was stroke, followed by COPD and influenza and pneumonia. Rates for these respective causes of death among Tennessee seniors were 1739.5, 1160.1, 493.6, 344.4 and 198.2 per 100,000.

- While heart disease and cancer were the top two leading causes for all race-gender groups, stroke was the third leading cause of death for all groups save white males, for whom it was fourth and COPD was third. COPD was the fourth leading cause of death among senior white females and fifth among senior black males, but it did not appear among the top five causes of death for black females age 65 and over. Diabetes, on the other hand, was the fourth leading cause of death among both senior black males and females, but does not appear among the top mortality causes for senior whites. Senior black females were the only group with essential (primary) hypertension as one of the top causes of death, ranked fifth for that group, while influenza and pneumonia was the fifth leading cause of death for both senior white males and females.

- All-cause death rates among Tennessee seniors rose by 5.1% , from 5280.9 in 1990 to 5552.7 in 2001, due entirely to increases in senior female death rates. Thus, rates decreased by 5.9% among senior males in the State over time, from 4438.1 to 6059.0, while they increased among females from 4534.4 to 5213.8. This 15% increase among females, while from a lower base rate than for males, suggests that improvements in mortality have affected males age 65 and over more than females in the State over the period of interest.

  - Mortality rates show a slight (2.2%) increase in senior black death rates over the period from 6387.1 in 1990 to 6530.8 in 2000, compared to an increase of 6.8% among senior whites from 5144.0 to 5491.5 over the same period.

  - Thus, senior all-cause death rates dropped for both white and black males (by about 5% each) but rose for both black females (by 9.2%) and white females. The largest increases in mortality were observed among white females (17.1%), whose rates were nevertheless still lowest of all groups. Thus, all-cause death rates dropped among white males, from 6267.3 in 1990 to 5965.3 in 2001, and among black males from 7870.7 in 1990 to

7479.1 per 100,000 in 2001. Among senior white females, rates rose from 1990 levels of 4415.4 to 5169.4 in 2001, and among black females, they rose from 5471.0 to 5976.8 between 1990 and 2001.

- In 2001, senior black males were the most disadvantaged in terms of mortality, having by far the highest death rates, at 20.2% higher than their white male counterparts, 20.1% higher than black femalesí rates, and fully 30.9% higher than rates for white females.

- No differences in all-cause death rates among seniors marked metropolitan versus nonmetropolitan regions, at 5594.8 and 5525.3 deaths per 100,000, respectively.

  - Senior death rates were highest in the Northwest Health Department region of Tennessee at 6156.5, while Madison County was the region with the lowest rate at 5044.5 per 100,000.

  - The highest death rates to seniors by county in Tennessee in 2001 were observed for Lake County and Lauderdale Counties, followed by Gibson and Giles, while the lowest death rates from all causes were noted for Humphreys, Perry, Cumberland and Van Buren Counties.

- Examination of specific causes of death suggests that excess death rates from diabetes and essential hypertension are more prevalent among black males and females than white males and females.

Morbidity

The Tennessee Health and Lifestyles Survey of 1998, in which more than 11,000 Tennesseeans age 18 and older living in households were surveyed using random-digit-dial telephone methods, is an excellent resource for documenting health and well-being, in this case, comparing adults age 65 and over with those under 65.[29]

- *Health Status:* Fair or poor health was reported by 42.6% of seniors and 19.5% of adults aged 18 to 64. Depression prevalence was similar in both groups, at 11.3% of seniors and 12.6% of other adults, while 1% and 3.6% of each respective group had attempted suicide.

- *Self-Reported Morbidity:* Most chronic and some acute conditions from high blood pressure, heart disease, and stroke, to diabetes, pneumonia and cancer as well as chronic GI tract problems, gallbladder problems and joint problems were more likely

[29] These results can be obtained at www.tennessee.gov/hitspot, by using SPOT to access Surveys and the Adult 1998 Health and Lifestyles Survey, and finally querying the data for 65 and older adults compared to those under 65 for the variables of interest.

to be reported by seniors. However, adults under age 65 were more likely to report seizures, liver problems, and injuries, especially traffic crash injuries, but also other injuries. A higher percentage of adults between the ages of 18 and 64 also reported ever having had mental illness or learning problems, and HIV/AIDS.

- *Health Care Utilization:* Approximately the same proportions of senior and younger adults had ever seen a doctor or other health care provider for a physical health problem (70.9% and 71.8%, respectively) or had done so in the past 12 months (39.5% and 39.1%, respectively). However, younger adults were more likely to have ever used a hospital emergency room (73% compared to 68.1%, respectively), while senior adults were more likely to have ever been admitted to a hospital (88.6% and 80.1%, respectively). The prevalence of 12-month utilization of ERís was similar for the two groups at 20.4% for seniors and 19.9% for adults under 65 years. Twelve-month prevalence of hospital admission was higher among senior adults at 17.2%, compared to 10.4% of younger adults. While 88.5% of seniors had ever had a routine checkup or screening and 90.6% of younger adults had ever done so, the percentages of those who had had a routine checkup in the past 12 months are 56.9% and 53.3%, respectively.

- *Health Insurance and Health Care Access*: While 99.3% of senior adults were covered by health insurance, 90.4% of those under 65 years were insured. Also, 72.2% of seniors, but only 15.9% of younger adults, had supplemental health insurance. Seniors were more likely to have a usual source of health care, at 93.1% compared to 86.9% of adults under age 65. And, while 8.2% of younger adults were unable to get medical care in the year preceding the survey, only 3% of seniors reported this problem.

- *DUI:* Driving after drinking alcohol and using prescription or other drugs was much more commonly reported by younger adults than those age 65 and over. Thus, while 45.9% of younger adults reported driving after ever drinking alcohol and 9.7% reported doing so in the past year, 20.8% of seniors reported this behavior in their lifetimes and 3.2% in the past year. Driving after drinking five or more drinks of alcohol was reported by 24.3% of younger adults and 8% of seniors. The prevalence of heavy/binge drinking coupled with driving in the past year was 2.7% among adults younger than 65 and 0.3% among those 65 and older. Similarly, 18.9% of adults under age 65 and 13.8% of those age 65 and over had driven after prescription drug use in the past year, while 34.3% and 19.5%, respectively, had done so ever in their lifetimes. Driving after use of other drugs was reported by 10.4% of younger adults and 1.9% of seniors, while 3% and 1.1% of each respective group had driven after other drug use in the past year.

- *Alcohol and Other Drug Use:* Younger adults were much more likely to report use of all drugs and substances: cigarettes and other tobacco, alcohol, tranquilizers, stimulants and painkillers, steroids, and marijuana, whether lifetime, 12-month or 30-day use. No seniors reported using cocaine, heroin, or injection drugs, and only

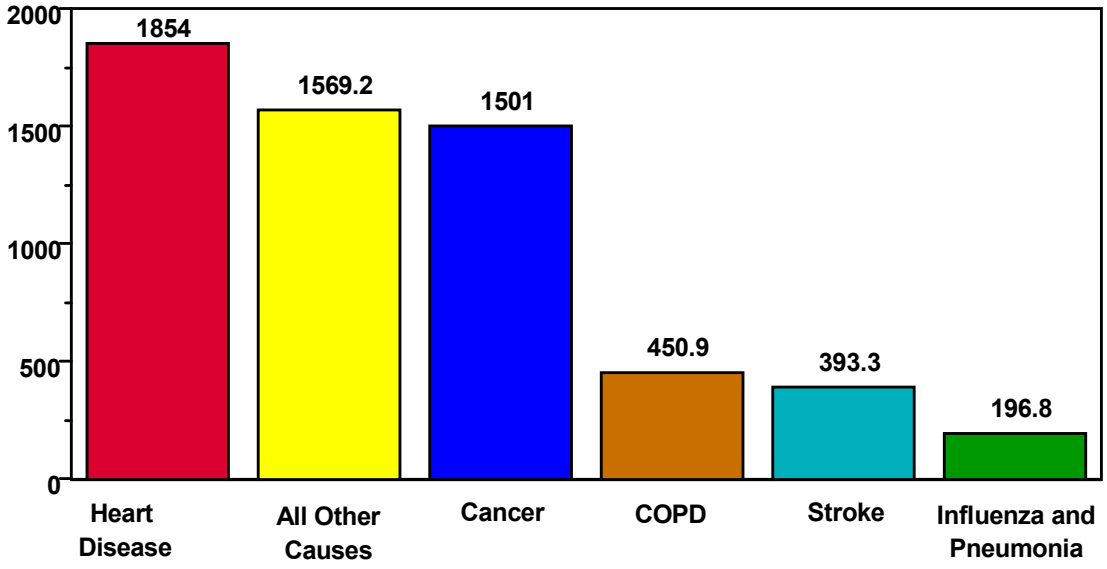
one senior reported using hallucinogens, compared to percentages of other adults ranging from 7% to 0.7%, depending on the drug. The only drugs that seniors were more likely to report using were sedatives and those only in the past 12 months or 30 days; lifetime prevalence of sedative use was the same for both groups. In line with these results, seniorsí self-reported addiction to all drugs and substances was also much less than that for younger adults.

- *Mental Health Treatment*: A higher percentage of younger adults had ever received mental health treatment and had done so in the past year, at 13.4% and 4.6%, compared to senior adults, at 5.3% and 1.3%, ever and in the past 12 months. While 3.6% of younger adults had ever been admitted to hospital for a psychiatric problem, this was reported by 2.3% of adults age 65 and over, with 0.4% of younger adults and no seniors reporting such hospital admission over the past year.

- *Alcohol or Other Drug Treatment:* Seniors in this survey were less likely to have been treated for an alcohol problem than younger adults, at 0.9% and 2.7% ever treated and 0.2% and 0.6% treated in the past year, respectively. Similarly, 1.2% of younger adults had ever been treated for a drug problem, and 0.2% had received treatment in the past year, while no seniors had ever been treated for a drug problem.

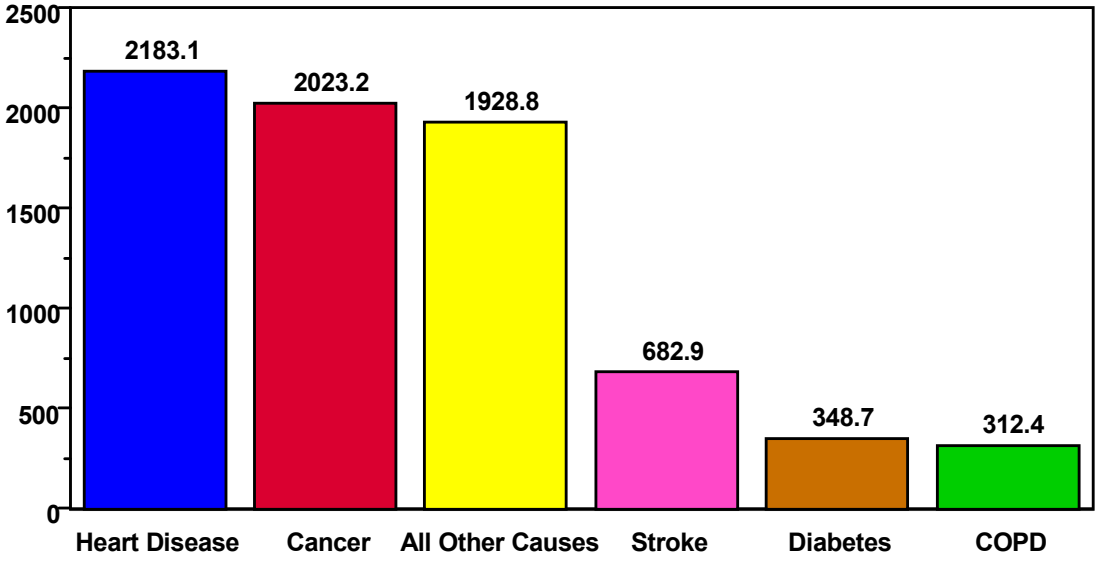
- *Caveats:* The mortality effects on these groups of senior and younger adults in the survey are such that members of the population who have engaged in risky behaviors, including alcohol and other drug use and DUI, are less likely to still be in the population as senior adults, since they would been more likely to have died and been eliminated from their age cohort earlier. It is also possible that they may be incarcerated or institutionalized in greater numbers such that they would not be represented in this or any survey of the noninstitutionalized household population. It also important to note relative to the seniors in the sample; that they are living in households and not in institutions and, therefore, represent the healthier and more independent seniors in Tennessee at the time. This reality represents a conservative bias in the results.

Top Five Leading Causes of Death Among White Males, Ages 65-85+, Tennessee, 2001[1]



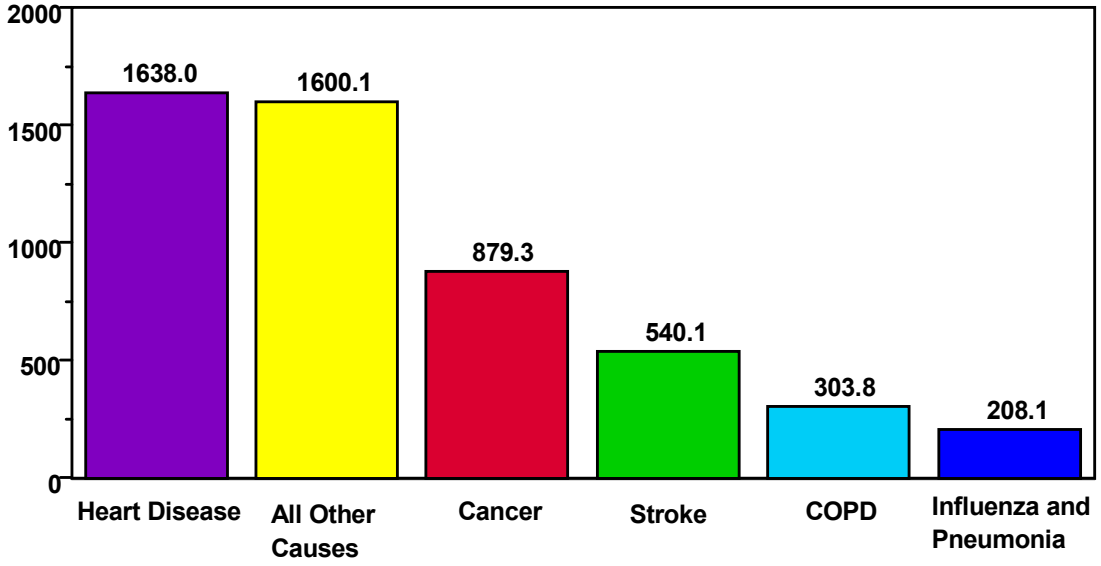
[1]Note: Death rates per 100,000 population are reported.
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Top Five Leading Causes of Death Among African-American Males, Ages 65-85+, Tennessee, 2001[1]



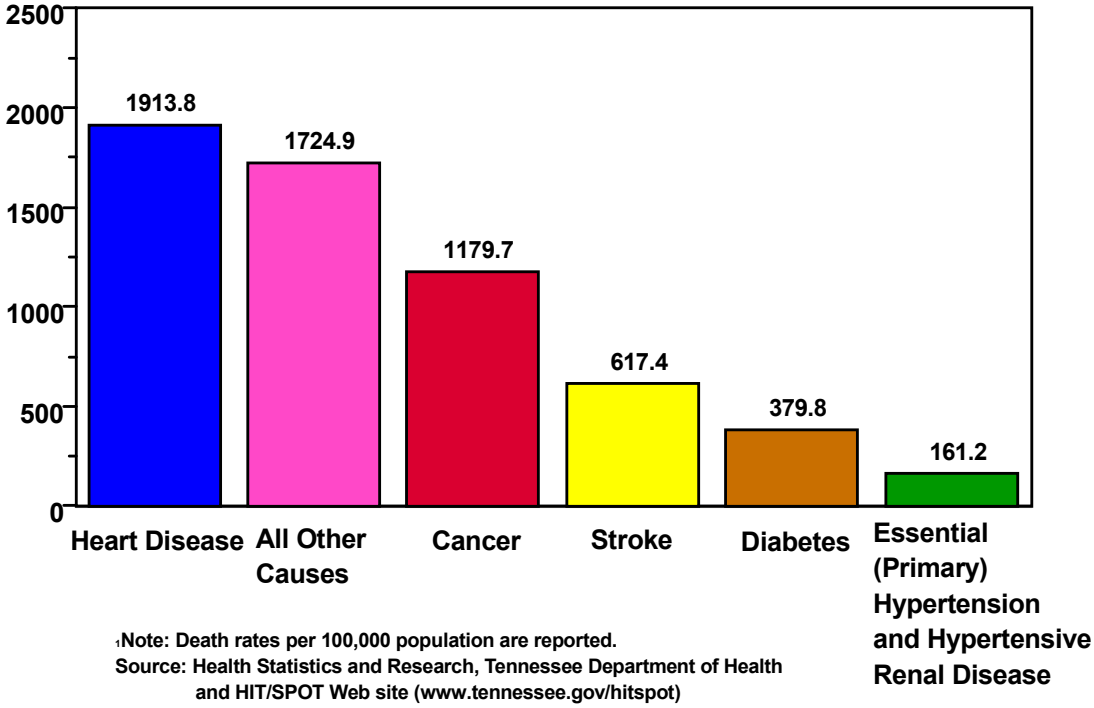
[1]Note: Death rates per 100,000 population are reported.
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Top Five Leading Causes of Death Among White Females, Ages 65-85+, Tennessee, 2001[1]

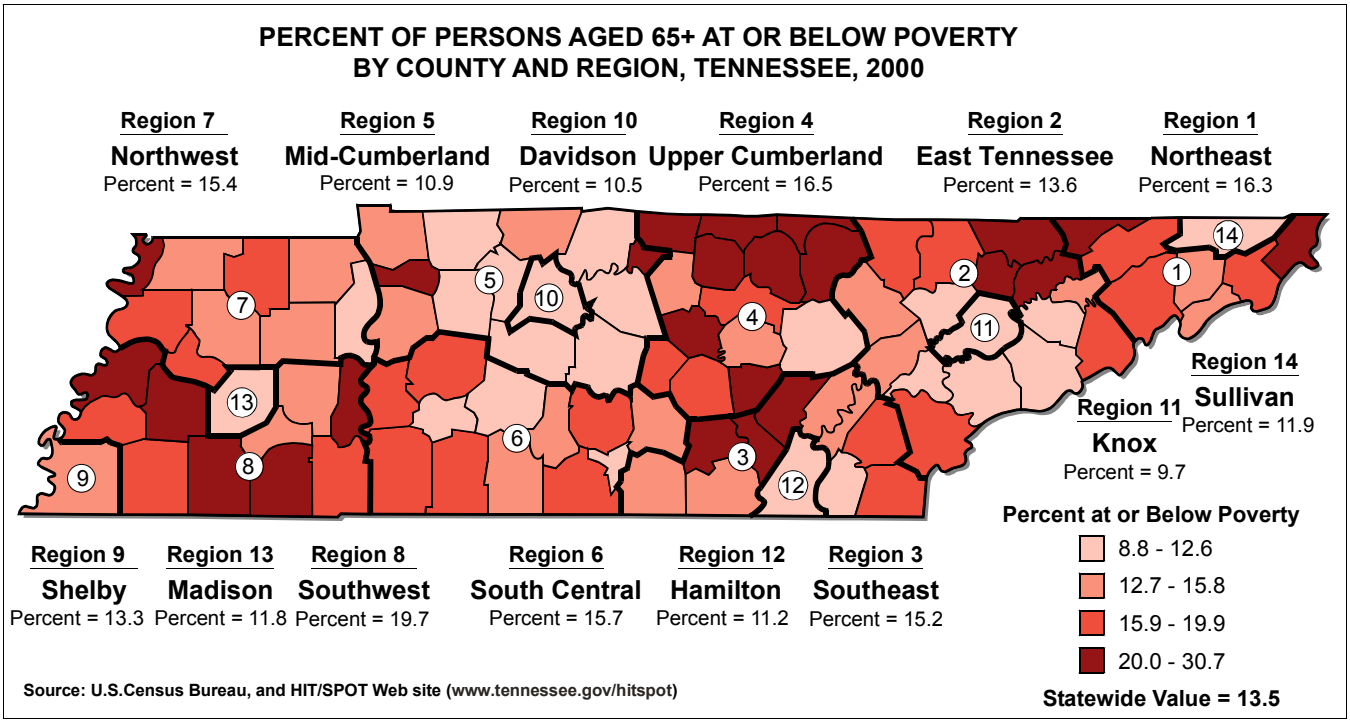


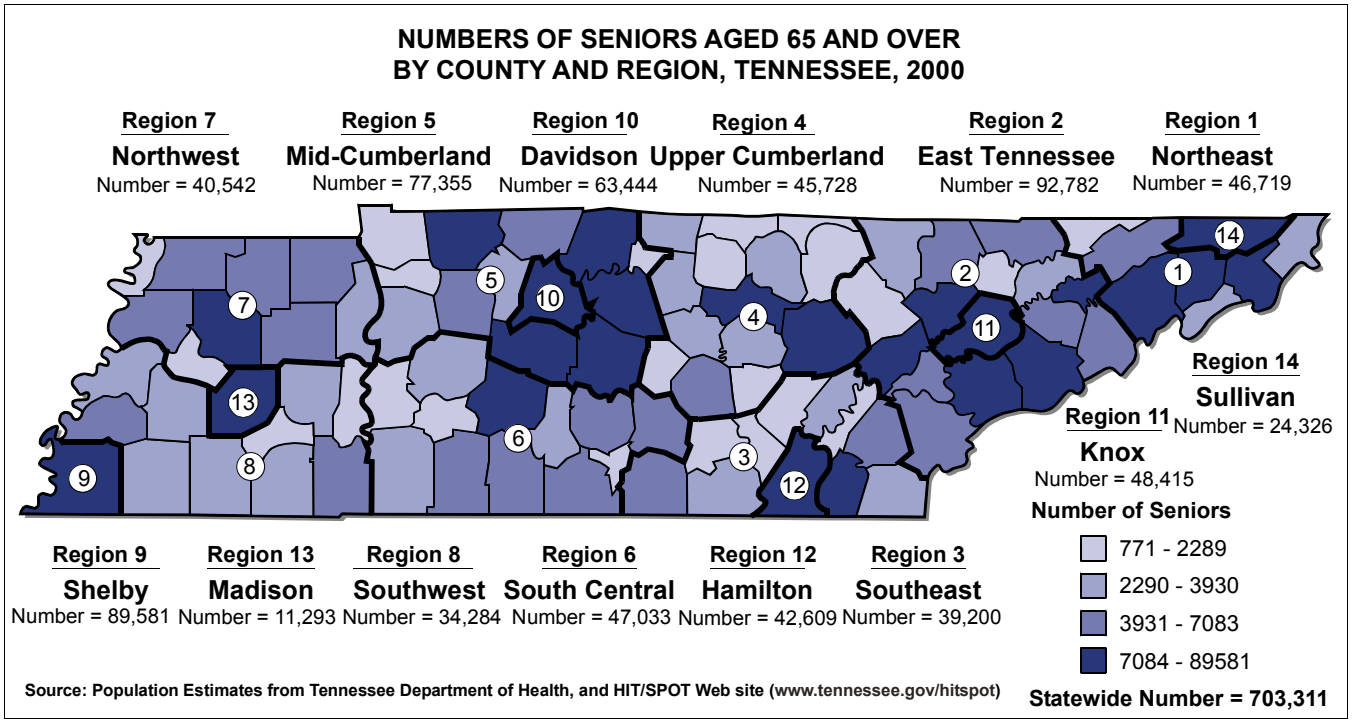
[1]Note: Death rates per 100,000 population are reported.
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

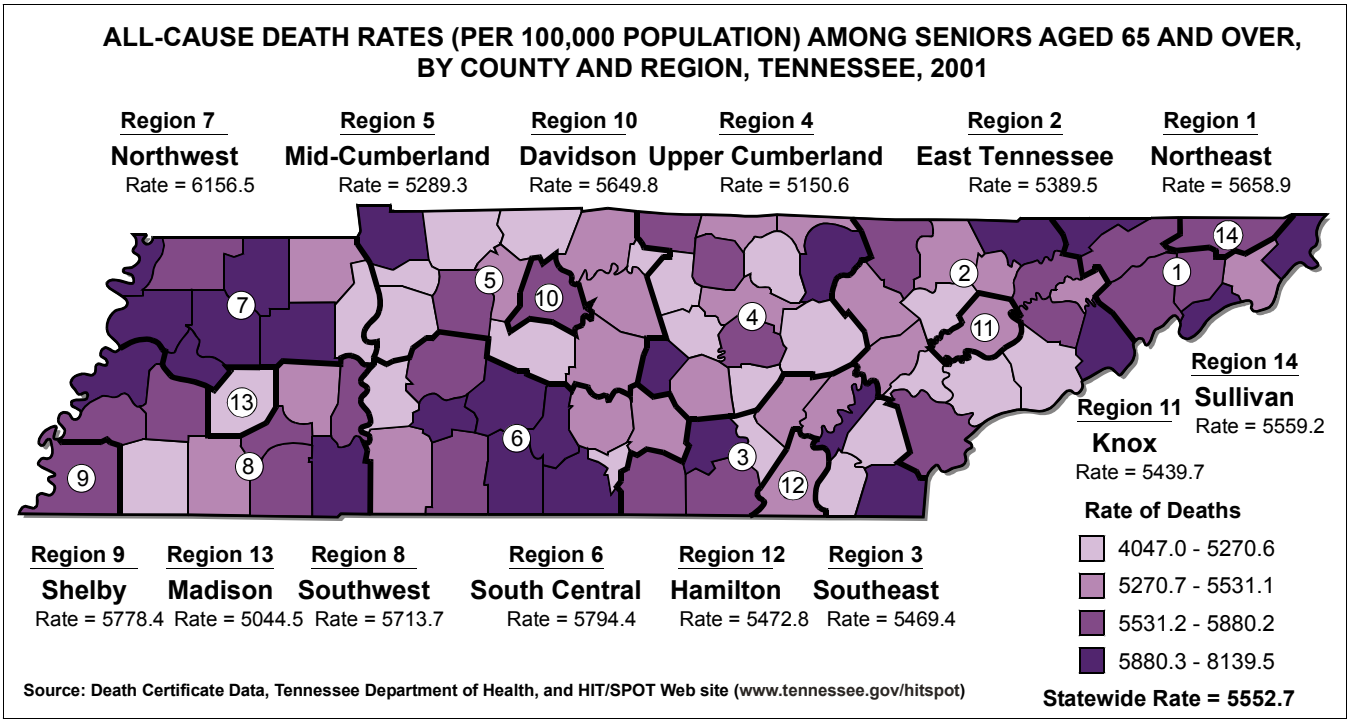
Top Five Leading Causes of Death Among African-American Females, Ages 65-85+, Tennessee, 2001[1]



[1]Note: Death rates per 100,000 population are reported.
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)


PERCENT OF PERSONS AGED 65+ AT OR BELOW POVERTY
BY COUNTY AND REGION, TENNESSEE, 2000
Region 7
Northwest
Percent = 15.4
Region 5
Mid-Cumberland
Percent = 10.9
Region 10
Davidson
Percent = 10.5
Region 4
Upper Cumberland
Percent = 16.5
Region 2
East Tennessee
Percent = 13.6
Region 1
Northeast
Percent = 16.3
Region 14
Sullivan
Percent = 11.9
Region 11
Knox
Percent = 9.7
Region 9
Shelby
Percent = 13.3
Region 13
Madison
Percent = 11.8
Region 8
Southwest
Percent = 19.7
Region 6
South Central
Percent = 15.7
Region 12
Hamilton
Percent = 11.2
Region 3
Southeast
Percent = 15.2
Percent at or Below Poverty
8.8 - 12.6
12.7 - 15.8
15.9 - 19.9
20.0 - 30.7
Statewide Value = 13.5
Source: U.S.Census Bureau, and HIT/SPOT Web site (www.tennessee.gov/hitspot)


NUMBERS OF SENIORS AGED 65 AND OVER
BY COUNTY AND REGION, TENNESSEE, 2000
Region 7
Northwest
Number = 40,542
Region 5
Mid-Cumberland
Number = 77,355
Region 10
Davidson
Number = 63,444
Region 4
Upper Cumberland
Number = 45,728
Region 2
East Tennessee
Number = 92,782
Region 1
Northeast
Number = 46,719
Region 14
Sullivan
Number = 24,326
Region 11
Knox
Number = 48,415
Region 9
Shelby
Number = 89,581
Region 13
Madison
Number = 11,293
Region 8
Southwest
Number = 34,284
Region 6
South Central
Number = 47,033
Region 12
Hamilton
Number = 42,609
Region 3
Southeast
Number = 39,200
Number of Seniors
771 - 2289
2290 - 3930
3931 - 7083
7084 - 89581
Statewide Number = 703,311
Source: Population Estimates from Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)


ALL-CAUSE DEATH RATES (PER 100,000 POPULATION) AMONG SENIORS AGED 65 AND OVER, BY COUNTY AND REGION, TENNESSEE, 2001
Region 7
Northwest
Rate = 6156.5
Region 5
Mid-Cumberland
Rate = 5289.3
Region 10
Davidson
Rate = 5649.8
Region 4
Upper Cumberland
Rate = 5150.6
Region 2
East Tennessee
Rate = 5389.5
Region 1
Northeast
Rate = 5658.9
Region 14
Sullivan
Rate = 5559.2
Region 11
Knox
Rate = 5439.7
Region 9
Shelby
Rate = 5778.4
Region 13
Madison
Rate = 5044.5
Region 8
Southwest
Rate = 5713.7
Region 6
South Central
Rate = 5794.4
Region 12
Hamilton
Rate = 5472.8
Region 3
Southeast
Rate = 5469.4
Rate of Deaths
4047.0 - 5270.6
5270.7 - 5531.1
5531.2 - 5880.2
5880.3 - 8139.5
Statewide Rate = 5552.7
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

TENNESSEE'S PROGRESS TOWARD SELECTED U.S. HEALTHY PEOPLE 2000 OBJECTIVES

Established by the United States Department of Health and Human Services, the Healthy People 2000 objectives were national standards that helped states to achieve improved health status. Healthy People 2000 indicators relating to mortality, teenage pregnancy and births, adult behavioral risk factors, and other topical areas have been examined to assess Tennessee's progress toward meeting these national objectives in previous Tennessee Health Status reports. Here the culmination of Tennesseeís experience of attaining, surpassing or failing to reach specific health objectives sets the stage for the monitoring of 2010 Healthy People Objectives and Tennesseeís early progress toward achieving those goals.

MORTALITY

REDUCE CORONARY HEART DISEASE MORTALITY
(Healthy People 2000 Objectives 1.1, 1.1a)

2000 TN: 113.9 deaths per 100,000
2000 U.S. Target: 100 deaths per 100,000
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 12% to have achieved the national goal.

2000 TN: 165.6 deaths per 100,000 blacks
2000 U.S. Target: 115.0 deaths per 100,000 blacks
Status: Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 blacks needed to have decreased by 31% to have achieved the national goal.

REDUCE STROKE MORTALITY
(Healthy People 2000 Objectives 15.2, 15.2a)

2000 TN: 32.1 deaths per 100,000
2000 U.S. Target: 20 deaths per 100,000
Status: Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 needed to have declined by 38% to have achieved the national goal.

2000 TN: 51.9 deaths per 100,000 blacks
2000 U.S. Target: 27 deaths per 100,000 blacks
Status: Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 needed to have declined by 48% to have achieved the national goal.

REDUCE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) MORTALITY
(Healthy People 2000 Objective 3.3)

2000 TN:	27.1 deaths per 100,000
2000 U.S. Target:	25 deaths per 100,000
Status:	Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 8% to have achieved the national goal.

REDUCE CIRRHOSIS MORTALITY
(Healthy People 2000 Objectives 4.2, 4.2a)

2000 TN:	7.9 deaths per 100,000
2000 U.S. Target:	6 deaths per 100,000
Status:	Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 24% to have achieved the national goal.

2000 TN:	12.5 deaths per 100,000 black males
2000 U.S. Target:	4.1 per 100,000 black males
Status:	Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 black males needed to have decreased by 67% to have achieved the national goal.

REDUCE CANCER MORTALITY
(Healthy People 2000 Objectives 2.2, 2.2a)

2000 TN:	134.2 per 100,000
2000 U.S. Target:	130 deaths per 100,000
Status:	Tennessee came close to reaching the 2000 goal. The number of deaths per 100,000 needed to have decreased by only 3% to have achieved the national goal.

2000 TN:	173.3 deaths per 100,000 blacks
2000 U.S. Target:	175 deaths per 100,000 blacks
Status:	**Tennessee's rate is 1% lower than the 2000 national target for blacks. Tennessee has met this goal.**

REDUCE LUNG CANCER MORTALITY
(Healthy People 2000 Objectives 3.2, 3.2a)

2000 TN:	45.6 deaths per 100,000
2000 U.S. Target:	42 deaths per 100,000
Status:	Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 8% to have achieved the national goal.

2000 TN:	29.9 deaths per 100,000 females
2000 U.S. Target:	27 deaths per 100,000 females
Status:	Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 10% to have achieved the national goal.

REDUCE FEMALE BREAST CANCER MORTALITY
(Healthy People 2000 Objectives 16.3, 16.3a)

2000 TN:	17.3 per 100,000 females
2000 U.S. Target:	20.6 deaths per 100,000 females
Status:	**Tennessee's rate is 16% lower than the 2000 national target. Tennessee has surpassed this goal**

2000 TN:	21.8 deaths per 100,000 black females
2000 U.S. Target:	25 deaths per 100,000 black females
Status:	**Tennessee's rate is 13% lower than the 2000 national target. Tennessee has surpassed this goal**

REDUCE UTERINE/CERVICAL CANCER MORTALITY
(Healthy People 2000 Objectives 16.4, 16.4a)

2000 TN:	2.8 per 100,000 females
2000 U.S. Target:	1.3 deaths per 100,000 females
Status:	Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 54% to have achieved the national goal.

2000 TN:	5.7 per 100,000 for black females
2000 U.S. Target:	3 deaths per 100,000 for black females
Status:	Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 47% to have achieved the national goal.

REDUCE CANCER OF THE ORAL CAVITY AND PHARYNX
(Healthy People 2000 Objectives 13.7, 13.7a, 13.7b, 13.7c)

2000 TN: 9.6 per 100,000 for males aged 45-74
2000 U.S. Target: 10.5 deaths per 100,000 for males aged 45-74
Status: Tennesseeís rate is 9% lower than the 2000 national target. Tennessee has surpassed this goal.

2000 TN: 2.7 per 100,000 for females aged 45-74
2000 U.S. Target: 4.1 deaths per 100,000 for females aged 45-74
Status: Tennesseeís rate is 34% lower than the 2000 national target. Tennessee has surpassed this goal.

2000 TN: 22.6 deaths per 100,000 for black males aged 45-74
2000 U.S. Target: 26 deaths per 100,000 for black males aged 45-74
Status: Tennesseeís rate is 13% lower than the 2000 national target. Tennessee has surpassed this goal.

2000 TN: 3.4 per 100,000 for black females aged 45-74
2000 U.S. Target: 6.9 deaths per 100,000 for black females aged 45-74
Status: Tennesseeís rate is 51% lower than the 2000 national target. Tennessee has surpassed this goal.

REDUCE HOMICIDE
(Healthy People 2000 Objectives 7.1, 7.1a, 7.1c, 7.1e)

2000 TN: 8.8 homicides per 100,000
2000 U.S. Target: 7.2 homicides per 100,000
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 18% to have achieved the national goal.

2000 TN: 4.7 homicides per 100,000 for children under age 3
2000 U.S. Target: 3.1 homicides per 100,000 for children under age 3
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 34% to have achieved the national goal.

REDUCE HOMICIDE (CONTINUED)

2000 TN: 99.4 homicides per 100,000 for black males aged 15-34
2000 U.S. Target: 72.4 homicides per 100,000 for black males aged 15-34
Status: Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 27% to have achieved the national goal.

2000 TN: 16.4 homicides per 100,000 for black females aged 15-34
2000 U.S. Target: 16 homicides per 100,000 for black females aged 15-34
Status: Tennessee came close to attaining the 2000 goal. The number of deaths per 100,000 needed to have decreased by only 2% to have achieved the national goal.

REDUCE SUICIDE

(Healthy People 2000 Objectives 6.1, 6.1a, 6.1b, 6.1c)

2000 TN: 11.7 suicides per 100,000 persons
2000 U.S. Target: 10.5 suicides per 100,000 persons
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 10% to have achieved the national goal.

2000 TN: 9.6 suicides per 100,000 youth aged 15-19
2000 U.S. Target: 8.2 suicides per 100,000 youth aged 15-19
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 15% to have achieved the national goal.

2000 TN: 23.8 suicides per 100,000 males aged 20-34
2000 U.S. Target: 21.4 suicides per 100,000 males aged 20-34
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 10% to have achieved the national goal.

2000 TN: 41.8 suicides per 100,000 white males age 65 and older
2000 U.S. Target: 39.2 suicides per 100,000 white males age 65 and older
Status: Tennessee came close to meeting the 2000 goal. The number of deaths per 100,000 needed to have decreased by only 6% to have achieved the national goal.

REDUCE MORTALITY DUE TO UNINTENTIONAL INJURIES
(Healthy People 2000 Objectives 9.1, 9.1b, 9.1c)

2000 TN: 41.7 deaths per 100,000
2000 U.S. Target: 29.3 deaths per 100,000
Status: Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 30% to have achieved the national goal.

2000 TN: 60 deaths per 100,000 black males
2000 U.S. Target: 51.9 deaths per 100,000 black males
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 14% to have achieved the national goal.

2000 TN: 61.7 deaths per 100,000 white males
2000 U.S. Target: 42.9 deaths per 100,000 white males
Status: Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 30% to have achieved the national goal.

REDUCE MORTALITY DUE TO MOTOR VEHICLE CRASHES
(Healthy People 2000 Objectives 9.3, 9.3a, 9.3b, and 9.3c)

2000 TN: 23.8 deaths per 100,000 persons
2000 U.S. Target: 14.2 deaths per 100,000 persons
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 40% to have achieved the national goal.

2000 TN: 6 deaths per 100,000 children age 14 and younger
2000 U.S. Target: 4.4 deaths per 100,000 children age 14 and younger
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 27% to have achieved the national goal.

2000 TN: 44 deaths per 100,000 youth aged 15-24
2000 U.S. Target: 26.8 deaths per 100,000 youth aged 15-24
Status: Tennessee fell short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 39% to have achieved the national goal.

2000 TN: 34.9 deaths per 100,000 persons age 70 and older
2000 U.S. Target: 20 deaths per 100,000 persons age 70 and older
Status: Tennessee fell far short of the 2000 goal. The number of deaths per 100,000 needed to have decreased by 43% to have achieved the national goal.

REDUCE INFANT MORTALITY
(Healthy People 2000 Objectives 14.1, 14.1a)

2000 TN:	9 deaths per 1,000 live births
2000 U.S. Target:	7 deaths per 1,000 live births
Status:	Tennessee fell short of the 2000 goal. The number of deaths per 1,000 live births needed to have decreased by 22% to have achieved the national goal.

2000 TN:	18.1 per 1,000 live births to black females
2000 U.S. Target:	11 per 1,000 live births to black females
Status:	Tennessee fell far short of the 2000 goal. The number of deaths per 1,000 live births needed to have decreased by 39% to have achieved the national goal.

REDUCE NEONATAL MORTALITY
(Healthy People 2000 Objectives 14.1d, 14.1e)

2000 TN:	5.9 deaths per 1,000 live births
2000 U.S. Target:	4.5 deaths per 1,000 live births
Status:	Tennessee fell short of the 2000 goal. The number of deaths per 1,000 live births needed to have decreased by 24% to have achieved the national goal.

2000 TN:	12 deaths per 1,000 live births to black females
2000 U.S. Target:	7 deaths per 1,000 live births to black females
Status:	Tennessee fell far short of the 2000 goal. The number of deaths per 1,000 live births needed to have decreased by 42% to have achieved the national goal.

REDUCE POSTNEONATAL MORTALITY
(Healthy People 2000 Objectives 14.1g, 14.1h)

2000 TN:	3.2 deaths per 1,000 live births
2000 U.S. Target:	2.5 deaths per 1,000 live births
Status:	Tennessee fell short of the 2000 goal. The number of deaths per 1,000 live births needed to have decreased by 22% to have achieved the national goal.

2000 TN:	6.1 deaths per 1,000 live births to black females
2000 U.S. Target:	4 deaths per 1,000 live births to black females
Status:	Tennessee fell far short of the 2000 goal. The number of deaths per 1,000 live births needed to have decreased by 34% to have achieved the national goal.

Note: All mortality rates are age-adjusted, except when a particular age-group is specified.
Source: Tennessee Department of Health, Death Certificate Data

PREGNANCY AND BIRTHS

REDUCE TEENAGE PREGNANCY
(Healthy People 2000 Objectives 5.1, 5.1a)

2000 TN:	41.9 per 1,000 females aged 15-17
2000 TN Target:	55 per 1,000 females aged 15-17
2000 U.S. Target:	50 per 1,000 females aged 15-17
Status:	**Tennessee's rate is 16% lower than the 2000 national target. Tennessee has surpassed both the state and national goals.**

2000 TN:	1.8 per 1,000 females aged 10-14
2000 TN Target:	2.5 per 1,000 females aged 10-14
Status:	**Tennessee has surpassed the state goal.**

REDUCE TEENAGE PREGNANCY

2000 TN:	120.8 per 1,000 black females aged 15-19
2000 U.S. Target:	120 per 1,000 black females aged 15-19
Status:	Tennessee came very close to attaining the 2000 goal. The number of pregnancies per 1,000 females aged 15-19 needed to have decreased by 1% to have achieved the national goal.

REDUCE VERY LOW BIRTH WEIGHT
(Healthy People 2000 Objectives 14.5, 14.5a)

2000 TN:	1.7% of live births
2000 U.S. Target:	1% of live births
Status:	Tennessee fell far short of attaining the 2000 goal. The percentage of live births that are very low birth weight needed to have decreased by 40% to have achieved the national goal.

2000 TN:	3.4% of live births to black females
2000 U.S. Target:	2% of live births to black females
Status:	Tennessee fell far short of attaining the 2000 goal. The percentage of live births to black females that are very low birth weight needed to have decreased by 41% to have achieved the national goal.

REDUCE LOW BIRTH WEIGHT
(Healthy People 2000 Objectives 14.5, 14.5b)

2000 TN:	9.2% of live births
2000 TN Target:	7.1% of live births
2000 U.S. Target:	5% of live births
Status:	Tennessee fell far short of attaining the 2000 goal. The percentage of live births that are low birth weight needed to have decreased by 46% to have achieved the national goal.

REDUCE LOW BIRTH WEIGHT (CONTINUED)

2000 TN: 14.6% of live births to black females

2000 U.S. Target: 9% of live births to black females

Status: Tennessee fell far short of attaining the 2000 goal. The percentage of live births that are low birth weight needed to have decreased by 38% to have achieved the national goal.

REDUCE CESAREAN SECTION DELIVERY RATE

(Healthy People 2000 Objective 14.8)

2000 TN: 25.2 Cesarean sections per 100 deliveries

2000 U.S. Target: 15 Cesarean sections per 100 deliveries

Status: Tennessee fell far short of attaining the 2000 goal. The number of Cesarean section births per 100 deliveries needed to have decreased by 40% to have achieved the national goal.

INCREASE ABSTINENCE FROM TOBACCO USE DURING PREGNANCY

(Healthy People 2000 Objective 14.10)

2000 TN: 82.7% of mothers abstained from using tobacco during pregnancy

2000 U.S. Target: 90% of mothers abstaining from using tobacco during pregnancy

Status: Tennessee fell short of attaining the 2000 goal. The percentage of mothers abstaining from tobacco use during pregnancy needed to have decreased by 9% to have achieved the national goal.

INCREASE ABSTINENCE FROM ALCOHOL USE DURING PREGNANCY

(Healthy People 2000 Objective 14.10)

2000 TN: 98.9% of mothers abstained from using alcohol during pregnancy

2000 U.S. Target: 95% of mothers abstaining from using alcohol during pregnancy

Status: Tennessee has surpassed this 2000 goal.

Source: Tennessee Department of Health and Health Information Tennessee Web site (**www.tennessee.gov/hitspot**), CHRG-TDH 1999.

BEHAVIORAL RISK FACTORS

ADULTS

REDUCE PREVALENCE OF CIGARETTE SMOKING
(Healthy People 2000 Objectives 3.4, 3.4d)

2000 TN:	25.7% cigarette smoking prevalence among adults age 18 and older
2000 U.S. Target:	15% cigarette smoking prevalence among adults age 18 and older
Status:	Tennessee fell far short of attaining the 2000 goal. The prevalence of cigarette smoking among adults needed to have decreased by 42% to have achieved the national goal.

2000 TN:	20% cigarette smoking prevalence among blacks age 18 and older
2000 U.S. Target:	18% cigarette smoking prevalence among blacks age 18 and older
Status:	Tennessee fell short of attaining the 2000 goal. The prevalence of cigarette smoking among black adults (age 18 and over) needed to have decreased by 10% to have achieved the national goal.

INCREASE INFLUENZA IMMUNIZATION
(Healthy People 2000 Objectives 20.11)

2000 TN:	67.3% of noninstitutionalized adults age 65 and over received flu immunization during the previous 12 months
2000 U.S. Target:	60% of noninstitutionalized adults age 65 and over are immunized during the previous 12 months
Status:	**Tennessee's flu immunization rate is 12% higher than the 2000 national target. Tennessee has surpassed this goal.**

INCREASE PNEUMONIA IMMUNIZATIONS
(Healthy People 2000 Objective 20.11)

2000 TN:	76.7% of noninstitutionalized adults aged 65 and over received a pneumonia vaccination
2000 U.S. Target:	60% of noninstitutionalized adults aged 65 and over received a pneumonia vaccination
Status:	**Tennessee's rate is 28% higher than the 2000 national target. Tennessee has surpassed this goal.**

INCREASE CHOLESTEROL CHECKING
(Healthy People 2000 Objective 15.14)

2000 TN:	71.1% of adults had their blood cholesterol checked within the past five years
2000 U.S. Target:	75% of adults to have their blood cholesterol checked within the past five years
Status:	Tennessee has come close to meeting this 2000 objective. The proportion of adults having their blood cholesterol checked within the past five years needed to have increased by 5% to have achieved the national goal.

INCREASE CLINICAL BREAST EXAMS AND MAMMOGRAMS
(Healthy People 2000 Objectives 16.11, 16.11d)

2000 TN:	65.9% of females age 50 and older had received a clinical breast exam and mammogram within the past two years
2000 U.S. Target:	60% of females age 50 and older had received a clinical breast exam and a mammogram within the past two years
Status:	**Tennessee's 2 year mammogram prevalence is higher than the 2000 national target. Tennessee surpassed this goal.**

INCREASE PAP SMEAR TESTS
(Healthy People 2000 Objective 16.12)

2000 TN:	93.6% of females age 18 and older have received a Pap smear test in their lifetime
2000 U.S. Target:	95% of females age 18 and older have received a Pap smear test in their lifetime
Status:	Tennessee has virtually met this 2000 objective. The proportion of females age 18 and older who have received a Pap smear test in their lifetime needed to have increased by only 1% to have achieved the national goal.

INCREASE REGULAR VIGOROUS PHYSICAL ACTIVITY
(Healthy People 2000 Objective 1.4)
Leisure-time physical activity for 20 minutes or more, 3 or more times/week, at 50% or more capacity.

2000 TN:	10.6% of adults age 18 and older engaging in regular vigorous physical activity
2000 U.S. Target:	20% of adults age 18 and older engaging in regular vigorous physical activity
Status:	Tennessee has fallen very far short of reaching this 2000 objective. The proportion of adults engaging in regular vigorous physical activity needed to have increased by 89% to have achieved the national goal.

REDUCE PHYSICAL INACTIVITY (NO LEISURE-TIME PHYSICAL ACTIVITY)
(Healthy People Objectives 1.5, 1.5a, 1.5d)

2000 TN:	42.8% of adults age 65 and older engages in no physical activity
2000 U.S. Target:	22% of adults age 65 and older engages in no physical activity
Status:	Tennessee has fallen far short of reaching this 2000 objective. The proportion of adults age 65 and older engages in no physical activity needed to have decreased by 49% to have achieved the national goal.

Sources: 2000 Behavioral Risk Factor Surveillance System (BRFSS) Summary Prevalence Report (CDC), based on weighted data.

YOUTH HEALTH OBJECTIVES

INCREASE REGULAR VIGOROUS PHYSICAL ACTIVITY
(Healthy People 2000 Objective 1.4)

2001 TN:	66.7% of students in grades 9-12 in regular vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
2000 U.S. Target:	75% of students in grades 9-12 in the U.S. engage in regular vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
Status:	Tennessee has fallen short of reaching this 2000 objective. The proportion of students engages in regular vigorous physical activity needed to have increased by 12% to have achieved the national goal.

REDUCE HEAVY DRINKING
(Healthy People 2000 Objective 4.7)

2001 TN:	35.6% heavy drinking among high school seniors. Heavy drinking is defined as consuming 5 or more alcoholic beverages per occasion within the past two weeks.
2000 U.S. Target:	28% heavy drinking among high school seniors.
Status:	Tennessee has fallen short of reaching this 2000 objective. The proportion of students engages in heavy or binge drinking needed to have decreased by 21% to have achieved the national goal.

REDUCE USE OF ANABOLIC STEROIDS
(Healthy People 2000 Objective 4.11)

2001 TN:	9.7% anabolic steroid use among male high school seniors.
2000 U.S. Target:	3% anabolic steroid use among male high school seniors.
Status:	Tennessee has fallen far short of reaching this 2000 objective. The proportion of male high school seniors using anabolic steroids needed to have decreased by 69% to have met the national goal.

Note: 2001 Youth Risk Behavior Survey data are unweighted and do not include data from the Nashville school districts.
Source: 2001 Tennessee State Department of Education Youth Risk Behavior Survey Results.

COMMUNICABLE DISEASES

REDUCE GONORRHEA

(Healthy People 2000 Objective 19.1)

2000 TN:	208.7 cases of gonorrhea per 100,000 persons
2000 U.S. Target:	100 cases of gonorrhea per 100,000 persons
Status:	Tennessee has fallen far short of reaching this 2000 objective. The gonorrhea case rate needed to have decreased by 109% to have met the national goal.

REDUCE PRIMARY AND SECONDARY SYPHILIS

(Healthy People 2000 Objective 19.3)

2000 TN:	9.4 cases of syphilis per 100,000 persons
2000 U.S. Target:	4 cases of syphilis per 100,000 persons
Status:	Tennessee has fallen far short of reaching this 2000 objective. The syphilis case rate needed to have decreased by 135% to have met the national goal.

REDUCE TUBERCULOSIS (TB)

(Healthy People 2000 Objective 20.4)

2000 TN:	6.7 cases of TB per 100,000
2000 U.S. Target:	3.5 cases of TB per 100,000
2000 TN Target:	9.5 cases of TB per 100,000
Status:	Tennessee has fallen far short of reaching this 2000 objective. The TB case rate needed to have decreased by 91% to have met the national goal. While not meeting the 2000 national target, **Tennessee surpassed its state goal** to reduce the rate of tuberculosis to no more than 9.5 cases per 100,000.

Source: Summary of Notifiable Diseases, United States, 2000. *Morbidity and Mortality Weekly Report*, CDC, June 14, 2002, 49(53); 1-93.

Source of U.S. Goals: *Healthy People 2000: Healthy People 2000 Review, 1997*. National Center for Health Statistics, Hyattsville, MD: 1997.

Source of Tennessee's State Goals: *Tennessee's Healthy People 2000*. Tennessee Department of Health, Health Statistics and Information, Nashville, TN: 1996.

HEALTHY PEOPLE 2010 - OBJECTIVES FOR THE NATION AND LEADING HEALTH INDICATORS

- Healthy People 2010 is the prevention agenda for the Nation. It has two overarching goals: to increase the quality and length of healthy life and to eliminate health disparities. Like Healthy People 2000, it is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats.

- Healthy People 2010 features 467 science-based objectives, which are organized into 28 focus areas, and 10 Leading Health Indicators, which are a smaller set of objectives chosen to track progress toward meeting specific lifestyle-related *Healthy People 2010* goals. The Leading Health Indicators represent the important determinants of health for the full range of issues in the 28 focus areas and are intended to help people more easily understand the importance of health promotion and disease prevention and to encourage wide participation in improving health in the next decade.

- The Tennessee State Health Improvement Plan (SHIP) was initiated using the *Healthy People 2010* objectives as a framework and will be used to guide health policy and resource allocation in future years. The developmental process for the SHIP was a unique and innovative approach to statewide needs assessment and planning. It used a community-based, grass-roots, bottom-up approach (the Community Diagnosis Initiative) coupled with a governmental data-sharing process (the Interdepartmental Work Group -- IWG) to create the basis for a plan that reflects the concerns and needs of Tennessee residents as well as the public agencies whose mission it is to identify and meet those needs. IWG members have assessed and documented their data holdings with respect to those Indicators; information gaps for the SHIP have been identified. The data worksheets documenting those data holdings have been turned into a searchable on-line database, currently accessible at http://storm.ra.utk.edu/ship. The SHIP process is described in a report by CHRG and TDH, ìMoving Toward Healthy People 2010 - Tennessee's Assessment Activities' available on the www.tennessee.gov/hitspot website under "Reports" and under "Tennessee State Health Improvement Plan" on the HIT Welcome Page.

In this section of the report, 2001 data that is available will be brought to bear to measure Tennessee's status relative to targets set for selected Healthy People 2010 Objectives from the 28 Focus areas. Next, available data on Leading Health Indicators will be presented as baseline for continued monitoring of the Stateís progress toward meeting these goals.

TENNESSEE'S PROGRESS TOWARD SELECTED U.S. HEALTHY PEOPLE 2010 FOCUS AREAS AND OBJECTIVES

Corresponding to the focus areas and objectives that have been followed by Tennessee since 1990 under the Healthy People 2000 initiative, the following objectives are presented because data were available to CHRG on them. These objectives include indicators relating to mortality, teenage pregnancy and births, adult behavioral risks factors, and other topical areas, which have been provided to allow continuing assessment of Tennessee's progress toward meeting the new 2010 national objectives. Tennessee's experience of attaining, surpassing or failing to reach specific health objectives, summarized in the previous section of this report, has set the stage for monitoring these 2010 Healthy People Objectives and establishes a baseline for reviewing Tennessees early progress toward achieving those goals.

MORTALITY

FOCUS AREA #3. CANCER

REDUCE CANCER MORTALITY
(Healthy People 2010 Objective 3-1)
2001 TN: 215.0 per 100,000
2010 U.S. Target: 159.9 deaths per 100,000
Status: The number of deaths per 100,000 needs to decline by 26% to meet the national objective.

REDUCE LUNG CANCER MORTALITY
(Healthy People 2010 Objective 3-2)
2001 TN: 69.5 deaths per 100,000
2010 U.S. Target: 44.9 deaths per 100,000
Status: The number of deaths per 100,000 needs to decline by 35% to meet the national objective.

REDUCE FEMALE BREAST CANCER MORTALITY
(Healthy People 2010 Objective 3-3)
2001 TN: 26.0 deaths per 100,000 females
2010 U.S. Target: 22.3 deaths per 100,000 females
Status: The number of deaths per 100,000 needs to decline by 14% to meet the national objective.

REDUCE UTERINE/CERVICAL CANCER MORTALITY
(Healthy People 2010 Objective 3-4)
2001 TN: 3.6 per 100,000 females
2010 U.S. Target: 2.0 deaths per 100,000 females
Status: The number of deaths per 100,000 needs to decline by 44% to meet the national objective.

REDUCE COLORECTAL CANCER
(Healthy People 2010 Objective 3-5)
2001 TN: 22.1 deaths per 100,000 population
2010 U.S. Target: 13.9 deaths per 100,000 population
Status: The number of deaths per 100,000 needs to decline by 37% to meet the national objective.

REDUCE CANCER OF THE ORAL CAVITY AND PHARYNX
(Healthy People 2010 Objective 3-6)
2001 TN: 3.4 deaths per 100,000 population
2010 U.S. Target: 2.7 deaths per 100,000 population
Status: The number of deaths per 100,000 needs to decline by 21% to meet the national objective.

REDUCE PROSTATE CANCER AMONG MALES
(Healthy People 2010 Objective 3-7)
2001 TN: 31.3 deaths per 100,000 males
2010 U.S. Target: 28.8 deaths per 100,000 males
Status: The number of deaths per 100,000 needs to decline by 8% to meet the national objective.

REDUCE MELANOMA (A FORM OF SKIN CANCER)
(Healthy People 2010 Objective 3-8)
2001 TN: 2.5 deaths per 100,000 population
2010 U.S. Target: 2.5 deaths per 100,000 population
Status: **Tennessee has met this national standard.**

FOCUS AREA #5. DIABETES

REDUCE DIABETES MORTALITY
(Healthy People 2010 Objective 5-5)
2001 TN: 31.0 deaths per 100,000 population
2010 U.S. Target: 45.0 deaths per 100,000 population
Status: **Tennessee has surpassed the standard by 31%.**

FOCUS AREA #10. FOOD SAFETY

REDUCE FOOD ALLERGIES MORTALITY

(Healthy People 2010 Objective 10-4)

2001 TN: 0 deaths per 100,000 population

2010 U.S. Target: 0 deaths per 100,000 population

Status: **Tennessee seems to have met this national standard, although reporting of such deaths and attribution of appropriate cause may be at issue.**

FOCUS AREA #12. HEART DISEASE AND STROKE

REDUCE CORONARY HEART DISEASE MORTALITY

(Healthy People 2010 Objective12-1)

2001 TN: 231.4 deaths per 100,000

2010 U.S. Target: 166.0 deaths per 100,000

Status: The number of deaths per 100,000 needs to decline by 28% to meet the national objective.

REDUCE STROKE MORTALITY

(Healthy People 2010 Objective 12-7)

2001 TN: 73.6 deaths per 100,000

2010 U.S. Target: 48.0 deaths per 100,000

Status: The number of deaths per 100,000 needs to decline by 35% to meet the national objective.

FOCUS AREA #15. INJURY AND VIOLENCE PREVENTION

REDUCE FIREARM-RELATED DEATHS

(Healthy People 2010 Objective 15-3)

2001 TN: 14.5 deaths per 100,000 population

2010 U.S. Target: 4.1 deaths per 100,000 population

Status: The number of deaths per 100,000 needs to decline by 72% to meet the national objective.

REDUCE DEATHS CAUSED BY POISONINGS

(Healthy People 2010 Objective 15-8)

2001 TN: 10.3 deaths per 100,000 population

2010 U.S. Target: 1.5 deaths per 100,000 population

Status: The number of deaths per 100,000 needs to decline by 85% to meet the national objective.

REDUCE DEATHS CAUSED BY SUFFOCATION
(Healthy People 2010 Objective 15-9)
2001 TN: 5.0 deaths per 100,000 population
2010 U.S. Target: 3.0 deaths per 100,000 population
Status: The number of deaths per 100,000 needs to decline by 40% to meet the national objective.

REDUCE MORTALITY DUE TO UNINTENTIONAL INJURIES
(Healthy People 2010 Objective 15-13)
2001 TN: 47.5 deaths per 100,000 persons
2010 U.S. Target: 17.5 deaths per 100,000 persons
Status: The number of deaths per 100,000 needs to decline by 63% to meet the national objective.

REDUCE MORTALITY DUE TO MOTOR VEHICLE CRASHES
(Healthy People 2010 Objective 15-15a) See below under Leading Health Indicators.

REDUCE RESIDENTIAL FIRE DEATHS
(Healthy People 2010 Objective 15-25)
2001 TN: 2.0 deaths per 100,000 population
2010 U.S. Target: 0.2 deaths per 100,000 population
Status: The number of deaths per 100,000 needs to decline by 90% to meet the national objective.

REDUCE DEATHS FROM FALLS
(Healthy People 2010 Objective 15-27)
2001 TN: 5.8 deaths per 100,000 population
2010 U.S. Target: 3.0 deaths per 100,000 population
Status: The number of deaths per 100,000 needs to decline by 48% to meet the national objective.

REDUCE DROWNINGS
(Healthy People 2010 Objective 15-29)
2001 TN: 1.3 deaths per 100,000 population
2010 U.S. Target: 0.9 deaths per 100,000 population
Status: The number of deaths per 100,000 needs to decline by 31% to meet the national objective.

REDUCE HOMICIDE
(Healthy People 2010 Objective 15-32) See below under Leading Health Indicators.

FOCUS AREA #16. MATERNAL, INFANT AND CHILD HEALTH

REDUCE INFANT MORTALITY

(Healthy People 2010 Objective 16-1c)

2001 TN: 8.7 deaths per 1,000 live births
2010 U.S. Target: 4.5 deaths per 1,000 live births
Status: The number of deaths per 1,000 live births needs to decline by 48% to meet the national objective.

REDUCE NEONATAL MORTALITY

(Healthy People 2010 Objective 16-1d)

2001 TN: 5.6 deaths per 1,000 live births
2010 U.S. Target: 2.9 deaths per 1,000 live births
Status: The number of deaths per 1,000 live births needs to decline by 48% to meet the national objective.

REDUCE POSTNEONATAL MORTALITY

(Healthy People 2010 Objective 16-1e)

2001 TN: 3.1 deaths per 1,000 live births
2010 U.S. Target: 1.2 deaths per 1,000 live births
Status: The number of deaths per 1,000 live births needs to decline by 61% to meet the national objective.

REDUCE INFANT DEATHS RELATED TO ALL BIRTH DEFECTS

(Healthy People 2010 Objective 16-1f)

2001 TN: 1.7 deaths per 1,000 live births
2010 U.S. Target: 1.1 deaths per 1,000 live births
Status: The number of deaths per 1,000 live births needs to decline by 35% to meet the national objective.

REDUCE INFANT DEATHS RELATED TO CONGENITAL HEART DEFECTS

(Healthy People 2010 Objective 16-1g)

2001 TN: 0.5 deaths per 1,000 live births
2010 U.S. Target: 0.38 deaths per 1,000 live births
Status: The number of deaths per 1,000 live births needs to decline by 24% to meet the national objective.

REDUCE DEATHS FROM SUDDEN INFANT DEATH SYNDROME (SIDS)

(Healthy People 2010 Objective 16-1h)

2001 TN: 0.8 deaths per 1,000 live births
2010 U.S. Target: 0.25 deaths per 1,000 live births
Status: The number of deaths per 1,000 live births needs to decline by 69% to meet the national objective.

REDUCE CHILD MORTALITY
(Healthy People 2010 Objective 16-2a, 16-2b)

2001 TN:	35.3 deaths per 100,000 children aged 1 to 4 years
2010 U.S. Target:	18.6 deaths per 100,000 children aged 1 to 4 years
Status:	The number of deaths per 100,000 needs to decline by 47% to meet the national objective.

2001 TN:	13.0 deaths per 100,000 children aged 5 to 9 years
2010 U.S. Target:	12.3 deaths per 100,000 children aged 5 to 9 years
Status:	The number of deaths per 100,000 needs to decline by 5% to meet the national objective.

REDUCE DEATHS OF ADOLESCENTS AND YOUNG ADULTS
(Healthy People 2010 Objective 16-3a, 16-3b, 16-3c)

2001 TN:	22.3 deaths per 100,000 adolescents aged 10 to 14 years
2010 U.S. Target:	16.8 deaths per 100,000 adolescents aged 10 to 14 years
Status:	The number of deaths per 100,000 needs to decline by 25% to meet the national objective.

2001 TN:	81.2 deaths per 100,000 adolescents aged 15 to 19 years
2010 U.S. Target:	39.8 deaths per 100,000 adolescents aged 15 to 19 years
Status:	The number of deaths per 100,000 needs to decline by 51% to meet the national objective.

2001 TN:	121.4 deaths per 100,000 young adults aged 20 to 24 years
2010 U.S. Target:	49.0 deaths per 100,000 young adults aged 20 to 24 years
Status:	The number of deaths per 100,000 needs to decline by 60% to meet the national objective.

REDUCE MATERNAL DEATHS
(Healthy People 2010 Objective 16-4)

2001 TN:	14.0 deaths per 100,000 live births
2010 U.S. Target:	3.3 deaths per 100,000 live births
Status:	The number of deaths per 100,000 live births needs to decline by 76% to meet the national objective.

FOCUS AREA #18. MENTAL HEALTH AND MENTAL DISORDERS

REDUCE SUICIDE
(Healthy People 2010 Objective 18-1)

2001 TN:	12.2 suicides per 100,000 persons
2010 U.S. Target:	5.0 suicides per 100,000 persons
Status:	The number of deaths per 100,000 needs to decline by 59% to meet the national objective.

FOCUS AREA #24. RESPIRATORY DISEASES

REDUCE ASTHMA DEATHS

(Healthy People 2010 Objective 24-1a, 24-1b, 24-1c, 24-1d, 24-1e)

2001 TN: 5.3 deaths per million children under age 5 years
2010 U.S. Target: 1.0 deaths per million children under age 5 years
Status: The number of deaths per million needs to decline by 81% to meet the national objective.

2001 TN: 2.5 deaths per million children aged 5 to 14 years
2010 U.S. Target: 1.0 deaths per million children aged 5 to 14 years
Status: The number of deaths per million needs to decline by 60% to meet the national objective.

2001 TN: 5.6 deaths per million adolescents and adults aged 15 to 34 years
2010 U.S. Target: 2.0 deaths per million adolescents and adults aged 15 to 34 years
Status: The number of deaths per million needs to decline by 64% to meet the national objective.

2001 TN: 14.3 deaths per million adults aged 35 to 64 years
2010 U.S. Target: 9.0 deaths per million adults aged 35 to 64 years
Status: The number of deaths per million needs to decline by 37% to meet the national objective.

2001 TN: 43.7 deaths per million adults age 65 years and older
2010 U.S. Target: 60.0 deaths per million adults age 65 years and older
Status: **Tennessee has surpassed the standard by 27%.**

REDUCE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) MORTALITY

(Healthy People 2010 Objective 24-10)

2001 TN: 141.6 deaths per 100,000 adults age 45 years and older
2010 U.S. Target: 60.0 deaths per 100,000 adults age 45 years and older
Status: The number of deaths per 100,000 adults age 45 years and older needs to decline by 58% to meet the national objective.

FOCUS AREA #26. SUBSTANCE ABUSE

REDUCE CIRRHOSIS MORTALITY

(Healthy People 2010 Objective 26-2)

2001 TN: 10.5 deaths per 100,000
2010 U.S. Target: 3.0 deaths per 100,000
Status: The number of deaths per 100,000 needs to decline by 71% to meet the national objective.

Note: All mortality rates are age-adjusted using the 2000 standard population, except when a particular age-group is specified.
Source: Tennessee Department of Health, Death Certificate Data; and under Healthy People 2010 Mortality Objectives" on the HIT web site.

PREGNANCY AND BIRTHS

FOCUS AREA #9. FAMILY PLANNING

REDUCE TEENAGE PREGNANCY
(Healthy People 2010 Objective 9-7)
2001 TN: 37.3 pregnancies per 1,000 females aged 15 to 17 years
2010 U.S. Target: 43.0 pregnancies per 1,000 females aged 15 to 17 years
Status: **Tennessee has surpassed the standard by 13%.**

FOCUS AREA #16. MATERNAL, INFANT AND CHILD HEALTH

INCREASE EARLY AND ADEQUATE PRENATAL CARE
(Healthy People 2010 Objectives 16-6a, 16-6b) For 16-6a Early Prenatal Care, see below under Leading Health Indicators.
2001 TN: 70.5% of mothers received adequate prenatal care during pregnancy
2010 U.S. Target: 90% of mothers receiving adequate prenatal care during pregnancy
Status: The percentage of mothers receiving adequate prenatal care during pregnancy needs to increase by 28% to meet the national objective.

REDUCE CESAREAN SECTION DELIVERY RATE
(Healthy People 2010 Objective 16-9a)
2001 TN: 27.3% of live births
2010 U.S. Target: 15% of live births
Status: The rate of cesarean births among women giving birth for the first time needs to decline by 45% to meet the national objective.

REDUCE LOW BIRTH WEIGHT AND VERY LOW BIRTH WEIGHT
(Healthy People 2010 Objectives 16-10a, 16-10b)
2001 TN: 9.2% of live births
2010 U.S. Target: 5% of live births
Status: The number of infants born at low birth weight (less than 2,500 grams or 5 pounds, 9 ounces) needs to decline by 46% to meet the national objective.

2001 TN: 1.7% of live births
2010 U.S. Target: 0.9% of live births
Status: The number of infants born at very low birth weight (less than 1,500 grams or 3 pounds, 5 ounces) needs to decline by 47% to meet the national objective.

REDUCE PRETERM BIRTHS
(Healthy People 2010 Objective 16-11a)

2001 TN:	11.3% of live births
2010 U.S. Target:	7.6% of live births
Status:	The number of infants born preterm needs to decline by 33% to meet the national objective.

INCREASE ABSTINENCE FROM ALCOHOL USE DURING PREGNANCY
(Healthy People 2010 Objective 16-17a)

2001 TN:	99% of mothers abstained from using alcohol during pregnancy
2010 U.S. Target:	94% of mothers abstaining from using alcohol during pregnancy
Status:	**Tennessee has surpassed the standard by 5%.**

INCREASE ABSTINENCE FROM TOBACCO USE DURING PREGNANCY
(Healthy People 2010 Objective 16-17c)

2001 TN:	82.6% of mothers abstained from using tobacco during pregnancy
2010 U.S. Target:	99% of mothers abstaining from using tobacco during pregnancy
Status:	The percentage of mothers abstaining from tobacco during pregnancy needs to increase by 20% to meet the national objective.

Source: Tennessee Department of Health, Birth Certificate Data; and under "Healthy People 2010" on the HIT web site.

BEHAVIORAL RISK FACTORS

ADULTS

FOCUS AREA #3. CANCER

INCREASE PAP SMEAR TESTS
(Healthy People 2010 Objectives 3-11a, 3-11b)

2000 TN:	93.6% of females age 18 and older received a Pap smear test in their lifetimes
2010 U.S. Target:	97% of females age 18 and older have received a Pap smear test in their lifetimes
Status:	Increase the proportion of women age 18 years and older who have ever received a Pap test by 4% to meet the national objective.

2001 TN:	87.7% of females age 18 and older received a Pap smear test within the preceding 3 years
2010 U.S. Target:	90% of females age 18 and older have received a Pap smear test within the preceding 3 years
Status:	Increase the proportion of women age 18 years and older who received a Pap smear test within the preceding 3 years by 3% to meet the national objective.

INCREASE CLINICAL BREAST EXAMS AND MAMMOGRAMS
(Healthy People 2010 Objective 3-13)

2001 TN:	76.3% of women age 40 years and older received a mammogram within the preceding 2 years
2010 U.S. Target:	70% of women age 40 years and older have received a mammogram within the preceding 2 years
Status:	**Tennessee has surpassed the standard by 9%.**

FOCUS AREA #12. HEART DISEASE AND STROKE

INCREASE CHOLESTEROL CHECKING
(Healthy People 2010 Objective 12-15)

2001 TN:	69.5% of adults 18 and older had their blood cholesterol checked within the preceding 5 years
2010 U.S. Target:	80% of adults 18 and older have had their blood cholesterol checked within the preceding 5 years
Status:	Increase the proportion of adults who have had their blood cholesterol checked within the preceding 5 years by 15% to meet the national objective.

FOCUS AREA #14. IMMUNIZATION AND INFECTIOUS DISEASES

INCREASE INFLUENZA IMMUNIZATION
(Healthy People 2010 Objective 14-29a) See below under Leading Health Indicators.

INCREASE PNEUMONIA IMMUNIZATIONS
(Healthy People 2010 Objective 14-29b) See below under Leading Health Indicators.

FOCUS AREA #22. PHYSICAL ACTIVITY AND FITNESS

REDUCE PHYSICAL INACTIVITY (NO LEISURE-TIME PHYSICAL ACTIVITY)
(Healthy People 2010 Objective 22-1)

2001 TN:	35.1% of adults age 18 and older engages in no physical activity
2010 U.S. Target:	20% of adults age 18 and older engaging in no physical activity
Status:	Reduce the proportion of adults age 18 years and older who engage in no leisure-time physical activity by 43% to meet the national objective.

INCREASE VIGOROUS PHYSICAL ACTIVITY
(Healthy People 2010 Objective 22-3)
Vigorous physical activity is exercise that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 minutes or more per occasion.

2000 TN:	10.6% of adults age 18 and older engages in vigorous physical activity
2010 U.S. Target:	30% of adults age 18 and older engaging in vigorous physical activity
Status:	Increase the proportion of adults age 18 years and older who engage in vigorous physical activity by 183% to meet the national objective.

FOCUS AREA #27. TOBACCO USE

REDUCE PREVALENCE OF CIGARETTE SMOKING
(Healthy People 2010 Objective 27-1a) See below under Leading Health Indicators.

Sources: 2000, 2001 Behavioral Risk Factor Surveillance System (BRFSS) Summary Prevalence Report (CDC), based on weighted data.

YOUTH HEALTH OBJECTIVES

FOCUS AREA #22. PHYSICAL ACTIVITY AND FITNESS

INCREASE VIGOROUS PHYSICAL ACTIVITY
(Healthy People 2010 Objective 22-7) See below under Leading Health Indicators.

FOCUS AREA #26. SUBSTANCE ABUSE

REDUCE BINGE DRINKING
(Healthy People 2010 Objective 26-11a)
The objective is to reduce the proportion of high school seniors engaging in binge drinking of alcoholic beverages during the past two weeks. We are using YRBS results which report binge drinking in the past 30 days.

2001 TN:	35.6% of high school seniors reported binge drinking, which is defined as consuming 5 or more alcoholic beverages per occasion within the past 30 days
2010 U.S. Target:	11% binge drinking among high school seniors
Status:	Reduce the proportion of high school seniors who engage in binge drinking by 69% to meet the national objective.

FOCUS AREA #27. TOBACCO USE

REDUCE USE OF TOBACCO PRODUCTS

(Healthy People 2010 Objective 27-2a)

2001 TN:	37% of students in grades 9 through 12 used tobacco products within the past 30 days
2010 U.S. Target:	21% of students in grades 9 through 12 using tobacco products within the past 30 days
Status:	Reduce tobacco use by students in grades 9 through 12 by 43% to meet the national objective.

Note: 2001 Youth Risk Behavior Survey data are unweighted.
Source: 2001 Tennessee State Department of Education Youth Risk Behavior Survey Results.

COMMUNICABLE DISEASES

FOCUS AREA #14. IMMUNIZATION AND INFECTIOUS DISEASES

REDUCE TUBERCULOSIS (TB)

(Healthy People 2010 Objective 14-11)

2001 TN:	5.5 cases of TB per 100,000 population
2010 U.S. Target:	1.0 new case of TB per 100,000 population
Status:	Reduce TB by 82% to meet the national objective.

FOCUS AREA #25. SEXUALLY TRANSMITTED DISEASES

REDUCE GONORRHEA

(Healthy People 2010 Objective 25-2)

2001 TN:	176.7 cases of gonorrhea per 100,000 persons
2010 U.S. Target:	19.0 cases of gonorrhea per 100,000 persons
Status:	Reduce gonorrhea by 89% to meet the national objective.

REDUCE PRIMARY AND SECONDARY SYPHILIS

(Healthy People 2010 Objective 25-3)

2001 TN:	5.8 cases of primary and secondary syphilis per 100,000 persons
2010 U.S. Target:	0.2 cases of primary and secondary syphilis per 100,000 persons
Status:	Reduce primary and secondary syphilis by 97% to meet the national objective.

REDUCE CONGENITAL SYPHILIS

(Healthy People 2010 Objective 25-9)

2001 TN:	30.6 cases of congenital syphilis per 100,000 live births
2010 U.S. Target:	1.0 case of congenital syphilis per 100,000 live births
Status:	Reduce congenital syphilis by 97% to meet the national objective.

This section of the report presents leading health indicators and the measures developed by CDC to identify and track them along with targets for 2010 and current status in 2001 in Tennessee.

LEADING HEALTH INDICATORS

PHYSICAL ACTIVITY

MODERATE PHYSICAL ACTIVITY IN ADULTS
(Healthy People 2010 Objective 22-2)

2010 U.S. Target:	Increase to 30% the proportion of adults who engage in moderate physical activity for at least 30 minutes per day.
2000 TN:	14.5% of adults age 18 years and older engages in moderate physical activity for at least 30 minutes on 5 or more days per week.
Status:	Tennessee must increase the proportion of adults who engage in moderate physical activity by 107% to achieve the national goal.

VIGOROUS PHYSICAL ACTIVITY IN ADOLESCENTS
(Healthy People 2010 Objective 22-7)

2010 U.S. Target:	Increase to 85% the proportion of adolescents who engage in vigorous physical activity promoting cardiorespiratory fitness on 3 or more days per week for 20 or more minutes per occasion
2001 TN:	61.2% of students in grades 9 through 12 engages in vigorous physical activity on 3 or more days per week for 20 or more minutes per occasion
Status:	Tennessee must increase the proportion of adolescents who engage in vigorous physical activity by 39% to achieve the national goal.

OVERWEIGHT AND OBESITY

OBESITY IN ADULTS
(Healthy People 2010 Objective 19-2)

2010 U.S. Target:	Reduce to 15% the proportion of adults who are obese
2001 TN:	23.4% of adults age 18 years and older were reported as obese (defined as BMI of 30 or more)
Status:	Tennessee must reduce the proportion of adults who are obese by 36% to achieve the national goal.

OVERWEIGHT AND OBESITY IN CHILDREN AND ADOLESCENTS
(Healthy People 2010 Objective 19-3c)

2010 U.S. Target:	Reduce to 5% the proportion of children and adolescents aged 6 to 19 years who are overweight or obese
2001 TN:	Unknown. The data source is the National Health and Nutrition Examination Survey (NHANES), which does not report data by state
Status:	In the U.S., 15% of children and adolescents aged 6-19 years were overweight or obese in 1999-2000 compared to 11% in 1988-1994.

TOBACCO USE

CIGARETTE SMOKING BY ADULTS
(Healthy People 2010 Objective 27-1a)

2010 U.S. Target:	Reduce cigarette smoking by adults to 12%
2001 TN:	24.4% of adults age 18 years and older were reported as current smokers
Status:	Tennessee must reduce cigarette smoking by adults by 51% to achieve the national goal.

CIGARETTE SMOKING BY ADOLESCENTS
(Healthy People 2010 Objective 27-2b)

2010 U.S. Target:	Reduce to 16% cigarette smoking (past 30 days) among students in grades 9 through 12
2001 TN:	29.1% of students in grades 9 through 12 reported smoking cigarettes on one or more of the past 30 days.
Status:	Tennessee must reduce by 45% cigarette smoking by adolescents to achieve the national goal.

SUBSTANCE ABUSE

ALCOHOL AND ILLICIT DRUG USE BY ADOLESCENTS
(Healthy People 2010 Objective 26-10a)

2010 U.S. Target:	Increase to 89% the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days

ALCOHOL USE BY ADOLESCENTS

2001 TN:	63.3% of adolescents age 15 years or younger and 52.5% of adolescents aged 16-17 reported not using alcohol during the past 30 days
Status:	Tennessee must increase the proportion of adolescents not using alcohol by 41% for students 15 years or younger and by 70% for students 16-17 years to achieve the national goal.

ILLICIT DRUG USE BY ADOLESCENTS

COCAINE

2001 TN: 96.3% of adolescents age 15 years or younger and 96.7% of adolescents aged 16-17 reported not using cocaine during the past 30 days

INHALANTS

2001 TN: 95.5% of adolescents age 15 years or younger and 97.2% of adolescents aged 16-17 reported not using inhalants during the past 30 days

MARIJUANA

2001 TN: 79.9% of adolescents age 15 years or younger and 74.9% of adolescents aged 16-17 reported not using marijuana during the past 30 days

Status: Tennessee must increase the proportion of adolescents not using marijuana by 11% for students 15 years or younger and by 19% for students 16-17 years to achieve the national goal.

ILLICIT DRUG USE BY ADULTS

(Healthy People 2010 Objective 26-10c)

2010 U.S. Target: Reduce to 2% the proportion of adults using any illicit drugs during the past 30 days

2001 TN: Unknown. The data source is the National Household Survey on Drug Abuse (NHSDA), SAMHSA, which does not report data by state. Tennessee is part of the East South Central region, which reported 5.7% illicit drug use among persons 12 years or older in the past 30 days

Status: To achieve the national goal, the East South Central region must reduce by 65% the proportion of adults using any illicit drugs.

BINGE DRINKING BY ADULTS

(Healthy People 2010 Objective 26-11c)

2010 U.S. Target: Reduce to 6% the proportion of adults age 18 years and older who engage in binge drinking (drinking 5 or more drinks on one occasion) during the past 30 days

2001 TN: 6.8% of adults age 18 years and older reported binge drinking or having 5 or more drinks on an occasion one or more times in the past 30 days

Status: Tennessee must reduce by 12% the proportion of adults who engage in binge drinking to achieve the national goal.

RESPONSIBLE SEXUAL BEHAVIOUR

RESPONSIBLE ADOLESCENT SEXUAL BEHAVIOR

(Healthy People 2010 Objective 25-11)

2010 U.S. Target: Increase to 95% the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active

2001 TN: 84.6% of students in grades 9 through 12 have never had sexual intercourse, or have had sexual intercourse but not during the past 3 months, or used a condom the last time they had sexual intercourse during the past 3 months

Status: Tennessee must increase by 12% the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active to achieve the national goal.

CONDOM USE BY ADULTS

(Healthy People 2010 Objective 13-6)

2010 U.S. Target: Increase to 50% the proportion of sexually active females aged 18 to 44 who use condoms

2001 TN: Unknown. The data source is National Survey of Family Growth (NSFG), and data will not be available until 2004

Status: Unknown.

MENTAL HEALTH

TREATMENT FOR ADULTS WITH RECOGNIZED DEPRESSION

(Healthy People 2010 Objective 18-9b)

2010 U.S. Target: Increase to 50% the proportion of adults age 18 years and older with recognized depression who receive treatment

2001 TN: Unknown

Status: Unknown.

INJURY AND VIOLENCE

DEATHS FROM MOTOR VEHICLE CRASHES

(Healthy People 2010 Objective 15-15a)

2010 U.S. Target: Reduce deaths caused by motor vehicle crashes to 9.2 age-adjusted deaths per 100,000 population

2001 TN: The age-adjusted death rate (deaths per 100,000 population) from motor vehicle crashes was 22.5

Status: Tennessee must reduce the motor vehicle crash death rate by 59% to achieve the national goal.

HOMICIDES
(Healthy People 2010 Objective 15-32)

2010 U.S. Target:	Reduce homicides to 3.0 age-adjusted deaths per 100,000 population
2001 TN:	The age-adjusted homicide rate in Tennessee in 2001 was 7.8 homicides per 100,000 population
Status:	Tennessee must reduce the homicide rate by 62% to achieve the national goal.

IMMUNIZATION

FULLY IMMUNIZED CHILDREN Aged 19 TO 35 MONTHS
(Healthy People 2010 Objective 14-24)

2010 U.S. Target:	Increase to 80% the proportion of children aged 19 to 35 months who receive the recommended vaccines.
2001 TN:	According to Health US 2002 (NCHS), 84% of Tennessee children aged 19 to 35 months received the recommended vaccines.
Status:	**Tennessee has exceeded this 2010 Objective.**

FLU AND PNEUMOCOCCAL VACCINATION IN HIGH-RISK ADULTS
(Healthy People 2010 Objective 14-29a, b)

2010 U.S. Target:	Increase to 90% the proportion of noninstitutionalized adults age 65 years and older who are vaccinated annually against influenza.
2001 TN:	65.6% of Tennessee adults age 65 years and older reported they had a flu shot within the past 12 months.
Status:	Tennessee must increase by 37% the proportion of adults age 65 years and older receiving an annual flu shot.
2010 U.S. Target:	Increase to 90% the proportion of noninstitutionalized adults age 65 years and older who are ever vaccinated against pneumococcal disease.
2001 TN:	55.4% of Tennessee adults age 65 years and older reported that they had received a pneumonia shot.
Status:	Tennessee must increase the proportion of adults age 65 years and older who receive a pneumonia shot by 62%.

ACCESS TO CARE

PERSONS WITH HEALTH INSURANCE
(Healthy People 2010 Objective 1-1)

2010 U.S. Target:	Increase to 100% the proportion of persons with health insurance.
2001 TN:	89.3% of Tennessee adults age 18 years and older reported they had health insurance.
Status:	Tennessee must increase by 12% the proportion of adults age 18 years and older who have health insurance.

SOURCE OF ONGOING CARE
(Healthy People 2010 Objective 1-4a)

2010 U.S. Target:	Increase to 96% the proportion of persons who have a specific source of ongoing care for all ages.
2002 TN:	87.8% of adults usually go to a particular clinic, health center, doctorís office, or other place when they are sick. *Source: Tennessee Health Needs Assessment Survey of 2002-3.*
Status:	Tennessee must increase by 9.3% the proportion of adults who have a specific source of ongoing care.

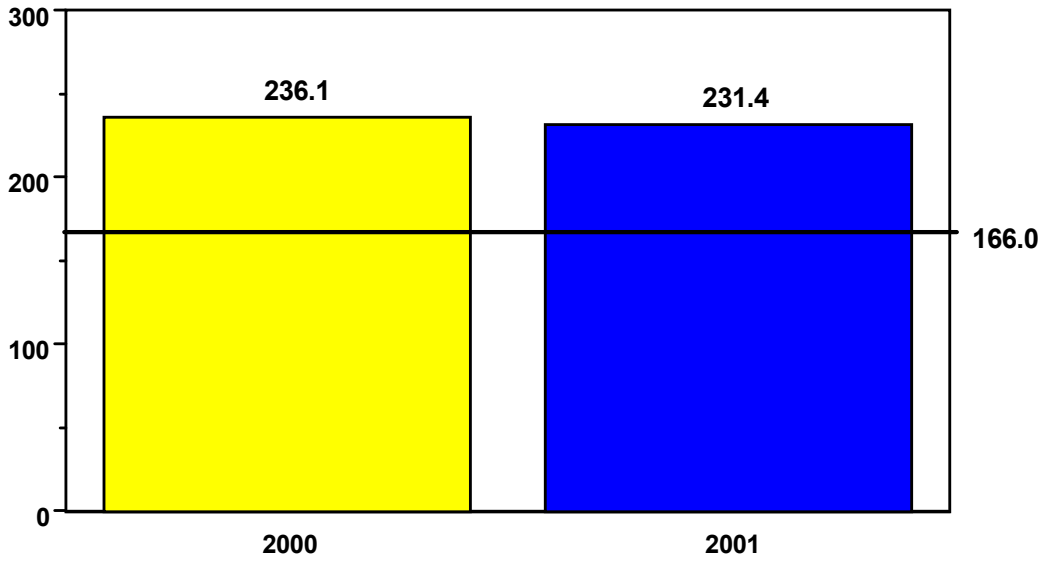
EARLY PRENATAL CARE
(Healthy People 2010 Objective 16-6a)

2010 U.S. Target:	Increase to 90% the proportion of pregnant women who receive prenatal care beginning the first trimester of pregnancy.
2001 TN:	80.5% of live births were to mothers with prenatal care beginning the first trimester.
Status:	Tennessee must increase the proportion of pregnant women who receive prenatal care beginning the first trimester of pregnancy by 12% to achieve the national goal.

Sources: Tennessee Department of Health, Surveillance Program, TB Control Program, HIV/AIDS/STD Branch and under "Healthy People 2010" on the HIT web site.

Source of U.S. Goals: U.S. Department of Health and Human Services. *Healthy People 2010.* 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000, and Healthy People web site (www.healthypeople.gov).

Age-Adjusted Healthy People 2010 Objective 12-1: Coronary Heart Disease Deaths, Tennessee, 2000-2001

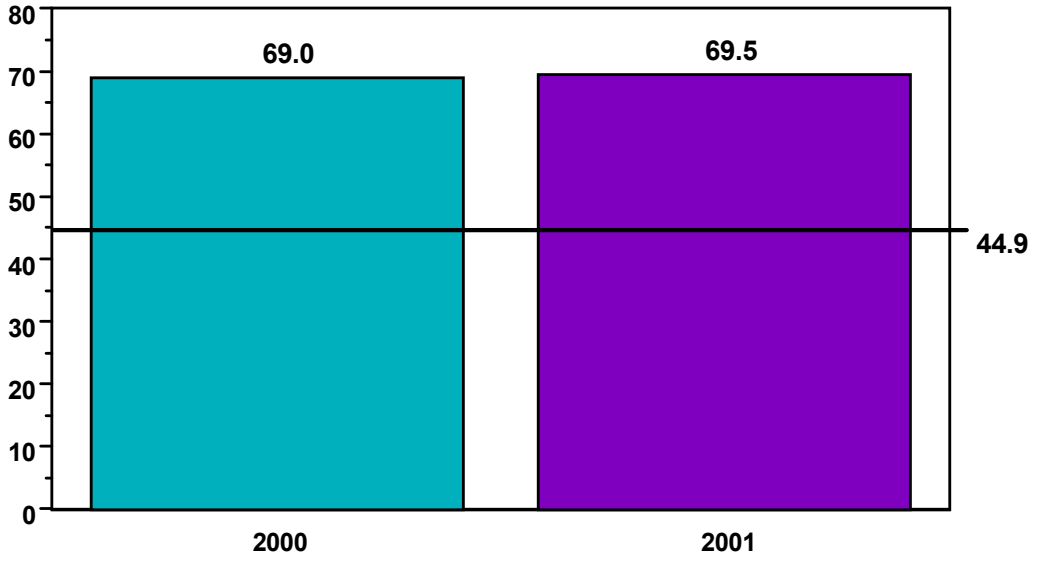


Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 12-7: Stroke Deaths, Tennessee, 2000-2001

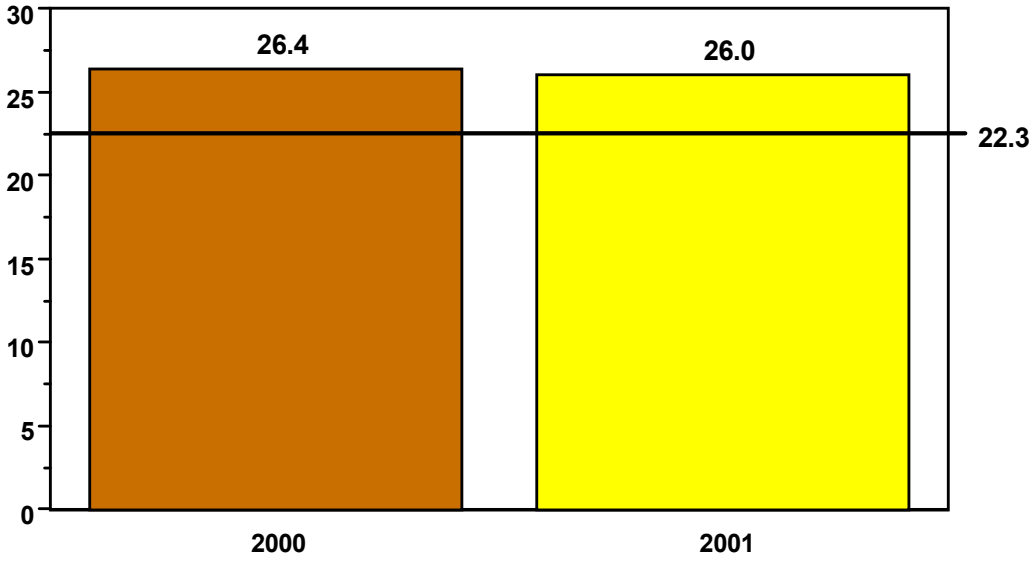
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 3-2: Lung Cancer Deaths, Tennessee, 2000-2001



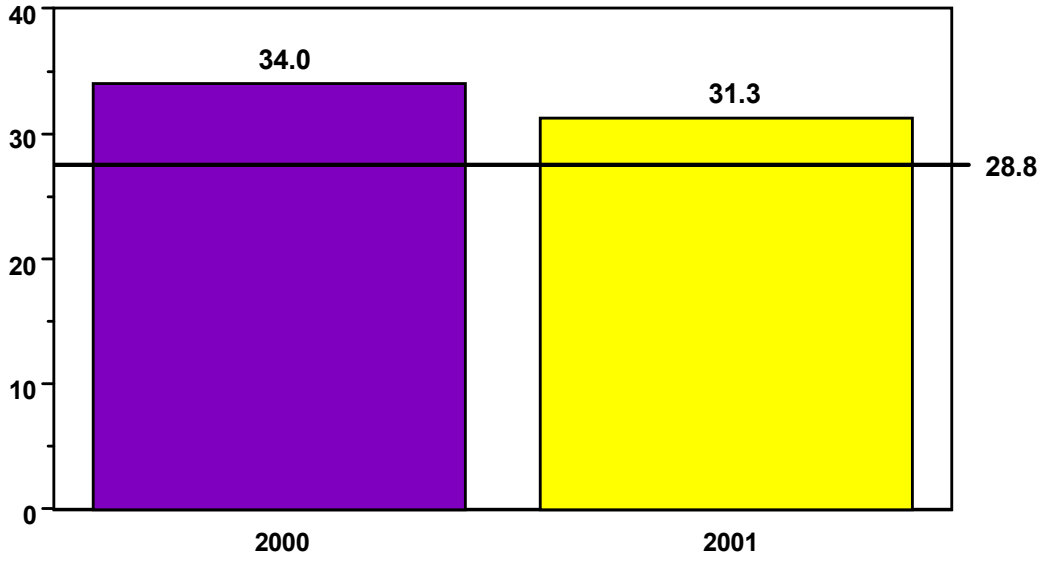
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 3-3: Female Breast Cancer Deaths, Tennessee, 2000-2001



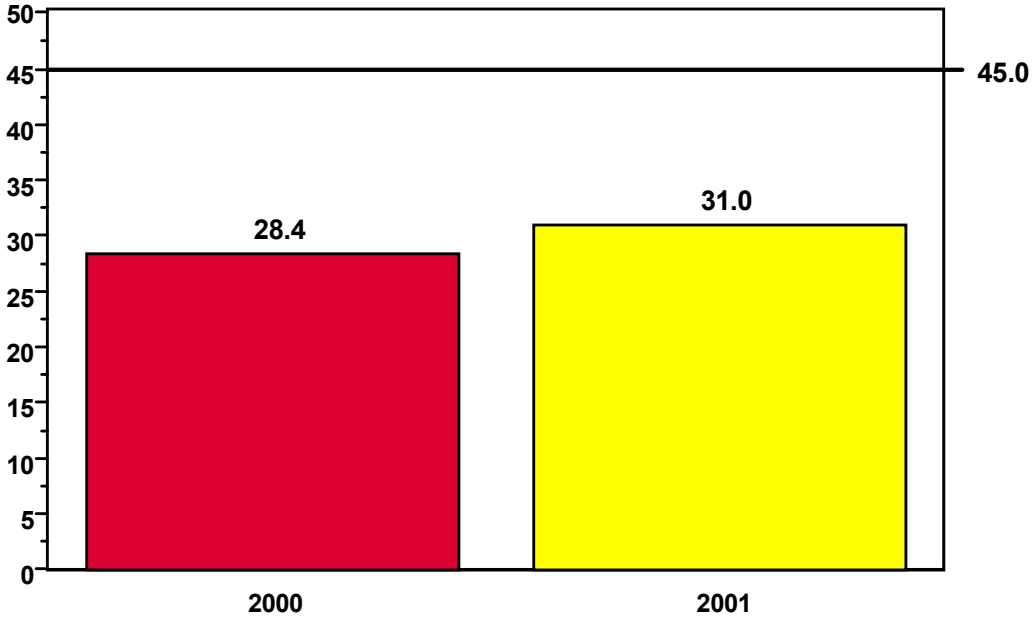
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 3-7: Male Prostate Cancer Deaths, Tennessee, 2000-2001



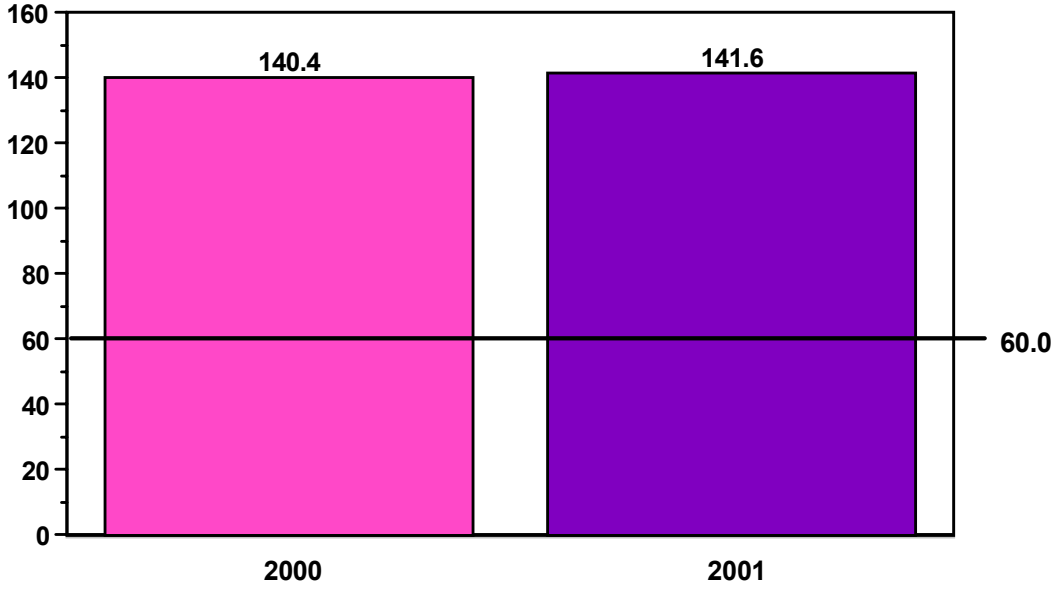
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 5-5: Diabetes Deaths, Tennessee, 2000-2001



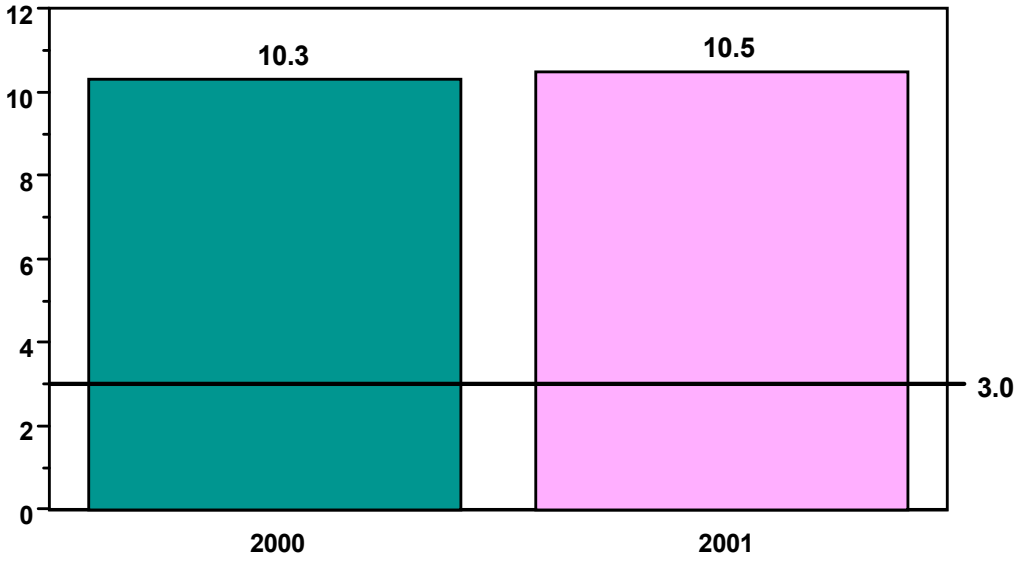
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 24-10: Ages 45 and Older COPD Deaths, Tennessee, 2000-2001



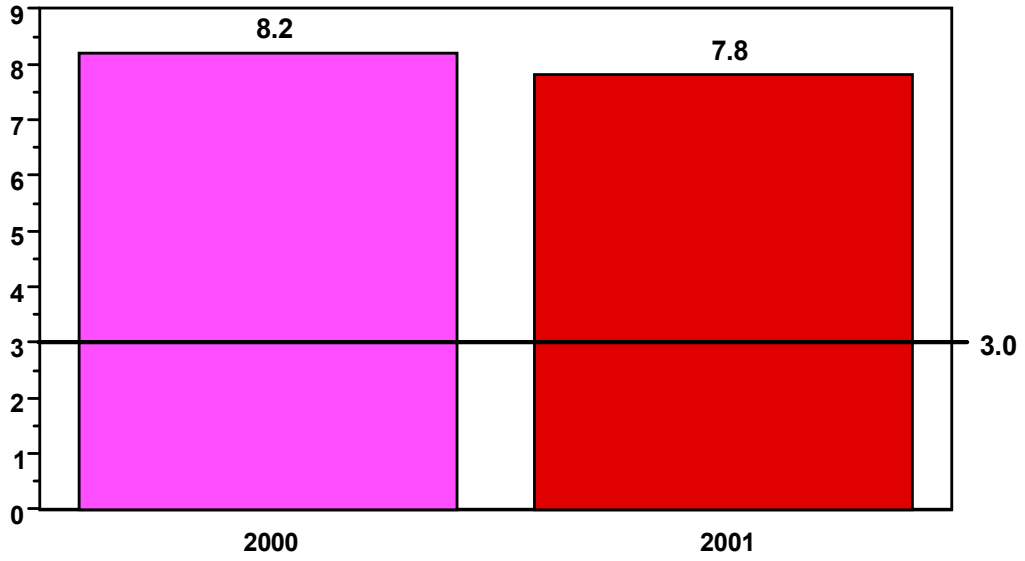
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 26-2: Liver Cirrhosis Deaths, Tennessee, 2000-2001



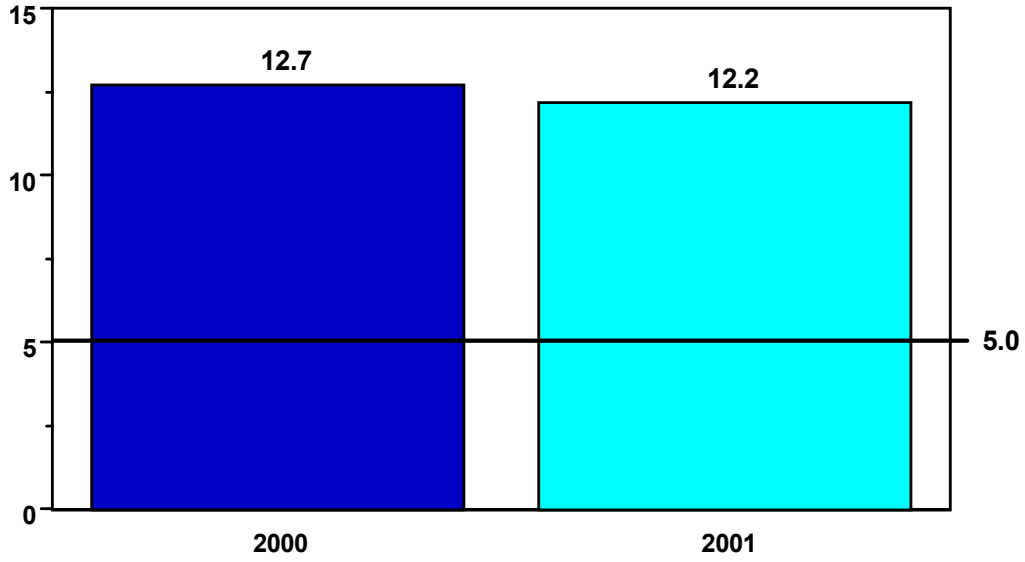
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 15-32: Homicide Deaths, Tennessee, 2000-2001



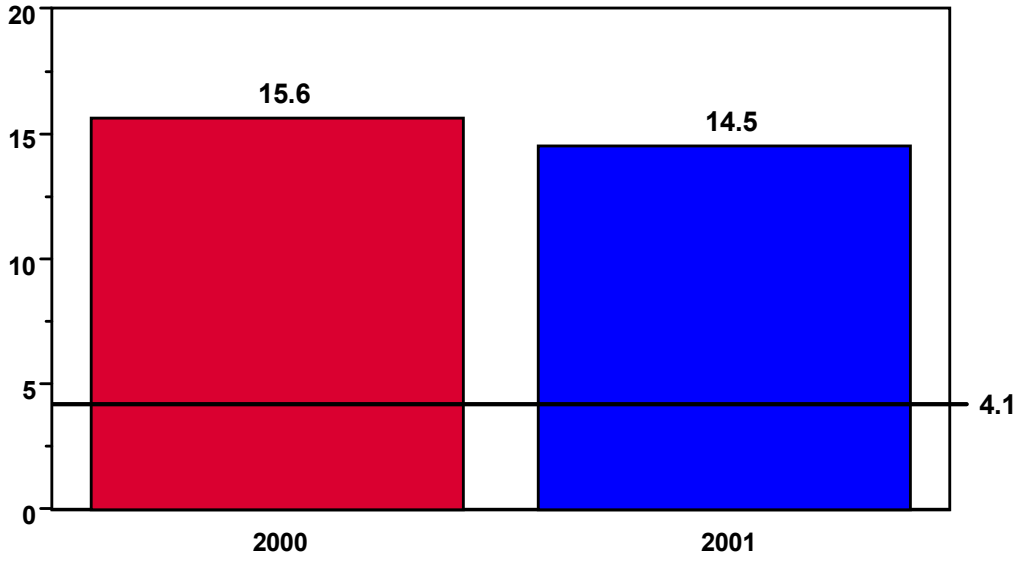
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 18-1: Suicide Deaths, Tennessee, 2000-2001



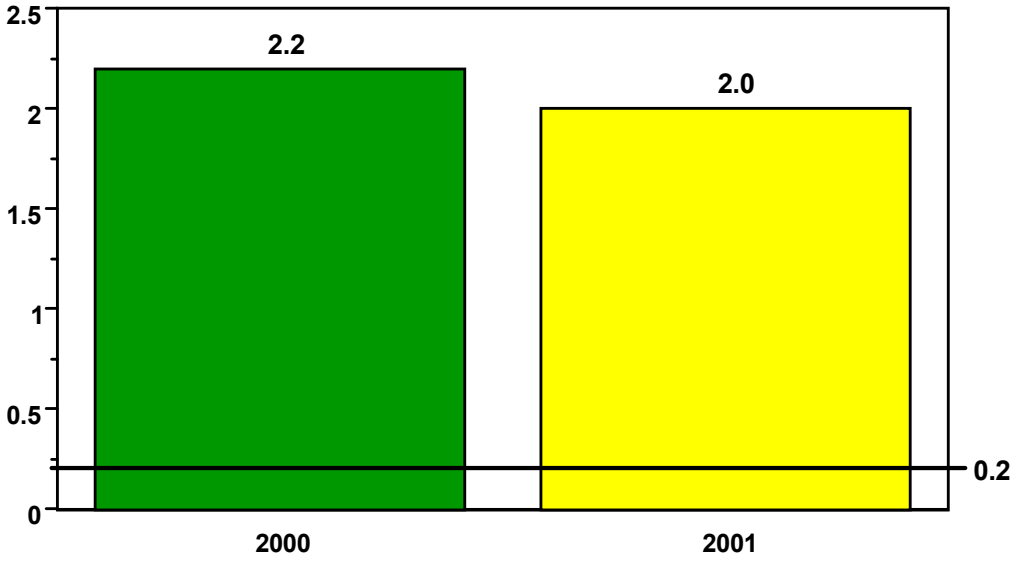
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 15-3: Firearm-Related Deaths, Tennessee, 2000-2001



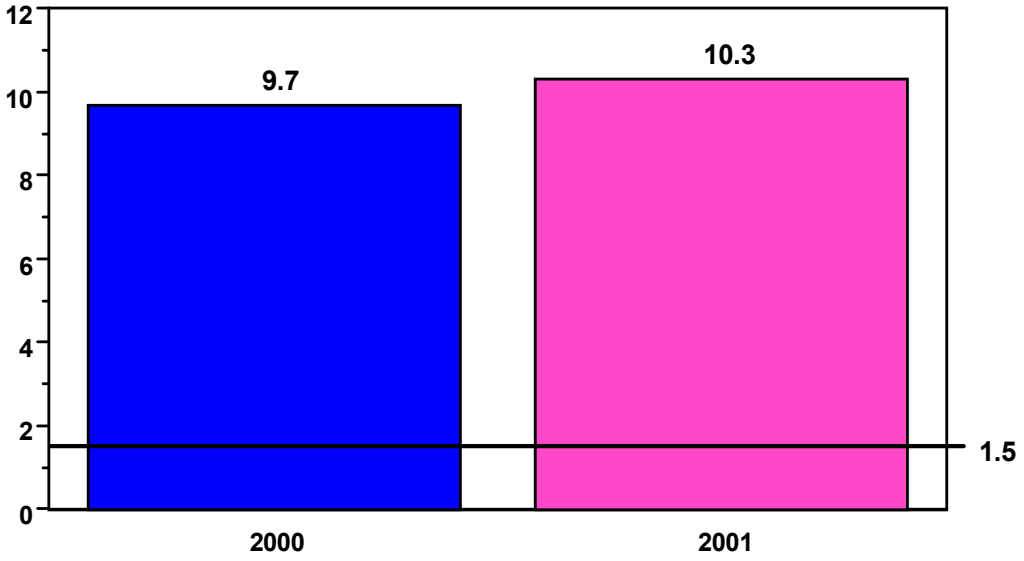
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 15-25: Residential Fire Deaths, Tennessee, 2000-2001



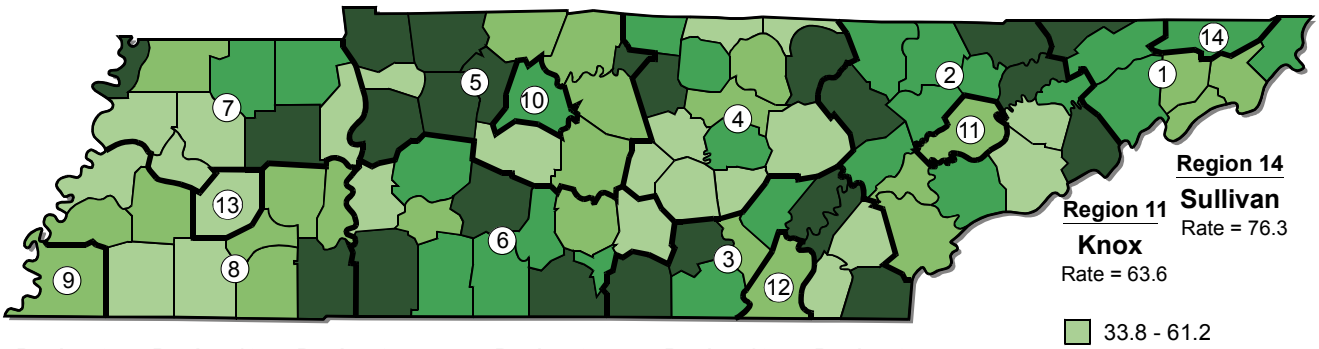
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Age-Adjusted Healthy People 2010 Objective 15-8: Poisoning Deaths, Tennessee, 2000-2001



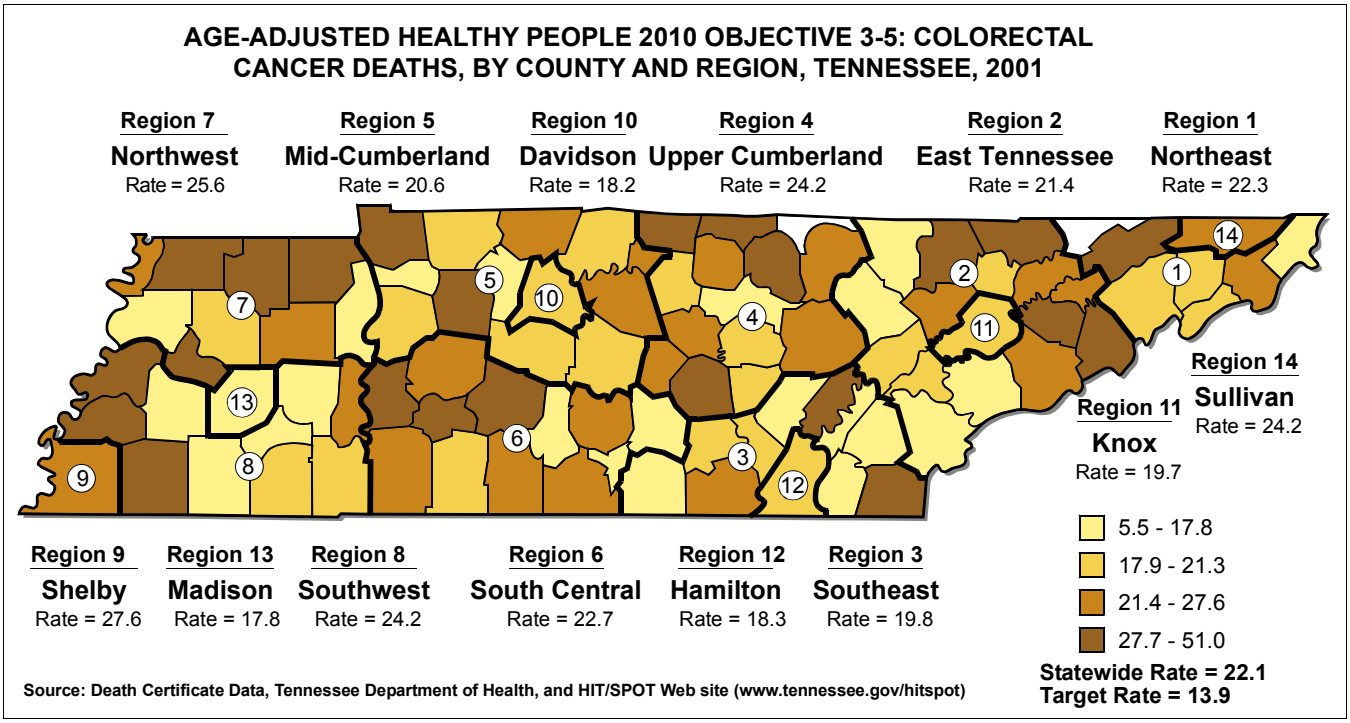
Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

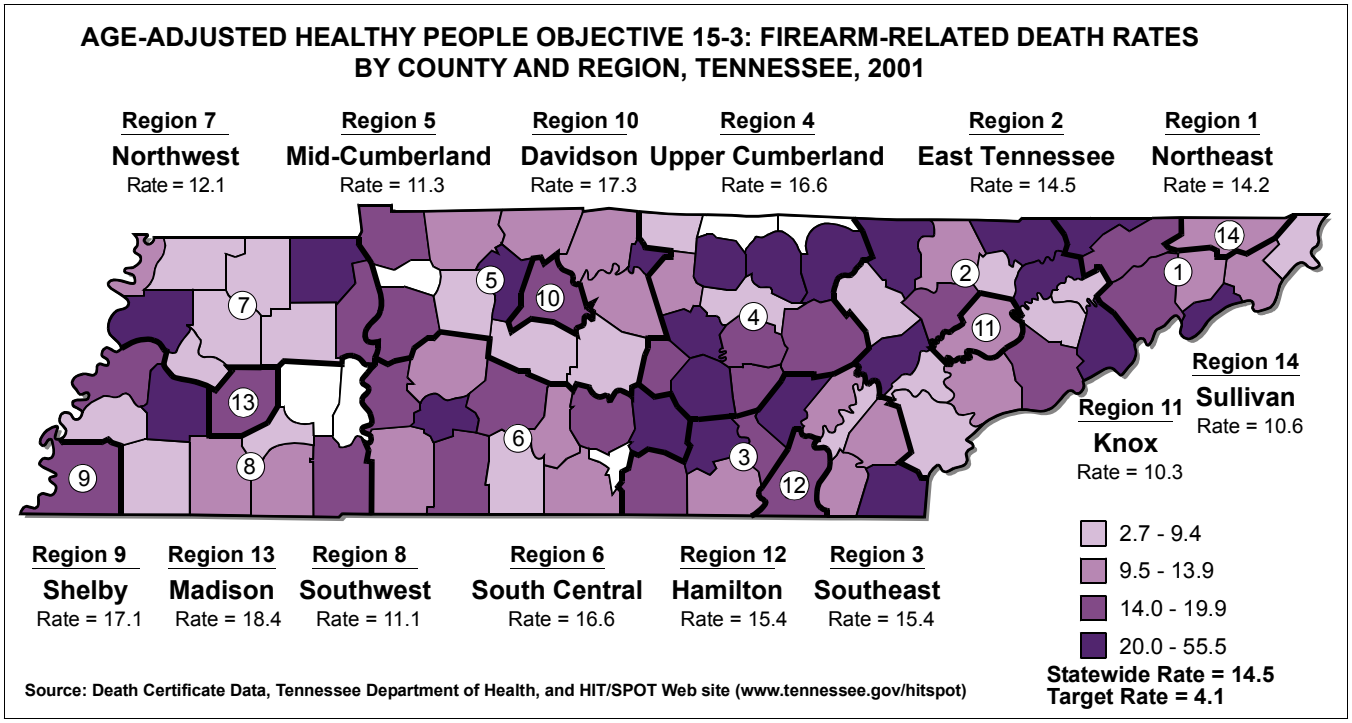
AGE-ADJUSTED HEALTHY PEOPLE 2010 OBJECTIVE 3-2: LUNG CANCER DEATHS BY COUNTY AND REGION, TENNESSEE, 2001

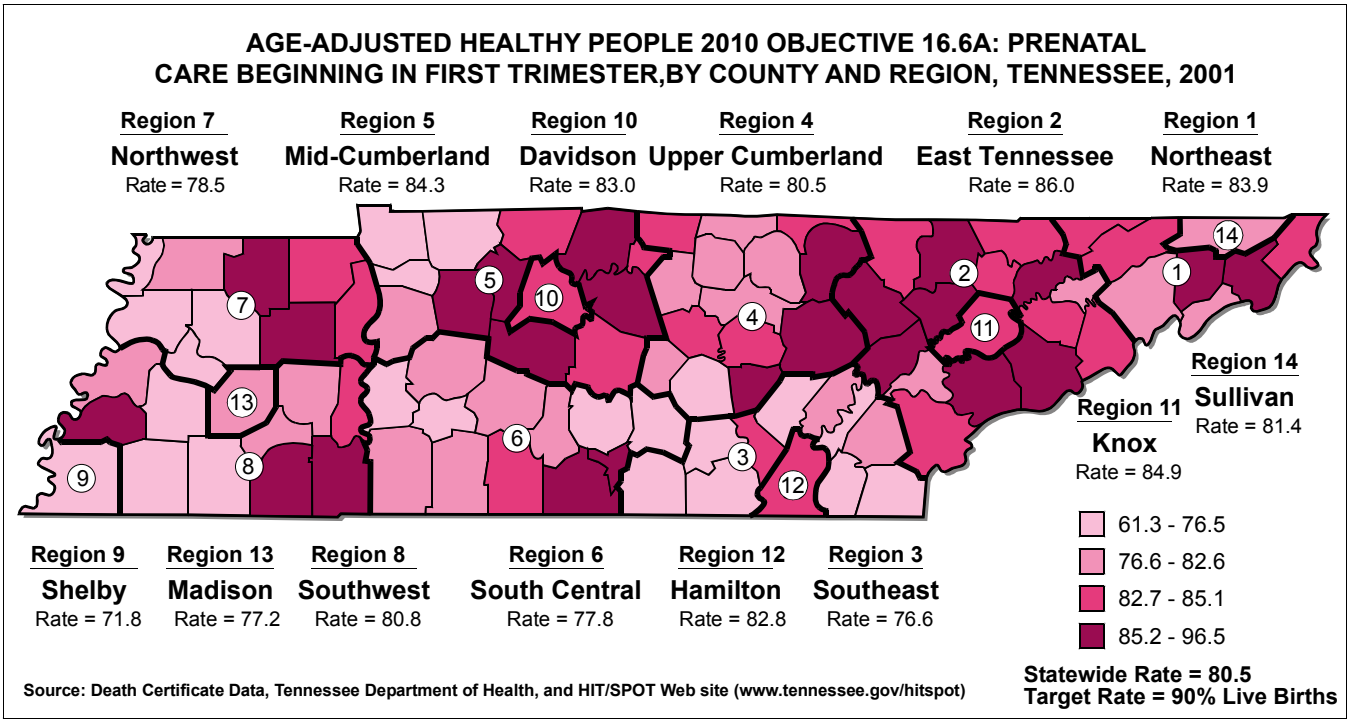


Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Target Rate = 44.9
Statewide Rate = 69.5


AGE-ADJUSTED HEALTHY PEOPLE 2010 OBJECTIVE 3-5: COLORECTAL CANCER DEATHS, BY COUNTY AND REGION, TENNESSEE, 2001
Region 7 Northwest Rate = 25.6
Region 5 Mid-Cumberland Rate = 20.6
Region 10 Davidson Rate = 18.2
Region 4 Upper Cumberland Rate = 24.2
Region 2 East Tennessee Rate = 21.4
Region 1 Northeast Rate = 22.3
Region 14 Sullivan Rate = 24.2
Region 11 Knox Rate = 19.7
Region 9 Shelby Rate = 27.6
Region 13 Madison Rate = 17.8
Region 8 Southwest Rate = 24.2
Region 6 South Central Rate = 22.7
Region 12 Hamilton Rate = 18.3
Region 3 Southeast Rate = 19.8
5.5 - 17.8
17.9 - 21.3
21.4 - 27.6
27.7 - 51.0
Statewide Rate = 22.1
Target Rate = 13.9
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)


AGE-ADJUSTED HEALTHY PEOPLE OBJECTIVE 15-3: FIREARM-RELATED DEATH RATES BY COUNTY AND REGION, TENNESSEE, 2001
Region 7 Northwest Rate = 12.1
Region 5 Mid-Cumberland Rate = 11.3
Region 10 Davidson Rate = 17.3
Region 4 Upper Cumberland Rate = 16.6
Region 2 East Tennessee Rate = 14.5
Region 1 Northeast Rate = 14.2
Region 14 Sullivan Rate = 10.6
Region 11 Knox Rate = 10.3
Region 9 Shelby Rate = 17.1
Region 13 Madison Rate = 18.4
Region 8 Southwest Rate = 11.1
Region 6 South Central Rate = 16.6
Region 12 Hamilton Rate = 15.4
Region 3 Southeast Rate = 15.4
2.7 - 9.4
9.5 - 13.9
14.0 - 19.9
20.0 - 55.5
Statewide Rate = 14.5
Target Rate = 4.1
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)


AGE-ADJUSTED HEALTHY PEOPLE 2010 OBJECTIVE 16.6A: PRENATAL CARE BEGINNING IN FIRST TRIMESTER,BY COUNTY AND REGION, TENNESSEE, 2001
Region 7
Northwest
Rate = 78.5
Region 5
Mid-Cumberland
Rate = 84.3
Region 10
Davidson
Rate = 83.0
Region 4
Upper Cumberland
Rate = 80.5
Region 2
East Tennessee
Rate = 86.0
Region 1
Northeast
Rate = 83.9
Region 14
Sullivan
Rate = 81.4
Region 11
Knox
Rate = 84.9
Region 9
Shelby
Rate = 71.8
Region 13
Madison
Rate = 77.2
Region 8
Southwest
Rate = 80.8
Region 6
South Central
Rate = 77.8
Region 12
Hamilton
Rate = 82.8
Region 3
Southeast
Rate = 76.6
61.3 - 76.5
76.6 - 82.6
82.7 - 85.1
85.2 - 96.5
Statewide Rate = 80.5
Target Rate = 90% Live Births
Source: Death Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

COMMUNICABLE DISEASES, TENNESSEE, 2000 and 2001

Comparison of Selected Communicable Disease Rates, Tennessee and the United States, 2000[30]

- The most common communicable diseases in Tennessee in 2000 were chlamydia and gonorrhea. The rates for these diseases in that year were 264.9 and 208.7 per 100,000 population, respectively (see Table below).

- The rates for all sexually transmitted diseases (STDs) selected for comparison were higher in Tennessee than the U.S. The differences ranged from 2% higher for AIDS to 158.6% higher for all forms of syphilis (see Table). The Tennessee rate of primary and secondary syphilis was 325% higher than the U.S. rate (9.35 cases per 100,000 population, compared to 2.2 cases, respectively).

- Tuberculosis, one of the more important infectious diseases in this time of increasing antibiotic resistance, was 11.7% higher in Tennessee than in the U.S. as a whole (6.7 cases per 100,000, compared to 6.0 cases, respectively).

SELECTED COMMUNICABLE DISEASES, TENNESSEE AND THE U.S., 2000

Selected Diseases	U.S.		Tennessee		Difference in Rate
	N	Rate[1]	N	Rate[1]	
AIDS	40758	14.9	863	15.2	2% Higher
Chlamydia	702093	257.5	15069	264.9	2.9% Higher
Gonorrhea	358995	131.6	11876	208.7	58.6% Higher
Hepatitis B	8036	2.9	239	4.2	44.8% Higher
Hepatitis C	3197	1.2	112	2	66.7% Higher
Syphilis, All Forms	31575	11.6	1708	30	158.6% Higher
Tuberculosis	16377	6	383	6.7	11.7% Higher
Population, 2000	272692000		568		

[1]Rate represents number of reported cases per 100,000 population.
Source: Summary of Notifiable Diseases, United States, 2000. *Morbidity and Mortality Weekly Report*, CDC, June 14, 2002, 49(53); 1-102.

[30]These comparisons are for the most recent year for which data are available for both TN and US - 2000.

Communicable Diseases:
Regional Differences, Tennessee, 2001

Chlamydia

- The statewide rate of chlamydia in 2001 was 271.0 cases per 100,000, compared to the 1995 rate of 261.5 cases per 100,000.

- In 2001, the chlamydia rate was almost 3 times higher in metropolitan regions than in nonmetropolitan regions (435.7 cases per 100,000, compared to 152.7 cases, respectively).

- Among metropolitan regions, Shelby County had the highest rate of chlamydia in 2001, at 604.7 cases per 100,000, while Sullivan County had the lowest, at 144.0 cases per 100,000.

- Among nonmetropolitan regions, the Southwest Region had the highest rate of chlamydia (267.0 cases per 100,000). The Upper Cumberland Region had the lowest chlamydia rate (97.4 per 100,000).

Gonorrhea

- The rate of gonorrhea declined by 36% between 1995 and 2001, from 276.2 cases per 100,000 in 1995 to 176.7 in 2001.

- In 2001, the rate was over 6 times higher in metropolitan regions than in nonmetropolitan regions (343.6 cases per 100,000, compared to 56.9 cases, respectively).

- Among metropolitan regions, Shelby County had the highest rate of gonorrhea, at 493.3 cases per 100,000, while Sullivan County had the lowest, at 59.6.

- Among nonmetropolitan regions, the Southwest Region had the highest rate of gonorrhea (110.6). The Upper Cumberland Region had the lowest gonorrhea rate (15.5).

Hepatitis B

- The statewide rate of hepatitis B fell from 9.7 cases per 100,000 population in 1995 to 4.7 cases per 100,000 in 2001, a 52% decline over the seven-year period.

- In 2001, the hepatitis B rate was 4 times higher in metropolitan regions than in nonmetropolitan regions (8.4 cases per 100,000, compared to 2.1, respectively).

- Among metropolitan regions, Shelby County had the highest rate of hepatitis B, at 16.0 cases per 100,000, while Sullivan County had the lowest, at 0.65.

- Among nonmetropolitan regions, the East Tennessee Region had the highest rate of hepatitis B (5.2 cases per 100,000). The Southwest Region had the lowest hepatitis B rate (0.8 per 100,000).

Hepatitis C

- The statewide rate of hepatitis C has fallen from 19.8 cases per 100,000 population in 1995 to 1.1 in 2001. This represents a 94% decline.

- In 2001, the hepatitis C rate in metropolitan regions was 1.0 cases per 100,000 population. In nonmetropolitan regions, the rate was 1.2 cases per 100,000.

- Among metropolitan regions, Hamilton County had the highest rate of hepatitis C at 2.9 cases per 100,000, while Sullivan County and Madison County had no reported cases, and Shelby and Knox had the lowest rates at 0.11 and 0.26.

- Among nonmetropolitan regions, the Southeast Region had the highest rate of hepatitis C (4.3 cases per 100,000). The Northwest Region had the lowest rate (0.4).

Syphilis

- The rate of syphilis has declined by 40% between 1996 (43.5) and 2001 (25.9).

- In 2001, the syphilis rate was over 16 times higher in metropolitan regions than in nonmetropolitan regions (57.2 cases per 100,000, compared to 3.5, respectively).

- Among metropolitan regions, Shelby County had the highest rate of syphilis, at 100.6, while Sullivan County had the lowest rate, at 1.3.

- Among nonmetropolitan regions, the Southwest Region had the highest rate of syphilis (13.4). The East Tennessee Region had the lowest syphilis rate (0.6).

Tuberculosis

- Between 1995 and 2001, statewide rates of tuberculosis have fallen from 8.9 cases per 100,000 in1995 to 5.5 in 2001. This represents a decline of 38% over the period.

- In 2001, the TB rate in metropolitan regions was more than twice that of the rate in nonmetropolitan regions (8.0 and to 3.65, respectively).

- Among metropolitan regions, Davidson County had the highest rate of tuberculosis, at 11.85 cases per 100,000, while Sullivan County had the lowest, at 0.65.

- Among nonmetropolitan regions, Upper Cumberland had the highest rate of tuberculosis (4.85 cases per 100,000), while the Northwest Region had the lowest tuberculosis rate (2.8).

HIV

- In 2001, the overall reported incidence[31] of HIV in Tennessee was 14.5 cases per 100,000 population, representing 830[32] cases of HIV reported in the State.

- Four counties had rates above the State average. Haywood, Shelby, Davidson and Hardin Counties were the counties with the highest rates of HIV, at 81.0, 46.3, 29.0 and 19.4 cases per 100,000, respectively. Overall, the metropolitan counties had an HIV prevalence rate of 28.4, while the nonmetropolitan regions' rate was 4.5.

- Although in 34 counties no new HIV cases were reported, HIV was present in every region of the state.

AIDS

- In 2001, the overall reported incidence of AIDS in Tennessee was 11.4 cases per 100,000 population, representing 653 cases of AIDS reported in the State.

- Seven counties had rates above the State average. Haywood, Shelby, Davidson, Marion, Hamilton, Gibson and Madison Counties were the counties with the highest rates of AIDS, at 35.4, 30.6, 24.1, 18.0, 15.0, 14.6 and 14.1 cases per 100,000, respectively. Overall, the metropolitan counties had an AIDS rate of 20.8 cases per 100,000, while the nonmetropolitan regions' rate was 4.5.

- In 36 counties, no new AIDS cases were reported.

Sources: Tennessee Department of Health, Surveillance Program, TB Control Program, and HIV/AIDS/STD Branch.

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[31]Due to the lag between infection and initial diagnosis of HIV, not all new HIV cases are reported in a timely manner, and these disease rates are likely to underestimate the true incidence of HIV in Tennessee.

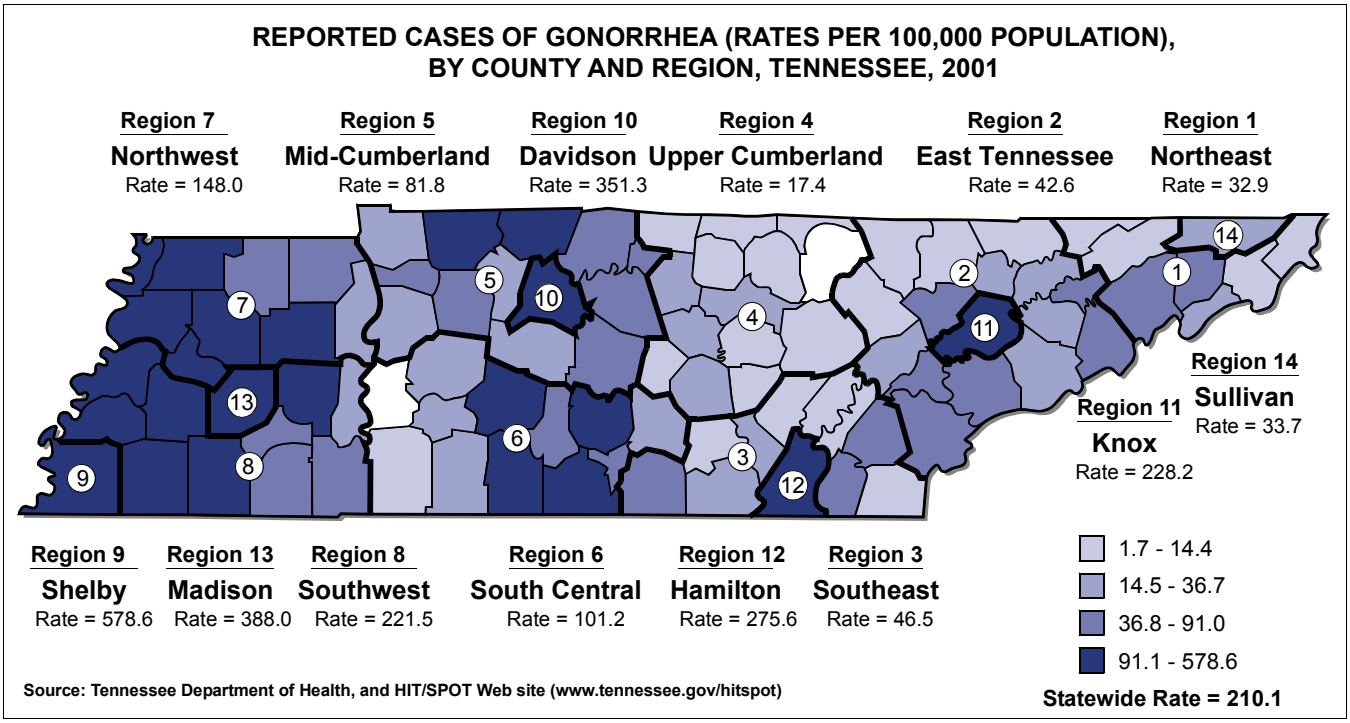
[32]The cases included here were initially reported HIV only; some may have converted to AIDS by the conclusion of the reporting period.

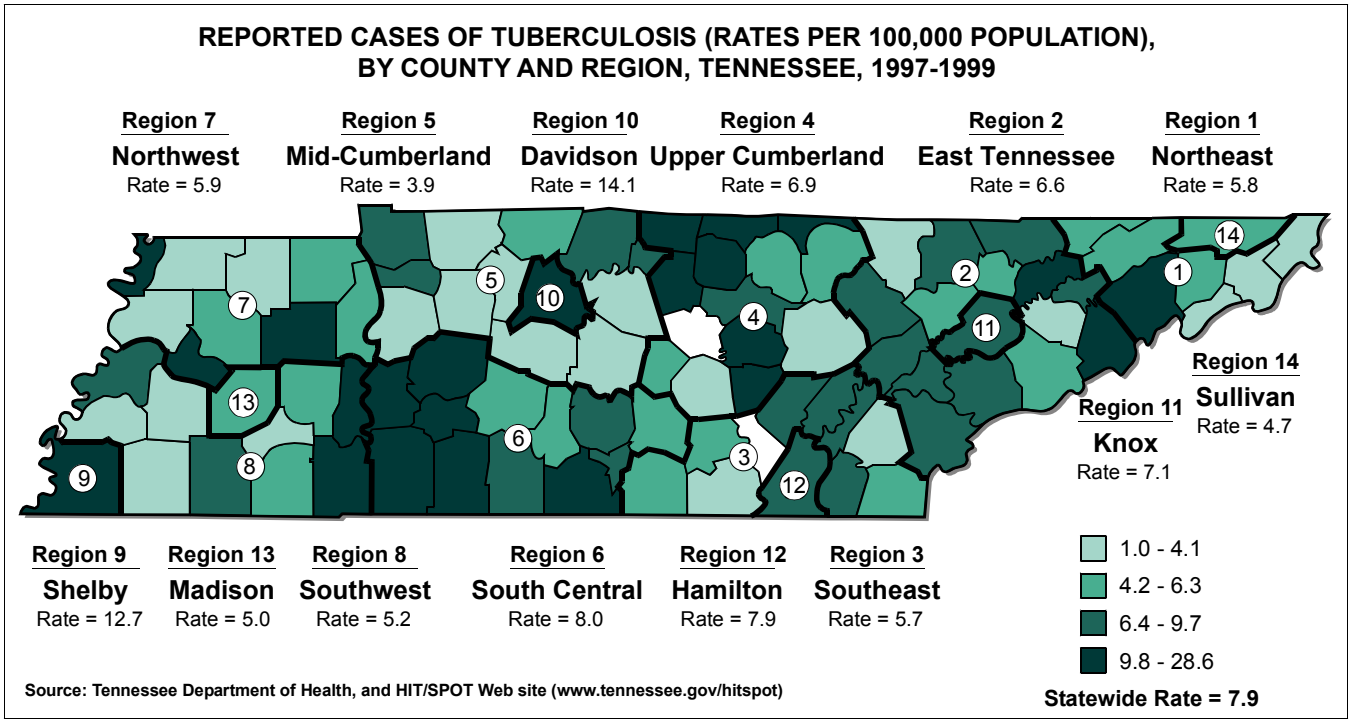
An Overview of HIV and AIDS in Tennessee Through April 30, 2001[33]

From January 1, 1992, through April 30, 2001, there have been 13,362 reported cases of HIV in Tennessee which resulted in 2,289 deaths. Of these persons, 6,530 are HIV infected only and 6,832 have been diagnosed with AIDS. By gender, 76.9% of persons with confirmed HIV infections were males, and 23.1% were females. By race, 43.3% of persons with confirmed HIV infections were white, and 54.8% were black. By age, 1% of persons with confirmed HIV infections were under 13 years; 2.8% were aged 13-19; 27.5% were aged 20-29; 41.4% were aged 30-39; 20.1% were aged 40-49; and 7.2% were age 50 and over.

From 1982 through April 30, 2001, there have been 10,182 reported cases of AIDS in Tennessee which resulted in 4,495 deaths. By gender, 85.1% of persons with AIDS were males, and 14.9% were females. By race, 54.7% of persons with AIDS were white, and 43.4% were black. By age, 0.7% of persons with AIDS were under 13 years; 0.8% were aged 13-19; 21.5% were aged 20-29; 45.8% were aged 30-39; 22.7% were aged 40-49; and 8.6% were age 50 and over.

[33]Source: TDH HIV and AIDS Case Report, Reported HIV and AIDS Cases, April 30, 2001


REPORTED CASES OF GONORRHEA (RATES PER 100,000 POPULATION),
BY COUNTY AND REGION, TENNESSEE, 2001
Region 7
Northwest
Rate = 148.0
Region 5
Mid-Cumberland
Rate = 81.8
Region 10
Davidson
Rate = 351.3
Region 4
Upper Cumberland
Rate = 17.4
Region 2
East Tennessee
Rate = 42.6
Region 1
Northeast
Rate = 32.9
Region 14
Sullivan
Rate = 33.7
Region 11
Knox
Rate = 228.2
Region 9
Shelby
Rate = 578.6
Region 13
Madison
Rate = 388.0
Region 8
Southwest
Rate = 221.5
Region 6
South Central
Rate = 101.2
Region 12
Hamilton
Rate = 275.6
Region 3
Southeast
Rate = 46.5
1.7 - 14.4
14.5 - 36.7
36.8 - 91.0
91.1 - 578.6
Statewide Rate = 210.1
Source: Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)


REPORTED CASES OF TUBERCULOSIS (RATES PER 100,000 POPULATION),
BY COUNTY AND REGION, TENNESSEE, 1997-1999
Region 7
Northwest
Rate = 5.9
Region 5
Mid-Cumberland
Rate = 3.9
Region 10
Davidson
Rate = 14.1
Region 4
Upper Cumberland
Rate = 6.9
Region 2
East Tennessee
Rate = 6.6
Region 1
Northeast
Rate = 5.8
Region 14
Sullivan
Rate = 4.7
Region 11
Knox
Rate = 7.1
Region 9
Shelby
Rate = 12.7
Region 13
Madison
Rate = 5.0
Region 8
Southwest
Rate = 5.2
Region 6
South Central
Rate = 8.0
Region 12
Hamilton
Rate = 7.9
Region 3
Southeast
Rate = 5.7
1.0 - 4.1
4.2 - 6.3
6.4 - 9.7
9.8 - 28.6
Statewide Rate = 7.9
Source: Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

MOTOR VEHICULAR CRASH RATES IN TENNESSEE, 1990-2000[34]

- A total of 176,799 highway crashes occurred in Tennessee in 2000, with about 29% resulting in injury or fatality (n=51,937).

- Total crash rates in Tennessee rose from 2,876 per 100,000 population in 1990 to 3,107.6 per 100,000 in 2000. This rate represents an increase of about 8%.

- Total crash rates were about one-third (30.6%) higher in metropolitan regions (3,775.2) than in nonmetropolitan regions (2,619.7) in 2000, while injury crash rates were 22.7% higher in metropolitan regions, at 1,027 per 100,000, compared to 793.7 in nonmetropolitan regions. However, fatal crash rates were substantially higher in nonmetropolitan regions of Tennessee in 2000, at 25.2 per 100,000 population, compared to 14.5 for metropolitan regions. This situation represents a differential of 42.5% and may relate to gaps in rural access to emergency and related services.

- Counties with the highest total crash rates include Davidson (4,405.4), followed closely by Hamilton (4,021.8), Knox, Madison, and Washington Counties. Lowest total crash rates were observed for Clay, Bledsoe and Lake Counties, at 689.6, 566.0 and 465.2, respectively. Regions with the highest total crash rates were metropolitan counties that are defined as regions by TDH, especially Davidson and Hamilton Counties, as noted above, while the lowest total crash rates were for Northwest Tennessee (2089.6) and Southwest Tennessee (2220.8).

- Injury crash rates declined by 6.3% from 951.7 per 100,000 in 1990 to 892.2 in 2000. After increasing to a high point of 1004.2 in 1995, these rates have dropped dramatically.

- The highest injury crash rates in 2000 were observed for Davidson, Henderson and Knox Counties (1410.3, 1120.6, and 1116.9, respectively), while three rural counties - Clay, Bledsoe and Lake - had the lowest injury crash rates (338.5, 323.4, and 226.3, respectively). Regions with the highest injury crash rates were the metropolitan counties that are planning regions, again Davidson and Knox, while the lowest rates were in Northwest (719.5) and Northeast (734.9) Tennessee.

- Fatal crash rates, like injury crash rates, also declined but by less (3.3%), from 21.4 per 100,000 in 1990 to 20.7 in 2000, with a pattern suggesting stabilization of the rates.

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[34]Highway crash data are from the Tennessee Department of Safety and are available for on-line querying on the Health Information Tennessee Web site (www.tennessee.gov/hitspot).

- Counties with the highest fatal crash rates in 2000 were Pickett (60.7), Haywood (60.6) and Benton (60.5), while counties with no fatal crashes in 2000 were Lewis, Meigs, Moore and Trousdale Counties. Regions with the highest crash fatality rates were Southwest (34.9) and Upper Cumberland (33.4 per 100,000) while those with the lowest rates were two metropolitan counties - Shelby (10.7) and Hamilton (13.6).

- Passenger fatality rates have remained fairly stable over time, from 5.9 in 1990 to 5.5 per 100,000 in 2000. In 2000, these rates were substantially higher (by 40%) in nonmetropolitan areas, at 6.7, compared to 4.0 for metropolitan areas. The rate was 5.5 statewide. Because of small numbers, regional rather than county differences in passenger fatality rates are reported. Thus, of the 14 TDH planning regions, the highest passenger fatality rates are observed for Upper Cumberland (8.9 per 100,000), followed by South Central (8.7) and Southwest (8.5) Tennessee. Lowest rates are seen for Shelby County (3.0), Northeast Tennessee (3.7) and Sullivan County (3.9).

- Pedestrian fatality rates declined from 2.19 to 1.78 over the decade from 1990 to 2000. These rates were 16.3% higher in metropolitan regions (1.96 per 100,000) than in nonmetropolitan regions (1.64). The statewide pedestrian fatality rate was 1.78 per 100,000 in 2000. Regional differences in pedestrian fatality rates show the highest rates in 2000 in Southwest (2.7), Upper Cumberland (2.6) and Davidson County (2.5 per 100,000). Sullivan had no such fatalities in 2000, and both Northeast Tennessee and East Tennessee had relatively low rates, at 0.3 and 0.9, respectively.

- The majority of crashes in Tennessee involved no injury or fatality, but only property damage. More than two-thirds (70.6%) of crashes, numbering 124,862 in 2000, resulted in property damage, compared to 28.7% resulting in injury and the remaining 0.7% resulting in fatalities.

- Over the 10 years from 1990 to 2000, the percentage of crashes resulting in injury has declined from 33.1% in 1990 to 28.7% in 2000, a decline of 13.3%. The decline was less in nonmetropolitan than in metropolitan regions. The decline in the former was from 33.5% to 30.3%, compared to a decline for metropolitan areas of 32.7% to 27.2%.

- The percentage of crashes with property damage only has risen slightly from 66.2% in 1990 to 70.6% in 2000. In metropolitan regions, property damage crashes rose from 66.8% to 72.4% of all crashes from 1990 to 2000, while the increase in nonmetropolitan regions was from 65.4% to 68.7% in that time period.

- The percentage of crashes resulting in fatalities declined slightly from 0.75% in 1990 to 0.67% in 2000, about an 11% decline, with the greatest decline in nonmetropolitan areas. Nonmetropolitan regions have a 60% higher percentage of

crashes that are fatal compared to metropolitan regions (0.96% vs. 0.38%, respectively). In 1990, the proportions of fatal crashes were 1.08% and 0.46% for respective categories of regions.

- Based on police reports, speed was a factor in about 4.7% of crashes in 2000, a decrease from 6.2% in 1990. Speed was more likely to be reported as a contributing factor in crashes in nonmetropolitan regions (5.9%) than in metropolitan regions (3.6% of crashes).

  - Grundy, Bledsoe, and Benton Counties had the highest prevalence of speed-related crashes reported by police in 2000, at 19.7%, 18.6% and 15.8%, respectively. Perry and Shelby were among the counties with the lowest prevalence of speed-related crashes, at 1.4% and 1.5%, respectively, along with Fentress, Warren and Lewis Counties at 2%, 2%, and 2.3%, respectively.

- Weather was recorded as a factor in 5% of crashes in 2000, compared with 8.5% of crashes in 1990. Weather was slightly more likely to be recorded as a factor in nonmetropolitan crashes (5.2%) than in metropolitan crashes (4.8%) in 2000.

  - Counties with the highest prevalence of weather-related crashes in 2000 were Sequatchie (10.7%), Unicoi (9.5%) and Hawkins (9.1%). Bledsoe, Clay, Lewis, Perry and Pickett Counties had no reported crashes where weather was a factor in 2000. Given any such crashes, Hardin had the lowest weather-related crash rate, at 0.3%.

- Late-night crashes, defined as those occurring between 9 p.m. and 2:59 a.m., decreased from 1990 to 2000 statewide, from 17.8% to 14.3% of all crashes. The decline for both metropolitan and nonmetropolitan regions was about 20% over the period. Late-night crashes declined from 16.2% to 12.9% of crashes for metropolitan areas and from 19.7% to 15.8% for nonmetropolitan crashes.

  - Counties with the highest prevalence of late-night crashes in 2000 were Dickson at 36.0% of crashes, Lake (35.1%) and Perry (28.4%). Those with the lowest were Rutherford (11.5%), Blount (11.5%), and Williamson (10.8%).

- One-third of late-night crashes involved injury or fatality in 2000. The percentage of late-night crashes with injury or fatality declined by 14.4%, from 39.2% of crashes to 33.6% of crashes in nonmetropolitan regions from 1990 to 2000. In Tennessee, the decline from 37.7% to 32.5% of crashes amounted to a 13.8% decline. The prevalence of these crashes declined by 13.6% (from 36.1% to 31.2% of crashes) in metropolitan regions over the same time period.

- Single vehicle crash prevalence has remained at about 25%-26% of total crashes in Tennessee from 1990 to 2000. However, the prevalence of single vehicle crashes in 2000 was higher in nonmetropolitan regions, at 36.2% of crashes, compared with 16.9% in metropolitan areas. The lowest single vehicle crash rates in 2000 were in Shelby, Knox, Davidson and Hamilton Counties (at 13.3%, 16.7%, 16.7%, and 20.7%, respectively), while the highest were in Perry, Houston and Meigs Counties, at 85.1%, 71.5% and 67.9%, respectively.

- Injury or fatal crashes involving single vehicles have declined as a percentage of all crashes in Tennessee from 1990 to 2000, from 43.1% to 38.1%. The prevalence has declined from 42.8% in 1990 to 38.1% in 2000 in nonmetropolitan regions and from 43.5% to 38% over the same period in metropolitan regions.

- Because the role of alcohol in crashes is under-reported on police forms, an indirect or proxy indicator of alcohol-related crashes may be used, i.e., the prevalence of late-night, single vehicle crashes involving young male drivers, aged 15-34. These types of crashes have declined in Tennessee from 4.5% to 3.2% of crashes in 1990-2000, a decrease of 29%. Over the same period, late-night, single vehicle crashes involving young male drivers have shown similar declines of about 29-30% in nonmetropolitan areas (6.4% to 4.5%) as in metropolitan areas (2.8% to 2%). Such crashes occurred at more than twice the rate in nonmetropolitan as metropolitan regions.

  - In 2000, counties with the highest proportion of such crashes were Decatur (12.2%), Perry (10.8%) and Bledsoe (10.0%), while Shelby and Davidson Counties had the lowest prevalence of such crashes (1.4% and 1.9%, respectively).

- Alcohol-related crashes (based on positive BAC's - blood alcohol concentrations - or police report of alcohol involvement) have declined by about 54% in Tennessee, from 7.8% of total crashes in 1990 to 3.6% of 2000 crashes. This substantial decline was steepest in nonmetropolitan regions (58%), from a base of from 9.1% of crashes in 1990 to 3.8% in 2000. In metropolitan counties, the decline was 49%, from 6.7% in 1990 to 3.4% in 2000.

  - Counties in 2000 with the highest prevalence of alcohol-related crashes were Lake (10.8%), Pickett (9.2%) and Unicoi (8.1%), with the no such crashes reported for Perry or Clay Counties in 2000.

  - Regions with the highest prevalence of alcohol-related crashes were Sullivan County (4.7%) and Northeast Tennessee (4.4%), while regions with the lowest prevalence were South Central Tennessee (2.7%) and Shelby County (3%).

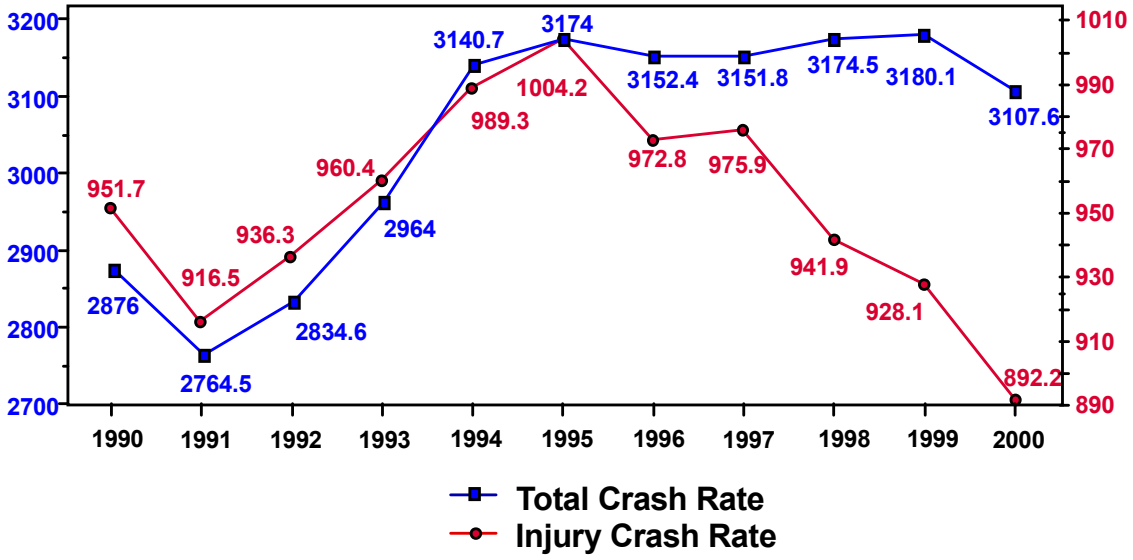
- For injury prevention, reducing alcohol-related crashes promises to have the greatest impact.

  - About 1 in 2 (50.9%) crashes in which alcohol was involved, based on a positive BAC or a police report of alcohol, resulted in injury or death -- more in nonmetropolitan regions (51.2%) than in metropolitan regions (50.6%).

  - By contrast, reducing late-night driving crashes, single vehicle crashes or those to young male drivers would appear to have less impact on injury and fatality rates. Only about 1 in 3 (32.5%) late night crashes statewide in 2000 involved injury or fatality; 38.1% of single vehicle crashes involved injury or fatality, as did 29.6% of crashes with young male drivers (between 15 and 34 years of age). However, about 2 in 5 (39.9%) of crashes statewide that occurred late at night to young male drivers in single vehicles resulted in either injury or death, suggesting that the combination of risk factors is more dangerous than any one separately.

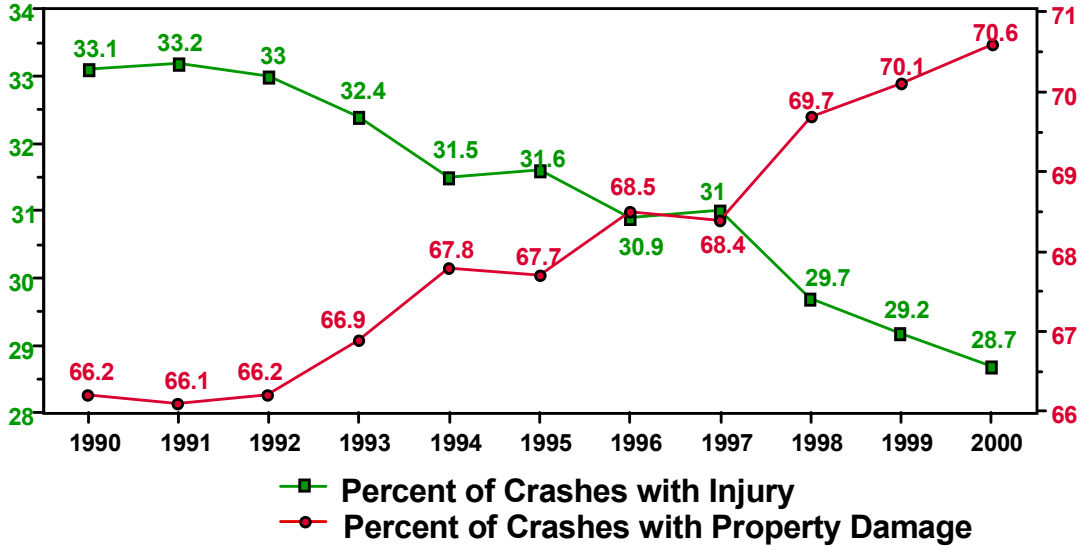
Source: Tennessee Department of Safety and CRASH data on HIT/SPOT Web site (**www.tennessee.gov/hitspot**).

Trends in Total Crash Rates (per 100,000 Population) and Injury Crash Rates (per 100,000 Population) Tennessee, 1990-2000



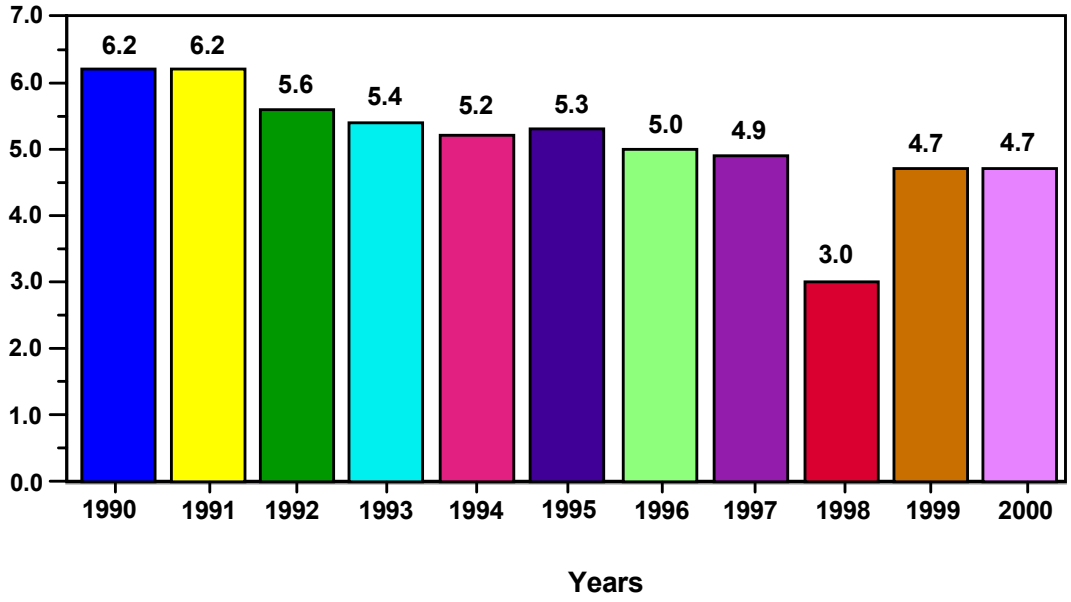
Source: Tennessee Department of Safety and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Trends in the Percent of Crashes with Injury and the Percent of Crashes with Property Damage Tennessee, 1990-2000



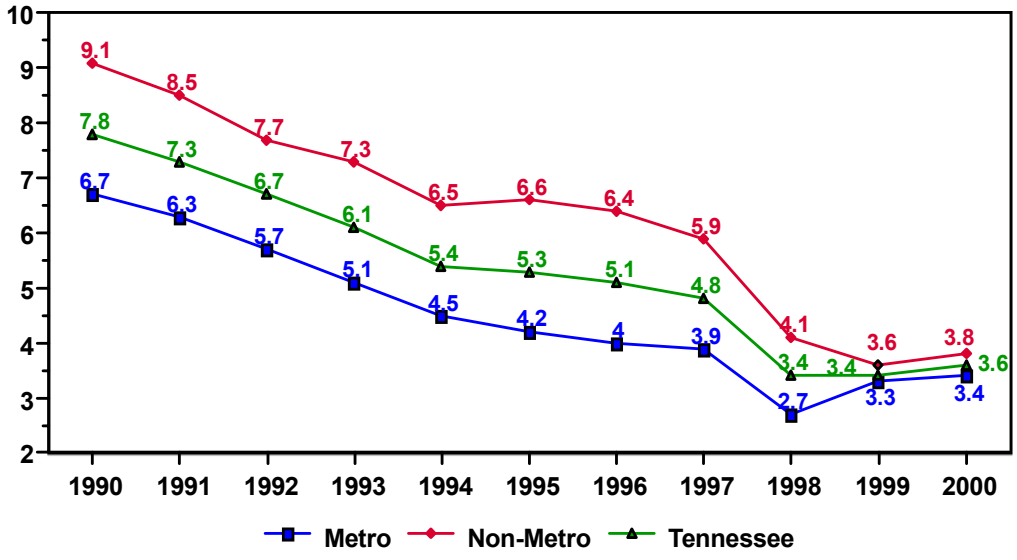
Source: Tennessee Department of Safety and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Trends in the Percent of Crashes Where Speed was a Factor, Tennessee, 1990-2000



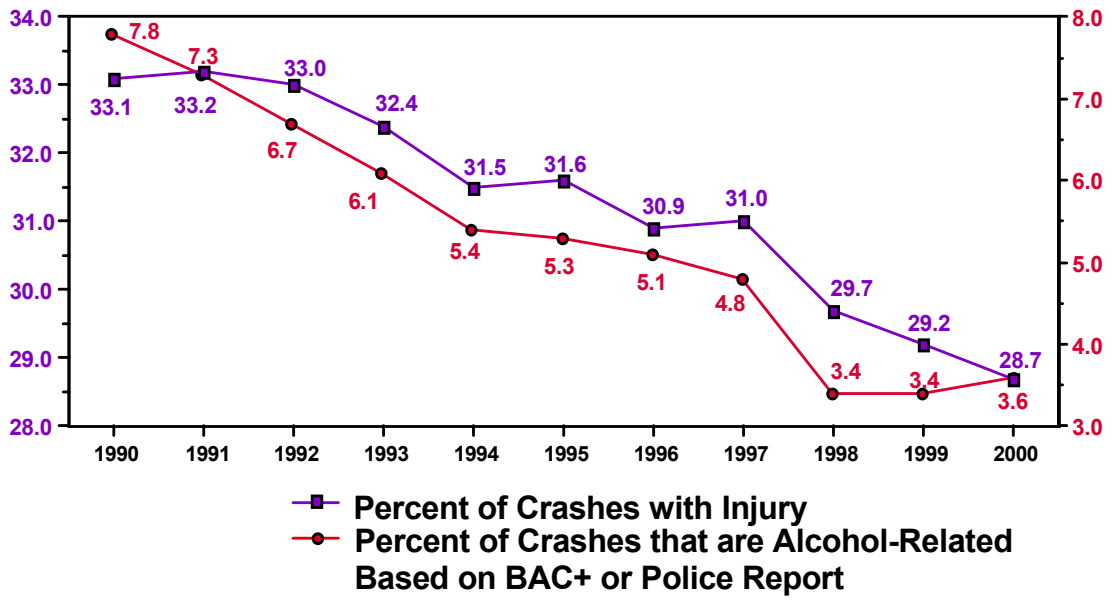
Source: Tennessee Department of Safety and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Percent of Highway Crashes that are Alcohol-Related Based on BAC+ or Police Reports Tennessee, 1990-2000



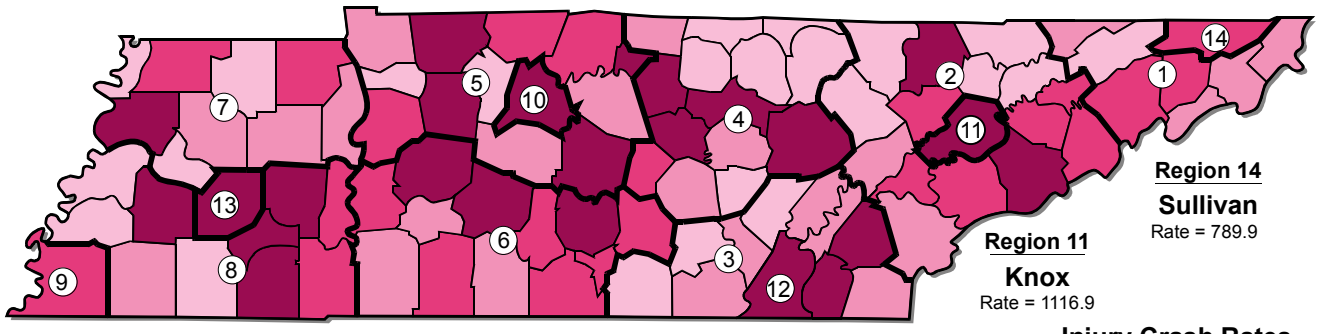
Note: BAC+: Positive Blood-Alcohol Content
Source: Tennessee Department of Safety and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Percent of Highway Crashes with Injury and Percent of Crashes that are Alcohol-Related Based on BAC+ or Police Reports Tennessee, 1990-2000



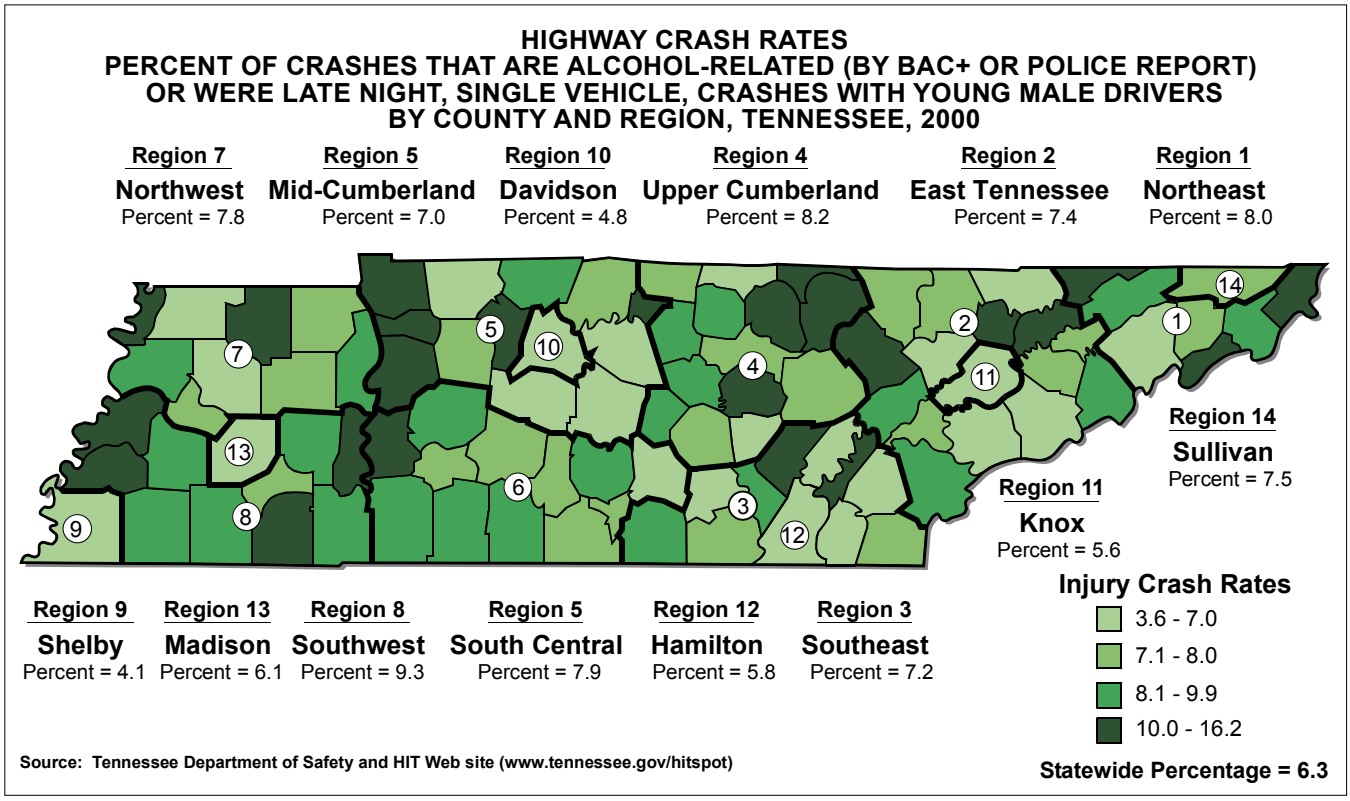
Note: BAC+: Positive Blood-Alcohol Concentration
Source: Tennessee Department of Safety and HIT/SPOT Web site (www.tennessee.gov/hitspot)

INJURY CRASH RATES (MOTOR VEHICLE CRASHES RESULTING IN INJURY PER 100,000 POPULATION) BY COUNTY AND REGION, TENNESSEE, 2000



Statewide Rate = 892.2

Source: Tennessee Department of Safety and HIT Web site (www.tennessee.gov/hitspot)


HIGHWAY CRASH RATES
PERCENT OF CRASHES THAT ARE ALCOHOL-RELATED (BY BAC+ OR POLICE REPORT)
OR WERE LATE NIGHT, SINGLE VEHICLE, CRASHES WITH YOUNG MALE DRIVERS
BY COUNTY AND REGION, TENNESSEE, 2000
Region 7
Northwest
Percent = 7.8
Region 5
Mid-Cumberland
Percent = 7.0
Region 10
Davidson
Percent = 4.8
Region 4
Upper Cumberland
Percent = 8.2
Region 2
East Tennessee
Percent = 7.4
Region 1
Northeast
Percent = 8.0
Region 14
Sullivan
Percent = 7.5
Region 11
Knox
Percent = 5.6
Region 9
Shelby
Percent = 4.1
Region 13
Madison
Percent = 6.1
Region 8
Southwest
Percent = 9.3
Region 5
South Central
Percent = 7.9
Region 12
Hamilton
Percent = 5.8
Region 3
Southeast
Percent = 7.2
Injury Crash Rates
3.6 - 7.0
7.1 - 8.0
8.1 - 9.9
10.0 - 16.2
Statewide Percentage = 6.3
Source: Tennessee Department of Safety and HIT Web site (www.tennessee.gov/hitspot)

ADOLESCENT PREGNANCY RATES, BIRTH RATES AND ADVERSE CONDITIONS, TENNESSEE, 1990-2001

Pregnancy Rates

- In 2001 in Tennessee, the pregnancy rate for early adolescents was 1.7 per 1,000 females aged 10-14. Among teenagers 15-17 years old, the pregnancy rate was 37.3 per 1,000 females, a 37.9% decrease from the rate of 60.1 per 1,000 females in 1990. Tennessee has exceeded by 13% the National Healthy People 2010 Objective for reducing the pregnancy rate per 1,000 adolescent females aged 15-17. The Healthy People 2010 rate is 43 per 1,000 females in this age-group, as compared with Tennesseeís rate of 37.3 per 1,000 in 2001.

- Tennessee's adolescent pregnancy rate in 2001 for females aged 10-17 was 15.1 per 1,000, which represented a 40% decrease from the 1990 rate (25.4 per 1,000 adolescent females). A total of 4,687 adolescent females were pregnant in 2001 in the State.

- Black adolescent females had a pregnancy rate that was more than twice as high as that for white adolescent females in 2001. The pregnancy rate among white females was 12.2 per 1,000 in 2001, while the rate among black females was 27.0.

- Since 1990, pregnancy rates among adolescent black females have declined more than that among adolescent white females. Pregnancy rates among adolescent black females have declined by 45.7% (from 49.7 to 27.0 per 1,000), compared to a 36.5% decline among adolescent white females (from 19.2 to 12.2 per 1,000).

- In 2001, counties in Tennessee with the highest pregnancy rates among females aged 10-17 were Lake County (38.6) and Lauderdale County (22.8). While no adolescent pregnancies were reported for Pickett and Moore Counties in 2001, counties with the lowest pregnancy rates among females aged 10-17 were Van Buren (3.6) and Williamson (4.3) Counties.

Birth Rates and Adverse Conditions for Live Births

- In 2001, the birth rate among adolescent females aged 10-17 was 11.7 per 1,000. This represents a 33.9% decrease from 1990, when the rate was 17.7.

- The 2001 adolescent birth rate for black females aged 10-17 was 20.2 per 1,000 females, compared to a rate of 9.7 among white females aged 10-17, the adolescent birth rate was 9.7 per 1,000.

- Since 1990, birth rates among adolescent black females have declined much more sharply than among adolescent white females. Birth rates among the former have

declined by 44% (from 36.1 to 20.2 per 1,000), compared to a 25.4% decline among the latter (from 13.0 in 1990 to 9.7 in 2001).

- Of all births in Tennessee in 2001, 4.6% were births to adolescents, with 2.9% being births to white adolescent females and 1.7% of births being to black adolescent females. In 2000, the rates were 3.1% and 1.9% respectively.

- Since 1990, increasingly lower percentages of all births have been represented by adolescent births - from 6.4% in 1990 to 4.6% in 2001, for an overall decline of 28.1%. Again, greater declines are observed in black adolescent births, which have declined as a percentage of all black births by 37.3%, compared to births to white adolescents, which declined by 21.5% over the period.

- In 2001, 3.2% of adolescent females who gave birth in that year received no prenatal care during their pregnancies. Among white adolescent mothers, 1.9% received no prenatal care, compared to 5.2% of black adolescent mothers.

- Overall, 10.8% of adolescent females who had live births in 2001 received inadequate prenatal care during their pregnancies (16.3% of blacks and 7.5% of whites).

- Fourteen percent of adolescent females giving birth in 2001 received either inadequate or no prenatal care. In 2001, 21.5% of black adolescents received inadequate or no prenatal care, compared to 9.5% of white adolescents.

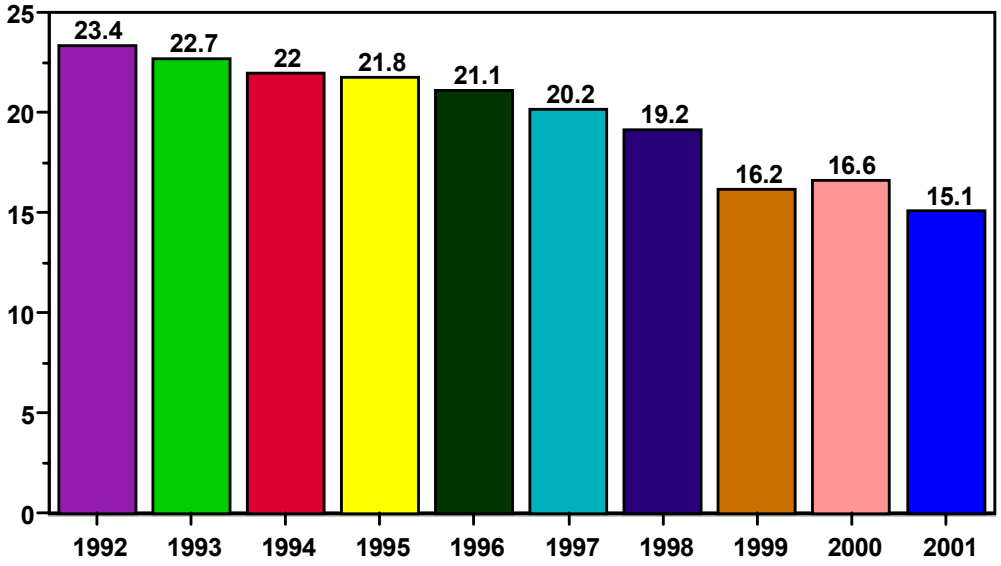
- Counties with the highest prevalence of no or inadequate prenatal care among adolescents from 1999 to 2001 were Pickett (28.6%), Montgomery (28.1%), and Clay (25.0%) Counties at more than twice the statewide average, while those counties with the lowest prevalence in that period from among the 85 counties with any adolescent births were Roane (2.4%), Sevier (2.3%), and White (1.9%) Counties.

- Trends over time suggest that the prevalence of no or inadequate care in pregnant females has declined over all age-groups but somewhat more among adolescents. Declines from 1990 to 2001 were 14.1% among adolescents and 11.4% over all other age-groups.

- The percent of adolescent births occurring to unmarried females in Tennessee aged 10-17 was 87% overall. Almost all births to black adolescents in 2001 were to unmarried females (99.5%), while 79.3% of births to white adolescents aged 10-17 were to unmarried females.

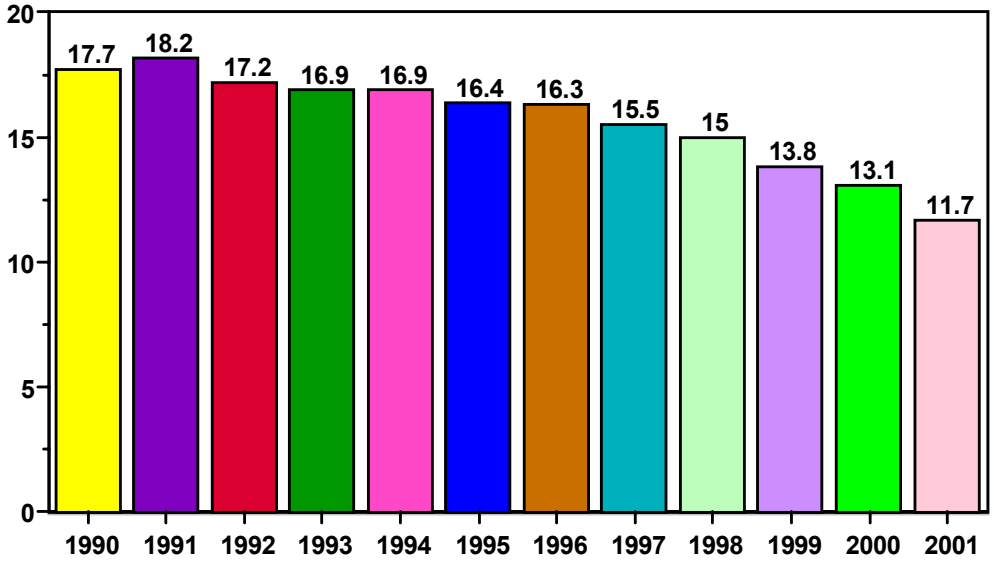
Source: ***Tennessee Adolescent Pregnancy Summary Data***, Health Statistics and Information, TDH, January 2001, and under "BIRTHS" and "TNKIDS" on the HIT Web site (**www.tennessee.gov/hitspot**).

Adolescent Pregnancy Rate (per 1,000 Females Ages 10-17), Tennessee, 1992-2001



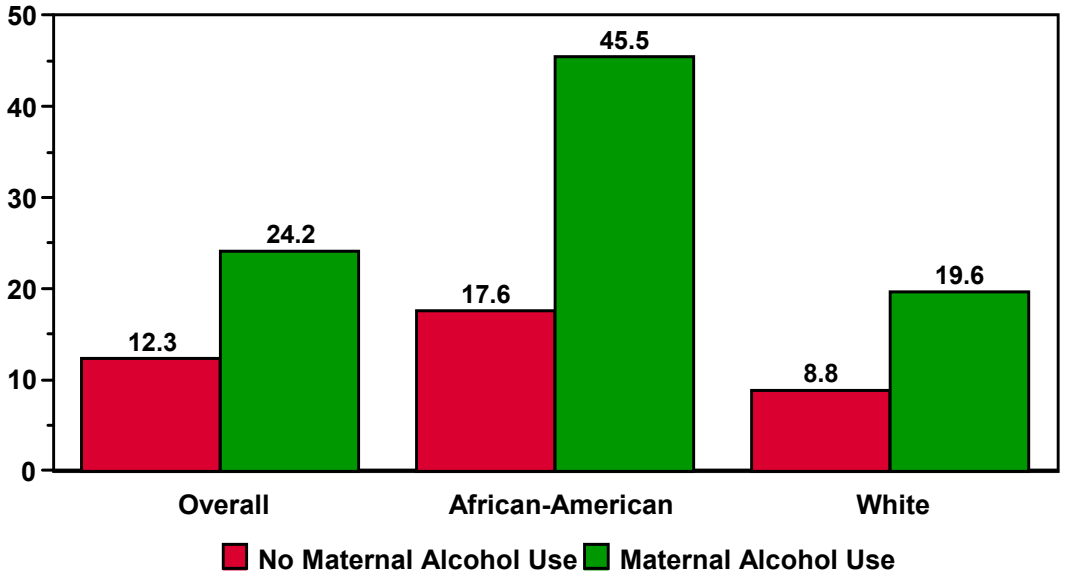
1997 Estimation Method
Source: Tennessee Birth Certificate Data and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Adolescent Birth Rate (Births per 1,000 Females Ages 10-17), Tennessee, 1990-2001



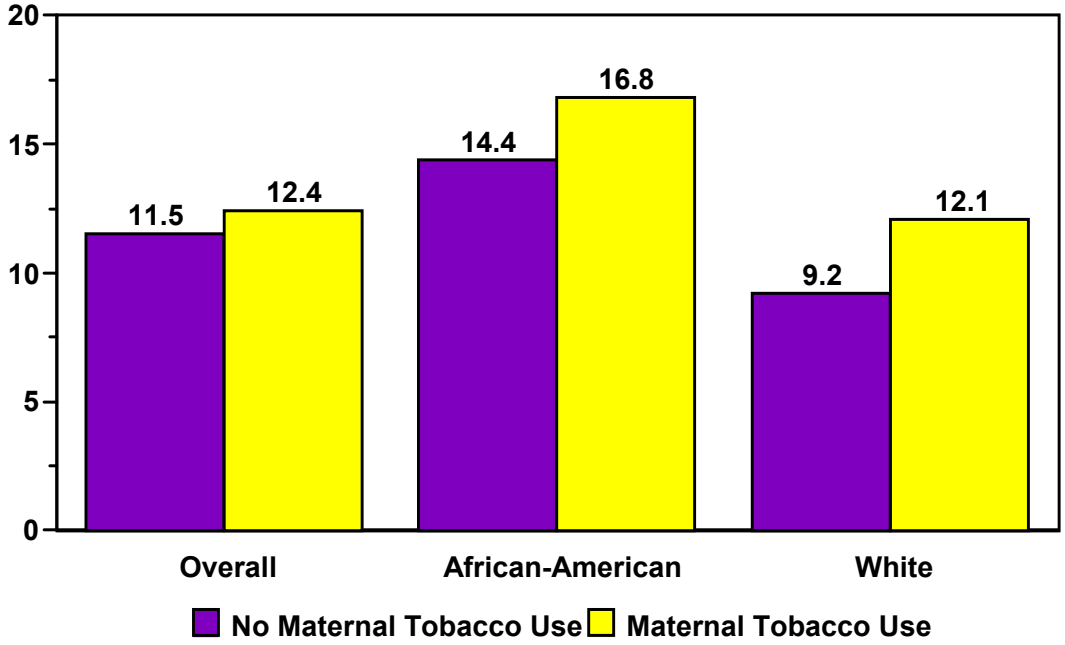
1997 Estimation Method
Source: Tennessee Birth Certificate Data and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Percent of Adolescent Births (to Females Ages 10-17) With No or Inadequate Prenatal Care Overall and by Race and Maternal Alcohol Use, Tennessee, 1999-2001

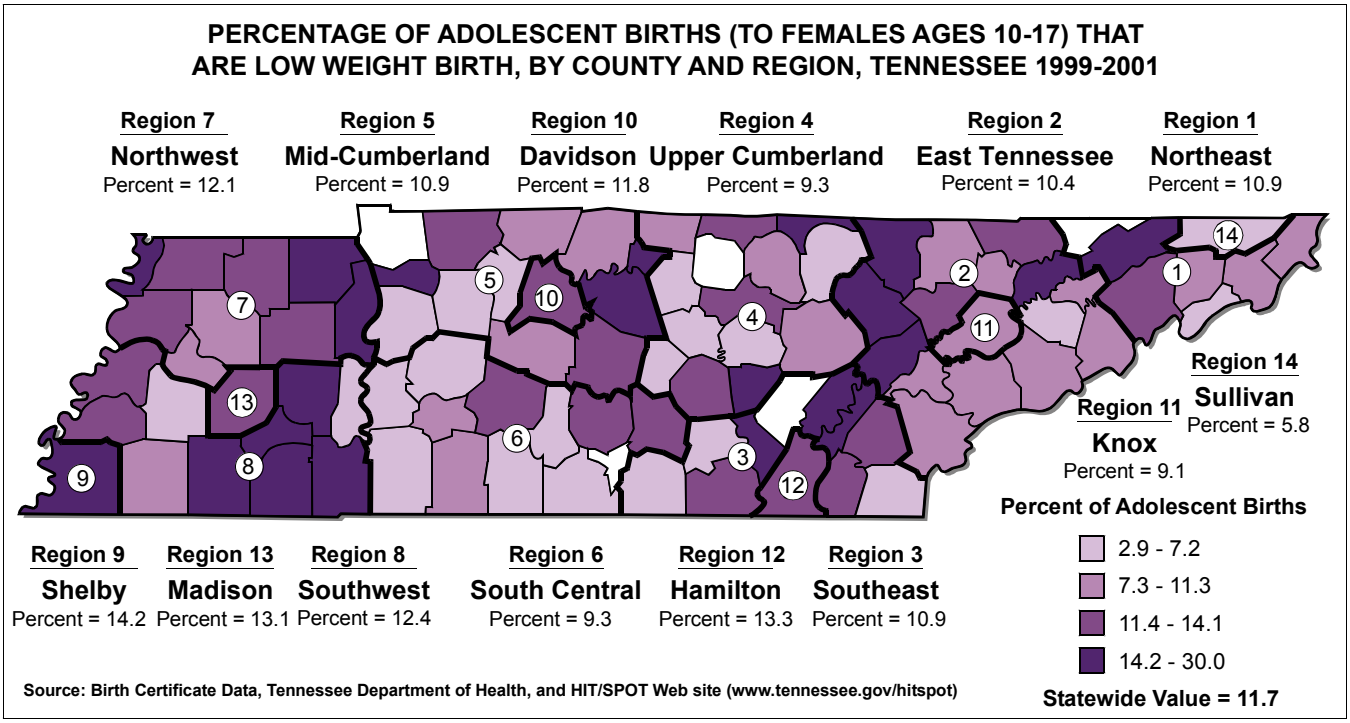


Source: Tennessee Birth Certificate Data and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Percent of Adolescent Births (to Females Ages 10-17) That are Low Weight Overall and by Race and Maternal Tobacco Use, Tennessee, 1999-2001



Source: Tennessee Birth Certificate Data and HIT/SPOT Web site (www.tennessee.gov/hitspot)


PERCENTAGE OF ADOLESCENT BIRTHS (TO FEMALES AGES 10-17) THAT ARE LOW WEIGHT BIRTH, BY COUNTY AND REGION, TENNESSEE 1999-2001
Region 7
Northwest
Percent = 12.1
Region 5
Mid-Cumberland
Percent = 10.9
Region 10
Davidson
Percent = 11.8
Region 4
Upper Cumberland
Percent = 9.3
Region 2
East Tennessee
Percent = 10.4
Region 1
Northeast
Percent = 10.9
Region 14
Sullivan
Percent = 5.8
Region 11
Knox
Percent = 9.1
Region 9
Shelby
Percent = 14.2
Region 13
Madison
Percent = 13.1
Region 8
Southwest
Percent = 12.4
Region 6
South Central
Percent = 9.3
Region 12
Hamilton
Percent = 13.3
Region 3
Southeast
Percent = 10.9
Percent of Adolescent Births
2.9 - 7.2
7.3 - 11.3
11.4 - 14.1
14.2 - 30.0
Statewide Value = 11.7
Source: Birth Certificate Data, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

TENNCARE ENROLLMENT, AS OF MARCH 2003

- Statewide, 1,325,922 persons were enrolled in TennCare as of March, 2003. The TennCare enrollment rate for Tennessee, defined as the percent of the population[35] enrolled in TennCare, was 23.1%. This is the same percentage as in 1995 but represents a slight (3.7%) decrease from the rate in 2000 of 24%.

- Of those enrolled in TennCare, 423,500 (31.9%) were children age 13 years and under. TennCare thus covered 39% of all persons 13 and under in Tennessee[36] in that time period.

- TennCare eligibles are classified into eight main categories: infants (under one year of age), children aged 1 to 13, males aged 14 to 44, females aged 14 to 44, adults aged 45 to 64, adults age 65 and over, dual eligibles enrolled in both Medicaid and Medicare, and the blind and disabled.

  - While infants represented 2.6% of persons enrolled in TennCare as of March 2003 and children aged 1-13, 29.3%, adult males and females aged 14-44 represented 9.4% and 20.3% of enrollees, respectively.

  - Persons aged 45-64 comprised 7.7% of TennCare enrollees, while those age 65 and over, only 0.3%.

  - Medicare/Medicaid dual eligibles represented 18.1% of enrollees, while the blind and disabled made up another 12.3%, for a total of 30.4% for two eligibility groups.

- Thus, more than half (52.2%) of TennCare enrollees were either females of childbearing age (aged 14-44) or children under 14.

- Since the Medicaid waiver program called TennCare was designed to provide health insurance coverage for the uninsured poor, the relative share of enrollment by two groups is important. Medicaid eligibles represented 72.4% of TennCare enrollees as of March 2003, while the uninsured or uninsurable group represented 27.6% of enrollees. The proportion of Medicaid eligibles has fluctuated between 1995 and 2003, with a minimum of 56.7% of enrollees who were Medicaid eligibles in 2001 and a maximum of 73.8% enrolled in both 1996 and 1997.

- Of the 959,525 Medicaid eligibles enrolled in TennCare as of March 2003, 33.9% were children aged 1 to 13, and 19.2% were females aged 14 to 44, for a total of

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[35]Population is based on the TDH estimates for population in 2001 (5,740,021).

[36]Population is based on the TDH estimates for population in 2001 (1,096,870).

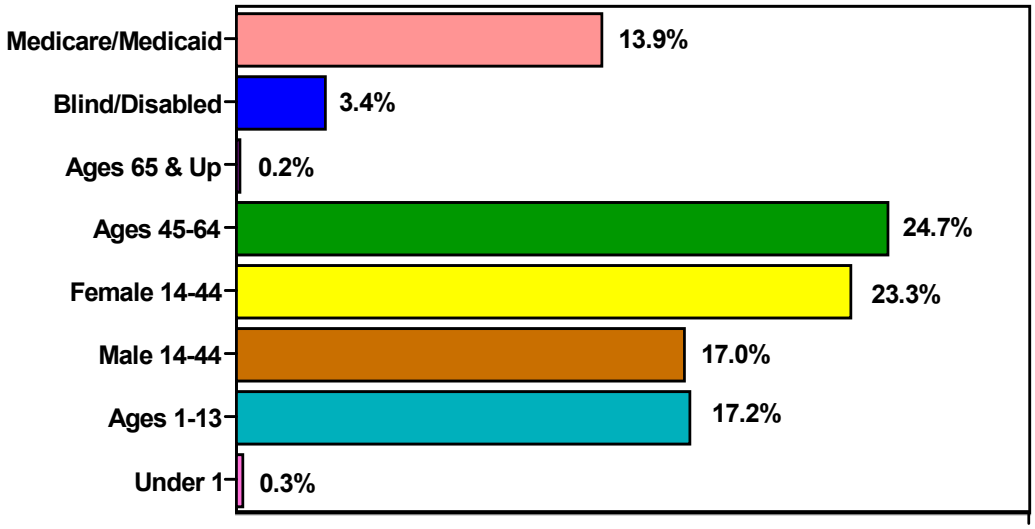
53.1% in those two categories. Another 19.7% were Medicaid/Medicare dual eligibles, and 15.7% were blind/disabled. Approximately 6.5% of Medicaid eligibles were males between 14 and 44 years of age; 3.6% were infants less than one year of age; and 1% were adults aged 45 to 64. The category with the lowest percentage of Medicaid eligibles consisted of persons age 65 and over (0.3%), who are mainly covered by Medicare.

- Of the 366,397 uninsured/uninsurable enrollees in the TennCare program, approximately 41% were either children under 14 (17.5%) or females aged 14-44 (23.3%). While 24.7% of uninsured/uninsurables were adults aged 45 to 64, 17% were males aged 14 to 44; 13.9% were dually eligible for Medicaid/Medicare; 3.4% were classified as blind/disabled; and 0.2% of this group were age 65 and over.

- From 1995 to 2003, the proportion of total TennCare enrollees who were infants under one year of age remained the same (2.6%), while the proportion of children aged 1 to 13 increased by 4.3%, from 28.1% to 29.3%. The percentage of males aged 14 to 44 enrolled in TennCare decreased by 21.7% from 12% to 9.4%, and the percentage of females aged 14 to 44 decreased by 9%, from 22.3% to 20.3%. Other changes included the fact that the proportion of enrollees in the age-group, 45 to 64, increased slightly (by 10%), from 7% to 7.7%, while the proportion of those age 65 and older decreased (by 62.5%), but from a very low base, falling from 0.8% to 0.3% of enrollees. Finally, Medicaid/Medicare dual eligibles increased as a percentage of TennCare enrollees by 36.1% (from 13.3% to 18.1%), and those enrollees classified as blind/ disabled decreased by 11.5% (from 13.9 to 12.3%) over the period.

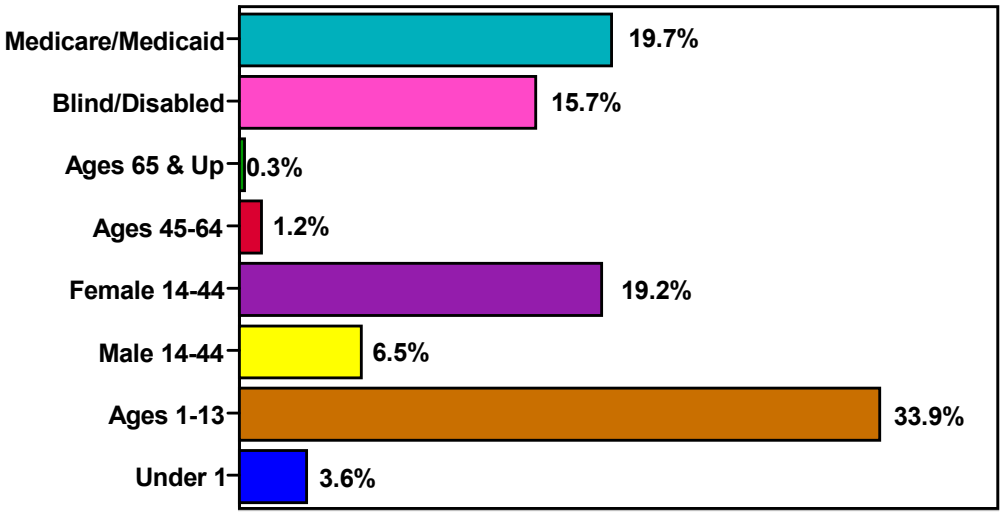
Source: Tennessee Medicaid Management Information System, TDH, Recipient Enrollments by County, MCO and Class, 03/08/03.

Percentage of TennCare Enrollment, Uninsured, Tennessee, as of March 2003



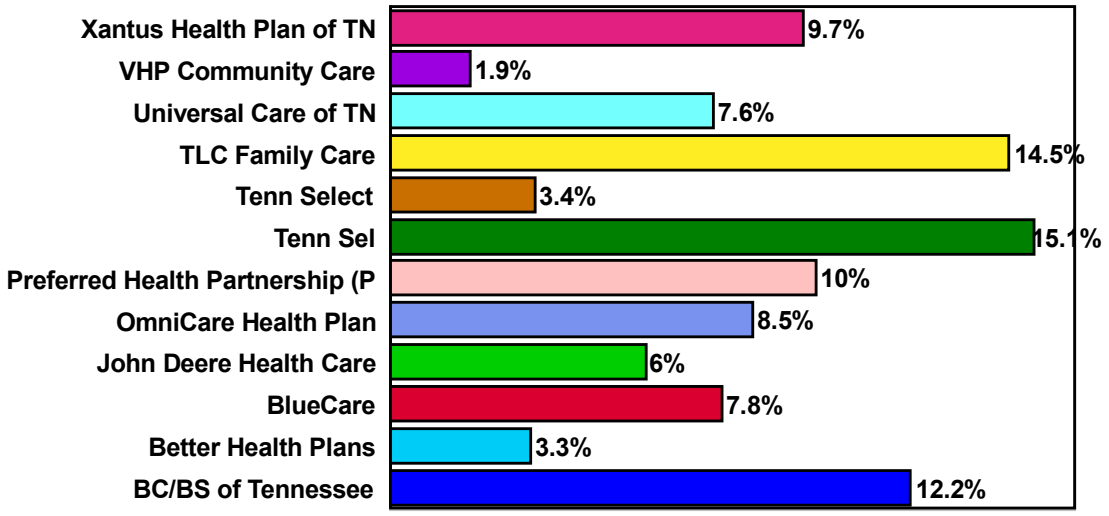
Source: Tennessee Medicaid Management Information System, TDH Recipient Enrollments by County, MCO and Class, 03/08/03.

Percentage of TennCare Enrollment, Medicaid, Tennessee, as of March 2003



Source: Tennessee Medicaid Management Information System, TDH Recipient Enrollments by County, MCO and Class, 03/08/03.

TennCare Enrollment by MCO as of March 2003



Source: Tennessee Medicaid Management Information System,
TDH Recipient Enrollments by County, MCO and Class, 03/08/03.

HEALTH FACILITIES, TENNESSEE, 1990-2000

Hospitals

Resources-Facilities

- According to the Tennessee Department of Health's Joint Annual Report of Hospitals, the number of general/specialty hospitals in Tennessee in 2000 was 128, down from 130 in 1999. The number of general/specialty hospitals steadily declined from 1990 (138) to 1995 (124). Beginning in 1996, Tennessee hospitals were required to file a separate survey report on each individual hospital, even if it was a satellite hospital, which resulted in the appearance of an increase in 1996 to 133 hospitals. In 1998, the number of general/specialty hospitals decreased to 130.

- From 1995 to 2000, the number of licensed and staffed beds for short-term nonfederal hospitals declined by 6.3% and 8.9%, respectively. In 1995, there were 24,978 licensed beds and 19,334 staffed beds, declining to 23,396 licensed beds and 17,605 staffed beds in 2000. Seventy-five percent of licensed beds in 2000 were being staffed, compared to 77% staffed in 1995.

- From 1995 to 2000, the rates of licensed beds per 1,000 population declined by 13.7%, from 4.76 in 1995 to 4.11 in 2000. The rates of staffed beds per 1,000 population declined by 16% from 3.68 in 1995 to 3.09 in 2000.

- The population per hospital increased by 5%, from an average of 42,312 Tennesseans for every hospital to an average of 44,448 Tennesseans per hospital.

Utilization - Inpatient Care

- Inpatient days in Tennessee hospitals in 2000 totaled 3.610 million, down from 3.963 million days in 1995. Admissions declined from 745,925 to 723,184 over the same period. From 1995 to 2000, inpatient days declined by 8.9%, while admissions declined by 3%.

- Overall, the average length of stay in Tennessee hospitals declined by 5.7% between 1995 and 2000, from 5.3 days to 5.0 days, respectively. The average daily census has declined steadily from 10,857 persons per day in 1995 to 9,890 in 2000. This decline amounted to 8.9% over the period.

- In 2000, the occupancy rate for Tennessee short-term or general/specialty hospitals was 42.2% for licensed beds and 56.1% for staffed beds. Occupancy rates declined from 1990 to 1996, but began increasing in 1997 for staffed beds. Both licensed and staffed occupancy rates decreased in 2000 from the rates in 1999. In 1990, the hospital occupancy rate was 52% for licensed beds and 62% for staffed beds. Declines have amounted to 19% and 9.5%, respectively.

Costs

- From 1995 to 2000, total operating costs[37] for hospitals in Tennessee increased approximately 26.7%, from about $6.0 billion in 1995 to $7.6 billion in 2000. Between 1999 and 2000 alone, the total operating costs rose by over $413 million. This total represents a 5.8% increase.

- The cost per adjusted inpatient day increased from 1995 to 1999 but decreased slightly in 2000. In 2000, the cost per adjusted inpatient day was $1,175, compared to $1,176 in 1999 and $1,037 in 1995. From 1995 to 2000, the cost per adjusted inpatient day increased by 13.3%, from $1,037 in 1995 to $1,175 in 2000.

- From 1995 to 2000, gross charges per adjusted inpatient day increased 37.6%, from about $1,777 in 1995 to $2,445 in 2000.

- Total net hospital revenue grew from $6.3 billion to nearly $7.9 billion between 1995 and 2000, a 25.4% increase. Net revenue per hospital admission increased 95% from $5,088 in 1995 to $9,922 in 2000. Net revenue per adjusted inpatient day increased 8.8%, from $1,024 in 1995 to $1,114 in 2000.

- Tennessee hospitals derive an increasing share of their income from outpatient services. In 1990, 21% of net patient revenue came from outpatient services, compared to 38% in 2000.

- Charity care as a percentage of charges decreased 45.3% from 1.72% in 1995 to 0.94% in 2000.

Source: *Joint Annual Report of Hospitals*, TDH, Office of Health Statistics and Research, 2000; *Tennessee Hospital Data*, September 2002, TDH, Office of Health Statistics and Research; *Tennessee Hospital Data*, March 2001, TDH, Office of Health Statistics and Research; and under "HOSPITALS" on the HIT Web site.

Nursing Homes

Resources - Facilities

- According to the Tennessee Department of Health's Joint Annual Report of Nursing Homes, the number of licensed nursing homes in Tennessee in 2000 was 349, down from 357 in 1999. The number of Tennessee nursing homes steadily increased from 302 in 1990 to 362 in 1998, but decreased in 1999 and again in 2000.

- In 2000, the number of licensed nursing home beds was 38,312, and the number of staffed beds was 38,042. The number of both licensed and staffed beds

[37] Dollar amounts have not been adjusted for inflation.

decreased from the previous year. Licensed beds decreased 2.8%, while staffed beds decreased 2.0% from 1999. The reported number of both licensed and staffed beds had increased over the period 1990 to 1998, but decreased in 1999 and again in 2000.

- From 1995 to 2000, the rates of licensed beds per 1,000 population age 65 and older declined by 2.9%, from 56.1 in 1995 to 54.5 in 2000. The rate of staffed beds per 1,000 population age 65 and older declined by 3.2% from 55.9% in 1995 to 54.1% in 2000.

- From 1995 to 2000, the number of Tennessee nursing homes that offered adult day care centers, outpatient services, respite care and specialized Alzheimerís services increased. In 2000, adult day care centers were available at 13 Tennessee nursing homes, compared to 6 in 1995. Outpatient services were available in 85 Tennessee nursing homes in 2000, compared to 62 in 1995. Respite care was available in 134 Tennessee nursing homes, compared to 83 in 1995. Specialized Alzheimerís services were available in 103 Tennessee nursing homes, compared to 70 in 1995.

Utilization

- The number of nursing home patients in 2000 was 33,806, compared to 34,632 in 1995.

- Approximately 4.3% of the population age 65 and over in Tennessee was in nursing homes in 2000, compared to 4.7% in 1995.

- In 2000, 73.5% of the nursing home patients were female, and 26.5% were male. This relative distribution of patients by gender has remained constant since 1995. By age-group, 90% of the patients were age 65 and over. Patient age distributions were roughly the same as in the previous 5 years.

- The number of nursing home patients per 1,000 population age 65 and older declined by 6.1%, from 51.2 in 1995 to 48.1 in 2000. The number of nursing home patients per 1,000 population declined by 10.6%, from 6.6 in 1995 to 5.9 in 2000. The population age 65 and over per nursing home has remained relatively stable from 1995 to 2000. In 2000, the rate was 2015.2, compared to 2013.8 in 1995.

- Nursing home admissions increased by 29%, from 45,464 in 1995 to 58,655 in 2000. Admissions per 1,000 population age 65 and older increased by 24.1%, from 67.2 in 1995 to 83.4 in 2000.

- The reported number of discharges increased by 32.9%, from 45,073 in 1995 to 59,924 in 2000. Discharges per 1,000 population age 65 and older increased by 27.9%, from 66.6 in 1995 to 85.2 in 2000.

- The average daily census[38] of nursing home patients in Tennessee was 34,595 in 1995, compared to 34,050 in 2000. This total is a decrease of 1.6%.

- The occupancy rates in 2000 were 90.2% for licensed beds and 90.4% for staffed beds, compared to 92.9% and 93.3%, respectively, in 1995. Declines in respective rates over the period have amounted to 2.9% and 3.1%.

- In 2000, the average length of stay in Tennessee nursing homes was 194 days, compared to 204 days in 1999 and 277 days in 1995. From 1995 to 2000, the average length of stay decreased by 30%.

- The rate of patient turnover increased from 1.20 in 1995 to 1.55 in 2000, a 29.2% rise.

Costs

- Total operating costs[39] for all nursing home facilities in Tennessee increased to $1.46 billion in 2000, from $1.41 billion in 1999 but are still lower than 1998 ($1.5 billion). Total operating costs were $1.17 billion in 1995, $1.36 billion in 1996 and $1.39 billion in 1997.

- Total revenue also increased between 1999 and 2000, from $1.42 billion to $1.5 billion. This represents a 5.6% increase in one year. Total revenue increased by 24%, from $1.21 billion in 1995 to $1.5 billion in 2000.

- From 1995 to 2000, average gross charges per day increased by 27.5%, from $109 per day in 1995 to $145 per day in 2000.

Source: *Joint Annual Report of Nursing Homes*, TDH, Office of Health Statistics and Research, 2000; *Tennessee Nursing Home Trends*, December 2002, TDH, Office of Health Statistics and Research; *Tennessee Nursing Home Trends*, May 2001, TDH, Office of Health Statistics and Research; and under "Nursing Homes" on the HIT Web site.

Home Health Agencies

Resources - Facilities

- According to the Tennessee Department of Health's Joint Annual Report of Home Health Agencies, there were 178 licensed home health agencies in Tennessee in the fiscal year 2000-2001. The Joint Annual Reports were completed and returned

[38]Patient census data is reported as of December 31 of each year.

[39]Dollar amounts have not been adjusted for inflation.

by 167 home health agencies. Of the 11 remaining home health agencies, two were inactive during the reporting period.

- The majority of the reporting home health agencies were free-standing (65.3%) or hospital-based (26.9%). The remainder were hospital-affiliated (1.8%), nursing home-based (1.8%), public health department (0.6%), or unknown (3.6%).

- The majority of the reporting home health agencies were for-profit corporations (62.9%), followed by other types of ownership including nonprofit corporations (24%), government (7.8%), individual profit (2.4%), partnership profit (1.8%) and partnership nonprofit (1.2%).

- In 2000-2001, Tennessee home health agencies employed an average of 36 FTE personnel. By job category, there were an average of 12 FTE nursing services personnel, 6 FTE home health aide services personnel and 18 FTE other personnel.

Patient and Discharge Characteristics

- In 2000-2001, 223,577 Tennesseans were home health agency patients. This represents a rate of 39 home health agency patients per 1,000 population.

- By gender, 63.4% of the home health agency patients were female and 36.6% were male. While 30.8% were under 65 years of age, 22.9% of patients were aged 65 to 74, and 46.3% were age 75 and over.

- In 2000-2001,specific reasons for home health agency patient discharge, in descending order of magnitude, were: (1)) No Further Care Needed (63.2%); (2) Institutionalized (11.3%); (3) Death (4.6%); (4) Patient No Longer Met Payorís Home Care Qualifications for Eligibility/Coverage (4.4%); (5) Patient Request (2.7%); (6) Physician Order (2.2%); (7) Transfer to Hospice Service from Home Health Agency (1.6%); (8) Transfer Out of Service Area (1.2%); with Other representing 7.7% of reasons for discharge.

- The average number of days of home health agency care per discharged patient was approximately 21 days in 2000-2001 and the average visits by home health providers per discharged patient was 17%.

Sources of Payment

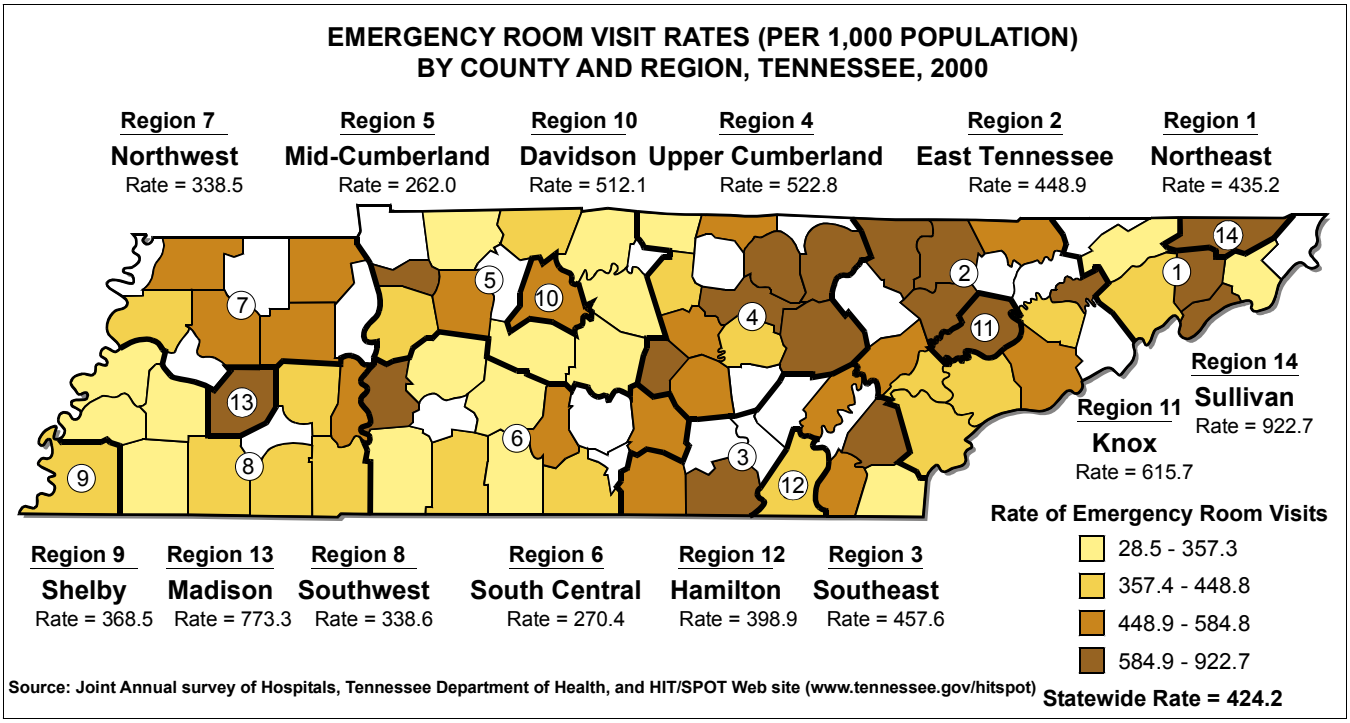
- In 2000-2001, the average revenue per home health agency was $2.71 million.

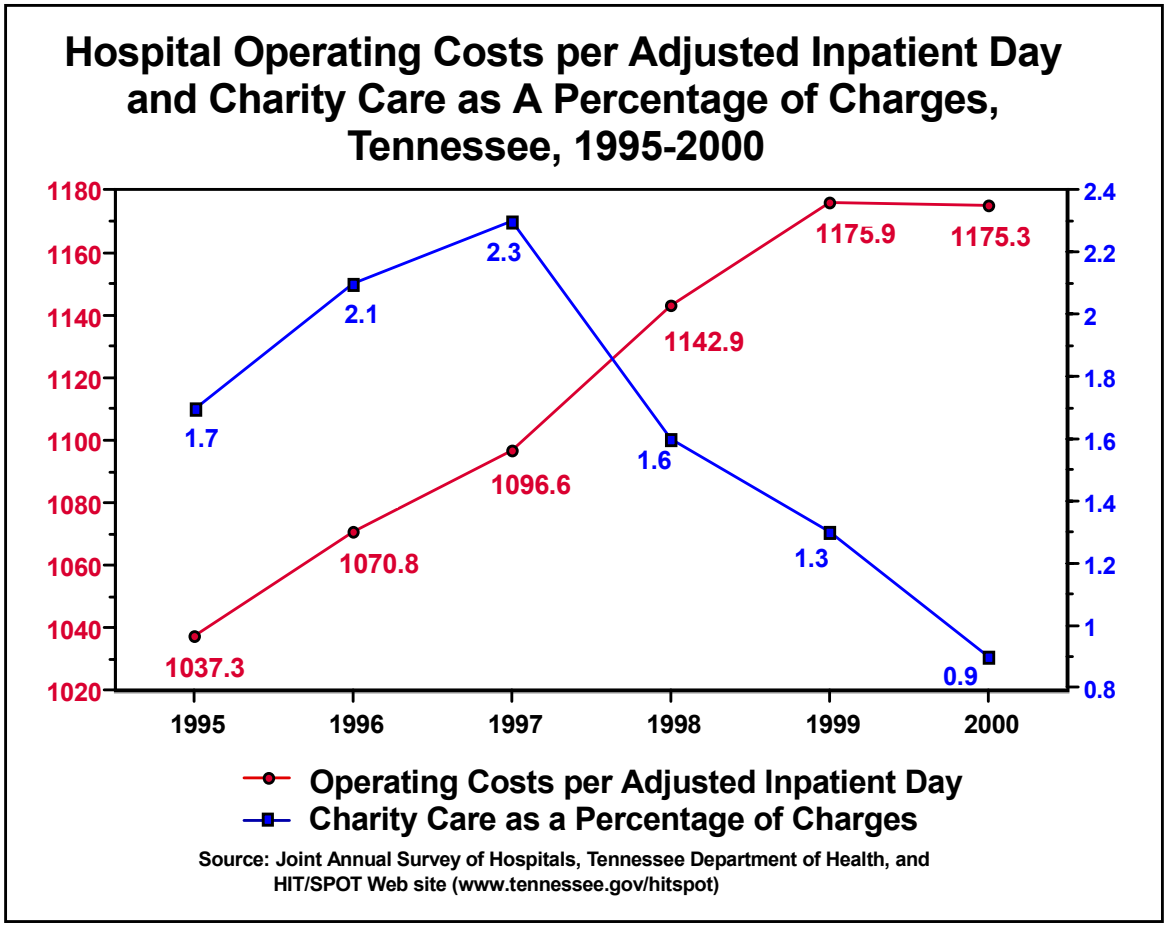
- Medicare was the largest revenue source for home health agencies[40] in 2000-2001 at 75.5% of revenues to HHA's. The remainder was from Tenncare (7.7%), Private (3.9%), Medicare HMO (0.9%), CHAMPUS (0.8%), and Charity (0.1%). Other payment sources comprised 11.1% of HHA revenues in 2000-2001.

Source	Amount	Percent of Total
Tenncare	$35,447,243	7.7%
Medicare	$347,683,832	75.5%
Medicare HMO	$3,957,722	0.9%
Private	$17,967,182	3.9%
CHAMPUS	$3,800,628	0.8%
Other	$51,195,555	11.1%
Charity	$484,969	0.1%
Total	**$460,537,131**	**100.0%**

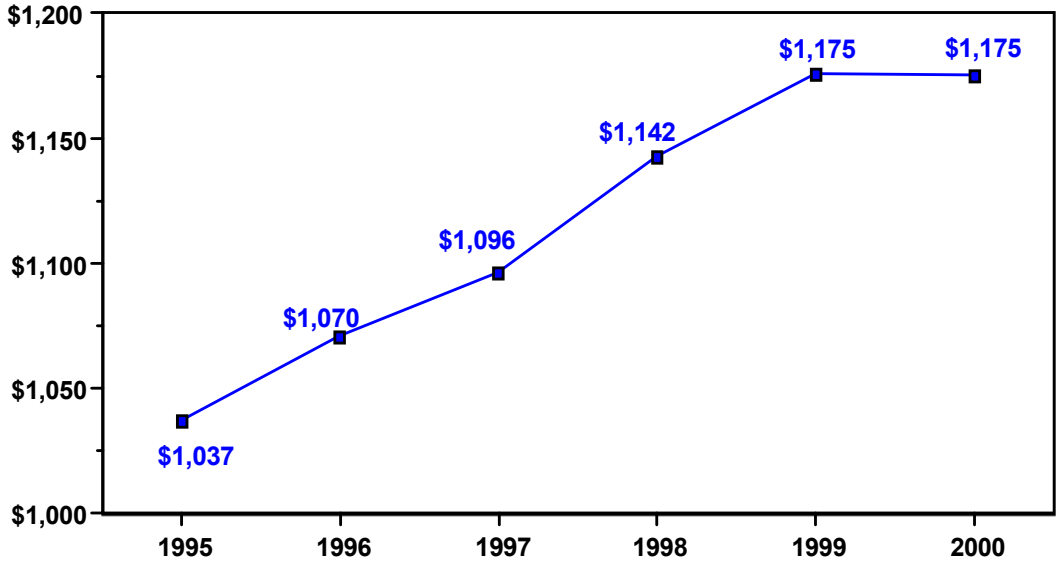
Source: *Joint Annual Report of Home Health Agencies,* TDH, Office of Health Statistics and Research, FY 00-01.

[40]The summary on source of payment is based on the 161 home health agencies that provided a complete year of data.


EMERGENCY ROOM VISIT RATES (PER 1,000 POPULATION)
BY COUNTY AND REGION, TENNESSEE, 2000
Region 7
Northwest
Rate = 338.5
Region 5
Mid-Cumberland
Rate = 262.0
Region 10
Davidson
Rate = 512.1
Region 4
Upper Cumberland
Rate = 522.8
Region 2
East Tennessee
Rate = 448.9
Region 1
Northeast
Rate = 435.2
Region 14
Sullivan
Rate = 922.7
Region 11
Knox
Rate = 615.7
Region 9
Shelby
Rate = 368.5
Region 13
Madison
Rate = 773.3
Region 8
Southwest
Rate = 338.6
Region 6
South Central
Rate = 270.4
Region 12
Hamilton
Rate = 398.9
Region 3
Southeast
Rate = 457.6
Rate of Emergency Room Visits
28.5 - 357.3
357.4 - 448.8
448.9 - 584.8
584.9 - 922.7
Statewide Rate = 424.2
Source: Joint Annual survey of Hospitals, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

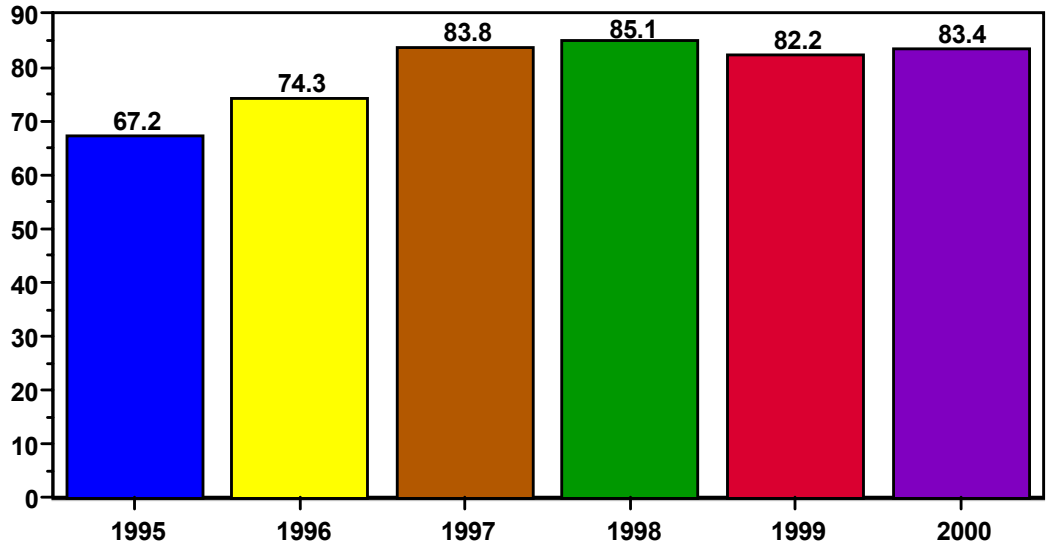

Hospital Operating Costs per Adjusted Inpatient Day and Charity Care as A Percentage of Charges, Tennessee, 1995-2000
1180
1160
1140
1120
1100
1080
1060
1040
1020
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
1995
1996
1997
1998
1999
2000
1037.3
1070.8
1096.6
1142.9
1175.9
1175.3
1.7
2.1
2.3
1.6
1.3
0.9
Operating Costs per Adjusted Inpatient Day
Charity Care as a Percentage of Charges
Source: Joint Annual Survey of Hospitals, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Hospital Cost Per Adjusted Patient Day, Tennessee, 1995-2000



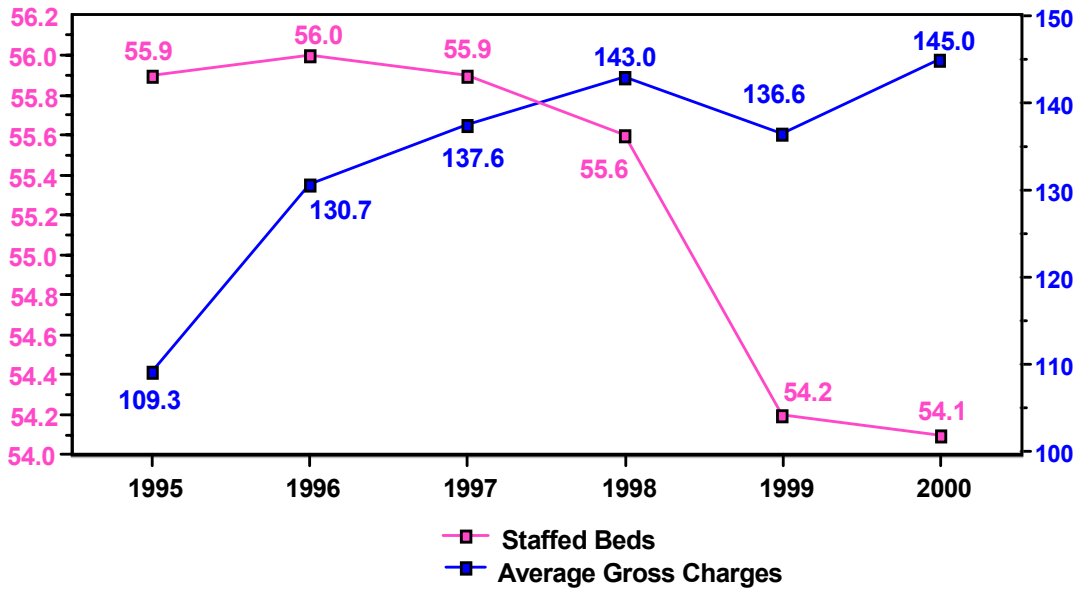
Source: Joint Annual Survey of Hospitals, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Nursing Home Admissions per 1,000 Population Aged 65 and Over, Tennessee, 1995 - 2000



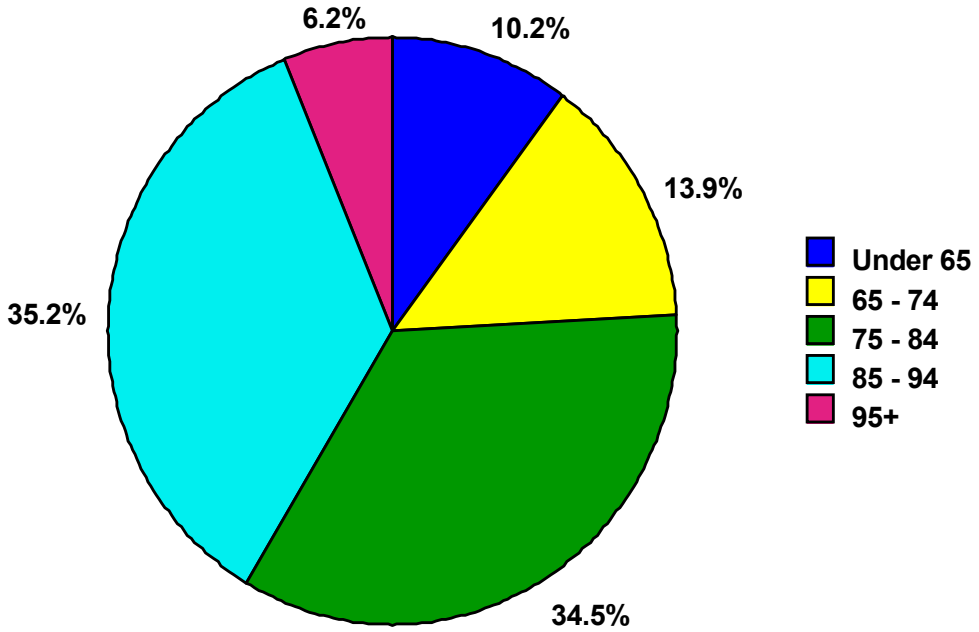
Source: Joint Annual Survey of Nursing Homes, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Nursing Home Staffed Beds Per 1,000 Population 65+ and Average Gross Charges Per Day, Tennessee, 1995-2000

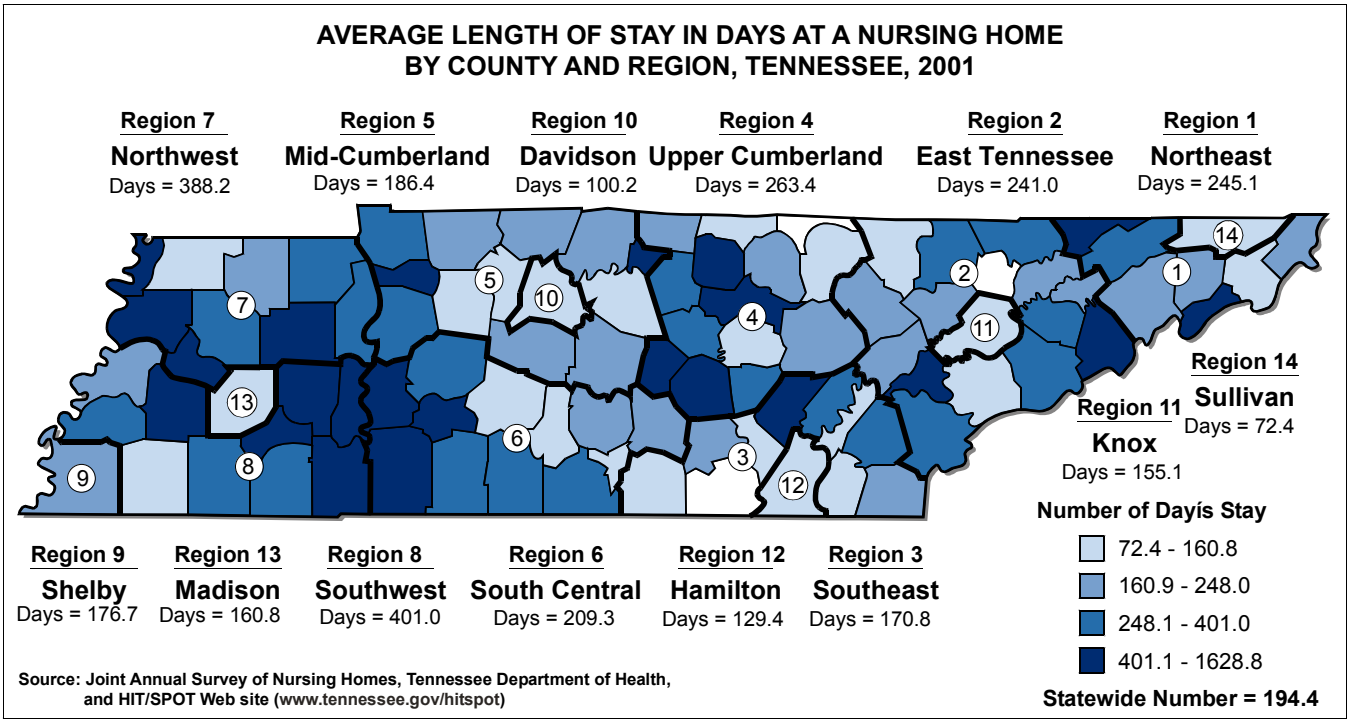


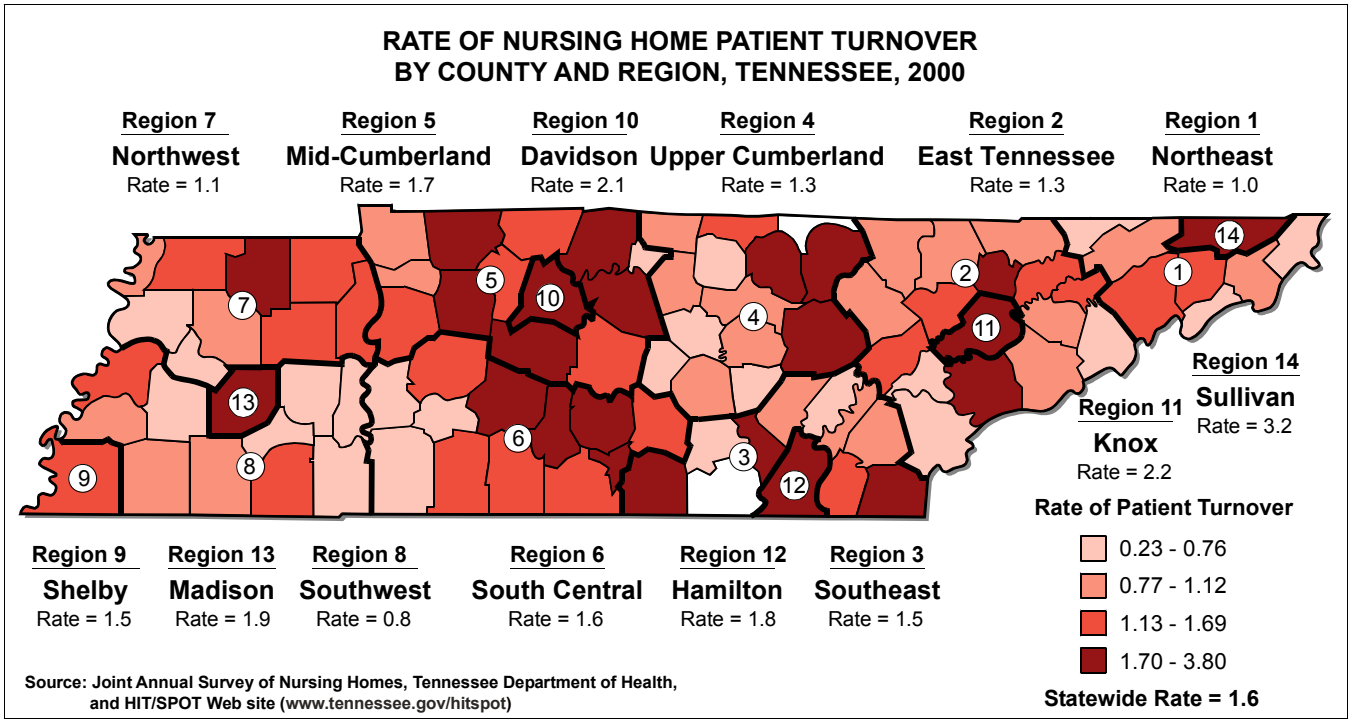
Source: Joint Annual Survey of Nursing Homes, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Percentage of Nursing Home Patients by Age-Group, Tennessee, 2000

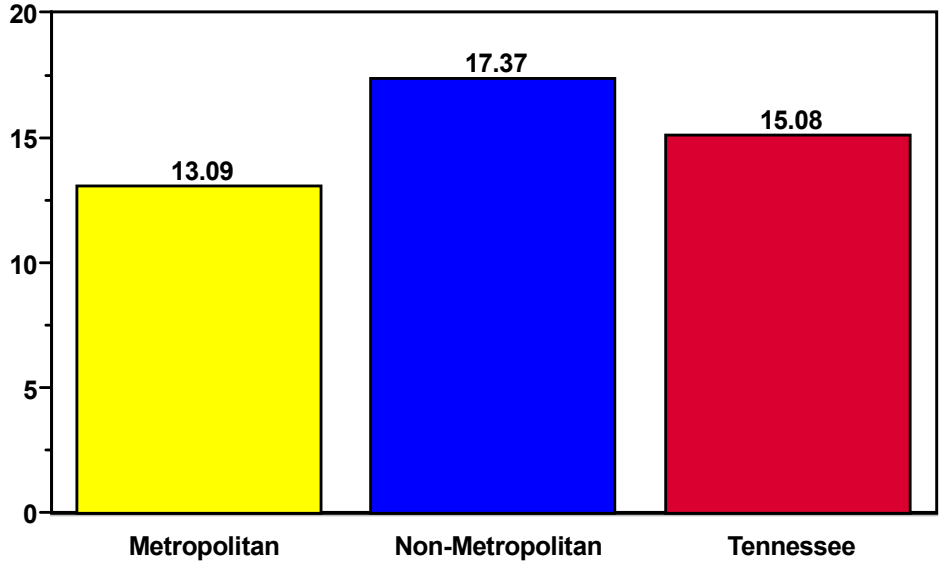


Source: Joint Annual Survey of Nursing Homes, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)


AVERAGE LENGTH OF STAY IN DAYS AT A NURSING HOME
BY COUNTY AND REGION, TENNESSEE, 2001
Region 7
Northwest
Days = 388.2
Region 5
Mid-Cumberland
Days = 186.4
Region 10
Davidson
Days = 100.2
Region 4
Upper Cumberland
Days = 263.4
Region 2
East Tennessee
Days = 241.0
Region 1
Northeast
Days = 245.1
Region 14
Sullivan
Days = 72.4
Region 11
Knox
Days = 155.1
Region 9
Shelby
Days = 176.7
Region 13
Madison
Days = 160.8
Region 8
Southwest
Days = 401.0
Region 6
South Central
Days = 209.3
Region 12
Hamilton
Days = 129.4
Region 3
Southeast
Days = 170.8
Number of Dayís Stay
72.4 - 160.8
160.9 - 248.0
248.1 - 401.0
401.1 - 1628.8
Statewide Number = 194.4
Source: Joint Annual Survey of Nursing Homes, Tennessee Department of Health,
and HIT/SPOT Web site (www.tennessee.gov/hitspot)

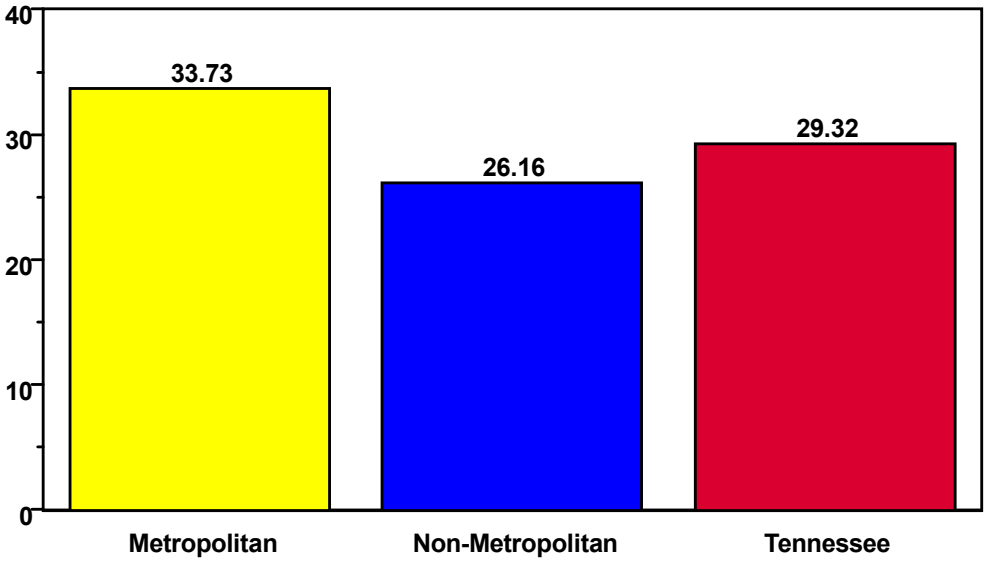

RATE OF NURSING HOME PATIENT TURNOVER
BY COUNTY AND REGION, TENNESSEE, 2000
Region 7
Northwest
Rate = 1.1
Region 5
Mid-Cumberland
Rate = 1.7
Region 10
Davidson
Rate = 2.1
Region 4
Upper Cumberland
Rate = 1.3
Region 2
East Tennessee
Rate = 1.3
Region 1
Northeast
Rate = 1.0
Region 14
Sullivan
Rate = 3.2
Region 11
Knox
Rate = 2.2
Region 9
Shelby
Rate = 1.5
Region 13
Madison
Rate = 1.9
Region 8
Southwest
Rate = 0.8
Region 6
South Central
Rate = 1.6
Region 12
Hamilton
Rate = 1.8
Region 3
Southeast
Rate = 1.5
Rate of Patient Turnover
0.23 - 0.76
0.77 - 1.12
1.13 - 1.69
1.70 - 3.80
Statewide Rate = 1.6
Source: Joint Annual Survey of Nursing Homes, Tennessee Department of Health,
and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Percent of Total Home Health Agency Patients Receiving Home Health Services, Tennessee, 2001

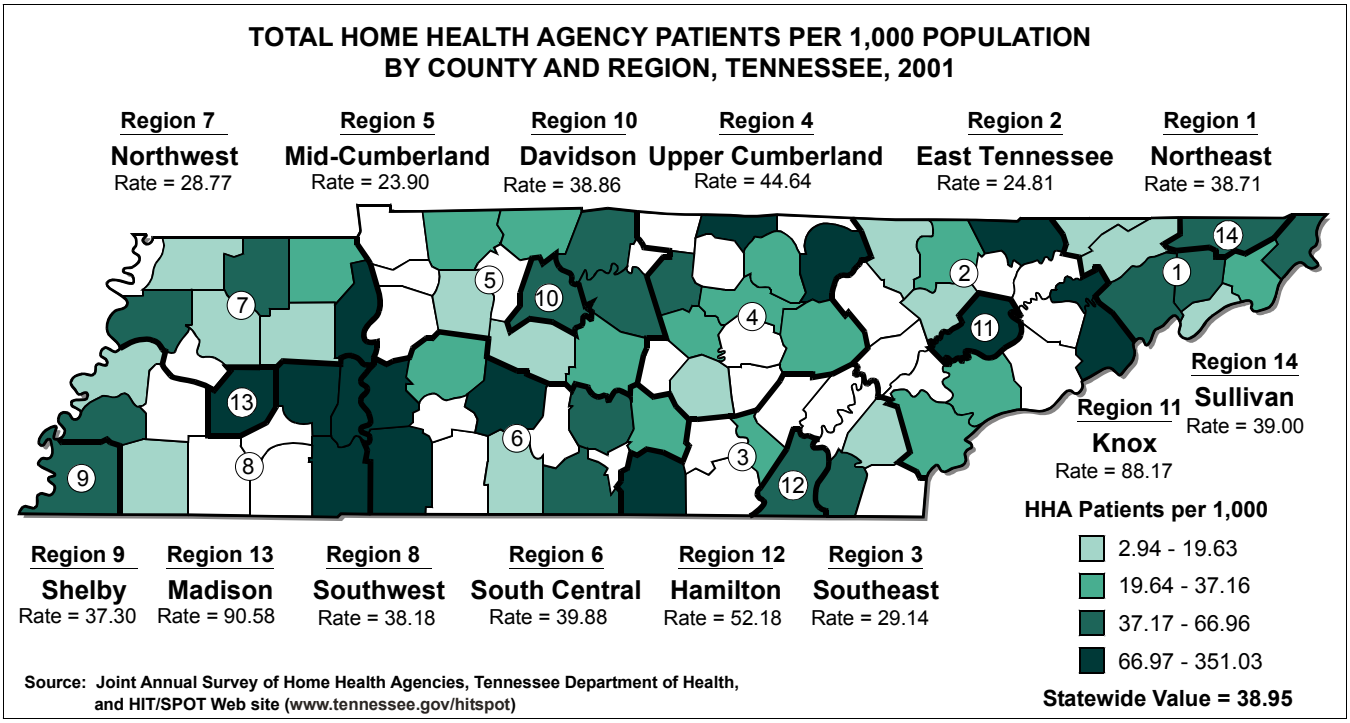


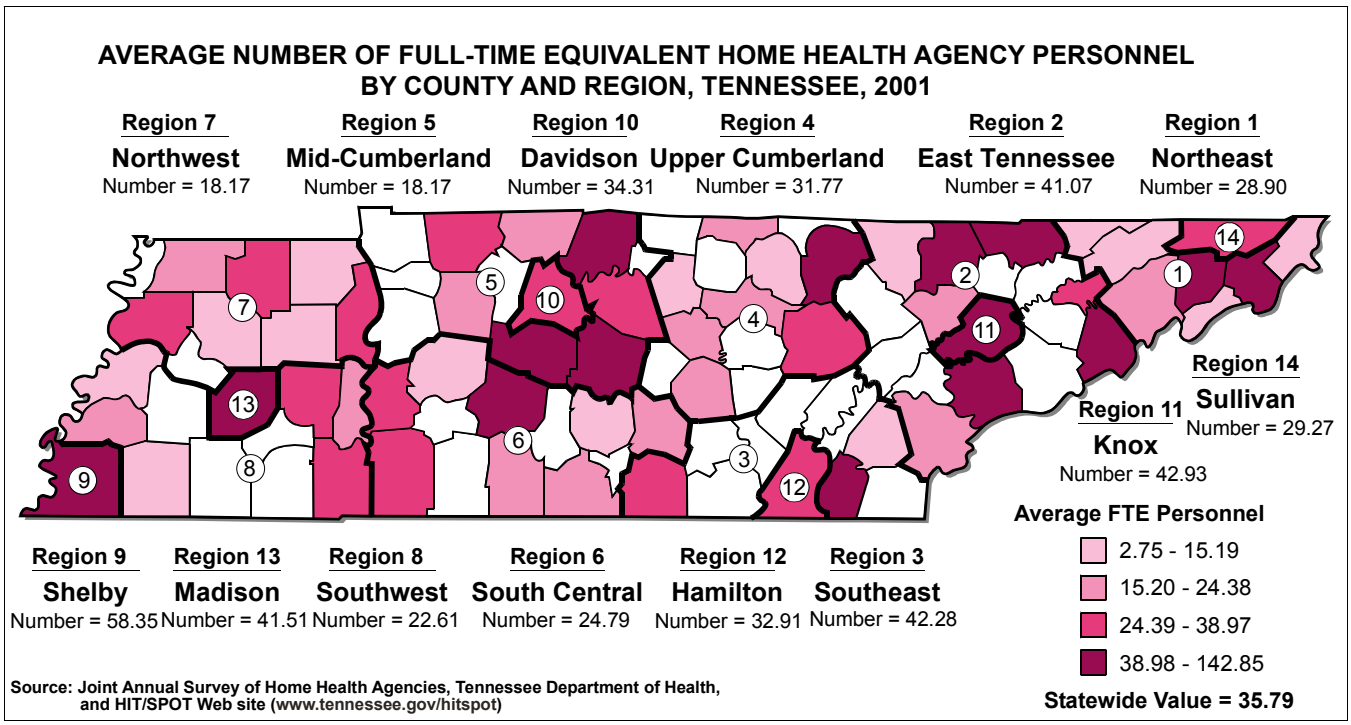
Source: Joint Annual Survey of Home Health Agencies, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot)

Medicare Home Health Agency Patients Per 1,000 Population, Tennessee, 2001



Source: Joint Annual Survey of Home Health Agencies, Tennessee Department of Health, and HIT/SPOT Web site (www.tennessee.gov/hitspot).


TOTAL HOME HEALTH AGENCY PATIENTS PER 1,000 POPULATION
BY COUNTY AND REGION, TENNESSEE, 2001
Region 7
Northwest
Rate = 28.77
Region 5
Mid-Cumberland
Rate = 23.90
Region 10
Davidson
Rate = 38.86
Region 4
Upper Cumberland
Rate = 44.64
Region 2
East Tennessee
Rate = 24.81
Region 1
Northeast
Rate = 38.71
Region 14
Sullivan
Rate = 39.00
Region 11
Knox
Rate = 88.17
Region 9
Shelby
Rate = 37.30
Region 13
Madison
Rate = 90.58
Region 8
Southwest
Rate = 38.18
Region 6
South Central
Rate = 39.88
Region 12
Hamilton
Rate = 52.18
Region 3
Southeast
Rate = 29.14
HHA Patients per 1,000
2.94 - 19.63
19.64 - 37.16
37.17 - 66.96
66.97 - 351.03
Statewide Value = 38.95
Source: Joint Annual Survey of Home Health Agencies, Tennessee Department of Health,
and HIT/SPOT Web site (www.tennessee.gov/hitspot)


AVERAGE NUMBER OF FULL-TIME EQUIVALENT HOME HEALTH AGENCY PERSONNEL
BY COUNTY AND REGION, TENNESSEE, 2001
Region 7
Northwest
Number = 18.17
Region 5
Mid-Cumberland
Number = 18.17
Region 10
Davidson
Number = 34.31
Region 4
Upper Cumberland
Number = 31.77
Region 2
East Tennessee
Number = 41.07
Region 1
Northeast
Number = 28.90
Region 14
Sullivan
Number = 29.27
Region 11
Knox
Number = 42.93
Region 9
Shelby
Number = 58.35
Region 13
Madison
Number = 41.51
Region 8
Southwest
Number = 22.61
Region 6
South Central
Number = 24.79
Region 12
Hamilton
Number = 32.91
Region 3
Southeast
Number = 42.28
Average FTE Personnel
2.75 - 15.19
15.20 - 24.38
24.39 - 38.97
38.98 - 142.85
Statewide Value = 35.79
Source: Joint Annual Survey of Home Health Agencies, Tennessee Department of Health,
and HIT/SPOT Web site (www.tennessee.gov/hitspot)

HEALTH MANPOWER, TENNESSEE, 2000

FTE Primary Care Providers, 2000

- In 2000, 5,072 full-time equivalent[41] (FTE) primary care providers were in practice in Tennessee. Primary care providers include MDs and DOs with the following specialities: general practice, family practice, pediatrics, internal medicine, obstetrics or obstetrics/gynecology, and general preventive medicine (public health). Mid-level providers are also included.

  - A reported 4,809 FTE primary care physicians (MDs and DOs) were in practice in Tennessee in 2000. Sixty-eight percent (3,274) of the total FTE primary care physicians were practicing in four metropolitan regions of the State: Davidson, Hamilton, Knox, and Shelby Counties. The remaining 32% of primary care physicians were practicing in nonmetropolitan counties.

  - There were 263 full-time equivalent mid-level primary care providers in Tennessee in 2000. The mid-level practitioner group is composed of nurse practitioners, nurse midwives, and physician assistants. Seventy-nine percent of mid-level providers were practicing in nonmetropolitan counties.

- In 2000, the largest numbers of FTE primary care physicians were located in the two largest two metropolitan counties -- Shelby County (1,158) and Davidson County (1,063). Among nonmetropolitan regions, Mid-Cumberland (310), Northeast (286), and East Tennessee (268) Regions had the most FTE primary care physicians.

Obstetrical Care

- In 2000, 549 FTE obstetrical (OB) care providers were actively practicing in Tennessee. Three out of four (416) of these FTE obstetricians were practicing in the four largest metropolitan counties. Thirty mid-level FTE obstetrical care providers practiced in Tennessee in 2000. Of these mid-level practitioners, 58% practiced in a metropolitan county.

- The number of counties that had no obstetrical (OB) providers was 17 in 1996, 13 in 1997, and 10 in 1999. In 2000, 13 counties reported having no OB providers. According to the Tennessee Department of Health, this shortage was primarily due to the absence of a medical facility offering obstetrical/delivery

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[41]Full-time equivalency is a measure of a health care providers' time spent on diagnosing, treating, or advising health care consumers. If a physician spends 20 hours a week working directly with health care consumers, then this physician counts as 0.5 FTE; if a physician spends 40 or more hours per week working directly with health care consumers, then this physician counts as 1.0 FTE.

services in those counties with low birth rates and access to adequate services in neighboring counties.

- Five counties reported having 10 or more OB providers. Four of these 5 were the largest metropolitan counties. The county with the largest proportion (27%) of OB providers in the State was Shelby (159 of the 579 total). Shelby County also accounted for 22% of the recorded births in Tennessee between 1997 and 1999.

Pediatric Providers

- In 2000, 1,084 pediatric primary care providers were reported in Tennessee. Of the pediatric care providers, 703 (65%) were practicing in the four largest metropolitan counties.

- In many counties, the numbers of pediatric practitioners do not correspond closely to the size of the population aged 0-17. Thirty-three percent of pediatric primary care physicians were located in nonmetropolitan areas, whereas 60% of the population aged 0-17 resided in the nonmetropolitan counties.

- Eighty-eight full-time equivalent mid-level pediatric primary care providers (nurse practitioners and physician assistants) were practicing in Tennessee in 1999. Of these, 27% were practicing in the four largest metropolitan counties.

TennCare Primary Care Providers[42]

- As of December 2000, 3,445 FTE TennCare primary care physicians were actively practicing in the State. Of these, 87% (2,982) were reported as practicing in the four largest metropolitan counties. Although in December 2000, the population of the 91 nonmetropolitan counties accounted for 65% of the TennCare enrollees in the State, only 13% of the TennCare primary care physicians were practicing in nonmetropolitan counties.

- A total of 139 FTE mid-level TennCare primary care providers actively practicing in Tennessee as of December of 2000. Seventy-two percent of these providers were located in nonmetropolitan regions.

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[42]These are MDs and DOs with primary care specialties who contract with one or more managed care organizations to serve the TennCare population. Their numbers also include mid-level providers - nurse practitioners, nurse midwives, and physician assistants.

Numbers of Primary Care Providers by Category and Provider-to-Population Ratios, Tennessee, 2000

Regions	2000 FTE Mid-Level Primary Care Providers	2000 FTE Primary Care Physicians	Provider-to-Population Ratio (1 : X)
Nonmetropolitan	209	1535	2,289
Northwest	17	114	2,177
Southwest	17	137	2,451
Mid-Cumberland	42	310	2,685
South Central	20	136	2,491
Upper Cumberland	27	161	2,350
Southeast	16	125	2,283
East Tennessee	43	268	2,390
Northeast	28	286	1,604
Metropolitan	54	3,274	633
Davidson	20	1,063	499
Hamilton	12	444	664
Knox	12	609	617
Shelby	11	1,158	754
Statewide	263	4,809	1,162

Note: Sullivan and Madison Counties, which are usually considered as TDH Regions, are not separated out here.
Source: Health Access Plan Update: Health Shortage Areas, Tennessee Department of Health, Bureau of Health Services, October, 2001.

FTE Primary Care Provider-to-Population Ratios

- High FTE primary care physician-to-population ratios indicate potentially underserved areas. Provider shortage areas are designated by TDH to include counties or groups of counties that display the highest (i.e. "worst") thirty ratios of providers to population. The statewide ratio was 1:1,162 in 2000. All counties with provider-to-population ratios higher than or equal to 1:2,552 were designated as primary care shortage areas in that year.

- In 2000, the provider-to-population ratio was slightly more than 3 times higher (i.e., less favorable) in nonmetropolitan compared to metropolitan counties, at 1:2,289 and 1:633, respectively.

- The lowest ratio (indicating a non-shortage area) was 490 persons per primary care provider in Davidson County. The highest ratio 1:5,558 (indicating a shortage area) was in Cheatham County, making that county the most underserved county in the State. Of the metropolitan counties, Madison County had the highest ratio (1:1,326), followed by Sullivan County (1:1,151).

- Primary care physician-to-population ratios were lowest in Davidson (1:490) and Knox (1:606) Counties, and highest in the Upper Cumberland Region (1:2,685).

- The statewide pediatric care physician-to-population ratio was 1:1,206. In the metropolitan counties, the ratio was 1:744, and in the nonmetropolitan counties, the ratio was 1:1,958.

- The TennCare primary care provider-to-population ratio statewide was 1:416. In the nonmetropolitan counties, the ratio was 1:1,998, and in the metropolitan counties, 1:170. Nonmetropolitan provider-to-population ratios were more than 4 times higher than those for metropolitan areas.

Health Resource Shortage Areas, as of December 2000

- As of December 2000, the Tennessee Commissioner of Health had designated 85 Rational Service Areas (RSA's) for primary care, general pediatric care, and TennCare primary care. Thirty-seven RSA's for obstetrics were designated.

- Of the 85 RSA's designated for primary care, 30 (35%) were designated as resource shortage areas. These shortage areas included 30 counties with some clustering in East, Northeast, West, and Southwest Regions of Tennessee.

- Obstetrical (OB) service shortage areas, i.e., RSA's with inadequate or no OB services, represented 86% (30 out of 37) of the OB RSA's in 2000. As of October 2000, the following counties or sections of counties, were OB shortage areas: Fayette, Haywood, Henry, Giles, Hickman, Lewis, Marshall, Maury, Perry, Lawrence, Wayne, Robertson, Macon, Smith, Trousdale, Wilson, Lincoln, Clay, Overton, Pickett, Jackson, Putnam, White, DeKalb, Bradley, Meigs, McMinn, Polk, Scott, Greene, and Cocke Counties.

- Thirty (35%) of the 85 RSA's for pediatric primary care were designated as shortage areas.

- Resource shortage areas for TennCare primary care in 2000 included 30 of the 85 (35%) RSA's. These shortage areas cluster in the Northeast, East into the Northeast, and Southwest Regions of Tennessee.

Manpower in Tennessee: Ratios of Persons Licensed as Health Care Providers to Population, 2003

- In Tennessee in 2003, 11,293 persons in 95 counties held licenses to practice as medical doctors. Statewide, there was a ratio of one MD licensee per 508 persons. The counties with the lowest licensees per thousand population ratios were Bledsoe County with 0.08 licensee per thousand persons and Sequatchie County with 0.10 per 1,000. Counties with the highest licensee per thousand population ratios were Washington County (4.48 per 1,000), Davidson County (4.44 per 1,000), and Madison County (3.36 per 1,000).

- In 2003, 2,504 people held licenses to practice as dentists across 91 counties. The Tennessee licensee-to-population ratio was 1:2,292. Counties with the lowest ratios of licensees per thousand population were Van Buren, Pickett, Grundy and Hancock Counties, which had no dentists, while Union County had a prevalence of 0.05 licensees per thousand population. Davidson (0.71 per 1,000), Williamson (0.62 per 1,000), and Shelby (0.61 per 1,000) Counties had the highest ratios of licensees per thousand population.

- In 2003, 43,841 people were licensed as registered nurses (RNs) in 95 counties. Statewide, the licensed RN-to-population ratio was 1:131. Van Buren (1.46 licensees per 1,000 persons), Grainger (1.62 per 1,000), and Jackson (1.70 per 1,000) Counties had the lowest licensees per thousand population ratios. The highest ratios of licensees to population were in Madison (14.96 per 1,000) Davidson (14.83 per 1,000),), and Washington (12.99 per 1,000) Counties.

- Individuals licensed as practical nurses (LPNs) totaled 18,482 across the 95 Tennessee counties. The licensee-to-state population ratio was 1:311. Union (0.81 per 1,000 persons), Williamson (1.32 per 1,000), and Sevier (1.61 per 1,000) Counties had the lowest ratios of LPN licensees per thousand population among the counties in Tennessee. Fentress (7.08 per 1,000), Clay (6.19 per 1,000), and Scott (6.00 per 1,000) Counties had the highest ratios.

- In 2003, 519 psychologists were licensed in Tennessee and distributed across 37 counties. The ratio of licensees-to-statewide population is 1:11,060. When the range is calculated across regions, the lowest ranges for regional licensees per thousand population ratios were found in the Northwest (0.0 to 0.03 per 1,000), and the South Central (0.0 to 0.06 per 1,000) Regions. Counties that had the highest licensed psychologists-to-population ratios were Knox County (0.26 per 1,000) and Davidson County (0.20 per 1,000).

- Licensed social workers totaled 1,274 across 70 counties. The ratio of licensed social workers to the state population was 1:4,506. The lowest number of licensees per thousand population was in the Upper Cumberland Region (0.0 to 0.17 per 1,000), South Central Region (0.0 to 0.18 per 1,000), and Southeast Region (0.0 to 0.19 per 1,000). The highest ratios for licensed clinical social workers per thousand population were in Davidson County (0.54 per 1,000), Knox County (0.49 per 1,000), and Shelby County (0.28).

- Statewide, the total number of licensees for alcohol and drug abuse counseling who were working full-time or part-time was 396. Alcohol and drug abuse counseling licensees were located in 54 counties. The statewide ratio of alcohol and drug abuse counseling licensees to state population was 1:14,495. The following regions had the lowest ratios of licensees per thousand population: Upper Cumberland Region (0.0 to 0.09 per 1,000) and Southeast Region (0.0 to 0.16 per 1,000). Davidson (0.18 licensees per 1,000 persons), Madison (0.16 per 1,000), and Hamilton (0.12 per 1,000) Counties had the highest licensee-to-population ratios.

- In 2003, there were 3,742 emergency medical personnel and first responder licensees in Tennessee. All 95 counties had licensees for these services. The ratio of licensees-to-state population was 1:1,534. Aside from Van Buren, where was no emergency medical personnel, counties with the lowest ratios of EMS and first responder licensees per thousand population were Lake County (0.26 per 1,000 population), Obion County (0.28 per 1,000), and Madison County (0.28 per 1,000). Highest EMS ratios were found in Decatur County (1.20 per 1,000), Morgan County (1.25 per 1,000), and Pickett County (1.39 per 1,000).

Source: **Health Access Plan Update: Health Shortage Areas,** Tennessee Department of Health, Bureau of Health Services, October 2000.

TENNESSEE / U.S.: CENSUS 1990, 2000

Demographic Characteristics

Population

- From 1990 to 2000, the population of Tennessee increased by 16.7%, from 4,877,185 to 5,689,283. The number of households in the state increased by 20.5% over the period, from 1,853,725 in 1990 to 2,232,905 in 2000, while the number of families increased by 14.8%, from 1,348,019 to 1,547,835 between 1990 and 2000.

Gender and Age

- Over the decade from 1990 to 2000, the proportion of the population of Tennessee that was female was stable, at 51.8% to 51.3%. Females comprised 50.9% of the U.S. population in 2000.

- The proportion of the state's population that was age 65 years or over declined from 12.7% in 1990 to 12.4% in 2000, the same as the percentage of seniors in the U.S. population. The proportion of the population under 18 years of age declined slightly from 24.9% to 24.6%, compared to the 2000 U.S. proportion of 25.7%. The population 18 to 64 years of age in Tennessee rose from 62.4% to 63.1% over the period. The U.S. had 61.9% of its 2000 population in the 18 to 64 age-group.

Race and Ethnicity

- While the proportion of the population that was white decreased from 83.0% to 80.2%, the black population remained constant at 16.0% in 1990 to 16.4% in 2000. The proportion of the population of other races (i.e. American Indian, Asian, mixed races) increased dramatically, by 240%, from 1.0% to 3.4%. This change was largely due to the increase in the Hispanic population, which rose to 2.2% of the Tennessee population in 2000, compared to 0.7% in 1990. This rise amounted to an increase of over 214%.

Urban and Rural Residence

- The percentage of the Tennessee population living in urban areas increased from 60.9% in 1990 to 63.6 % in 2000. There was a corresponding decline of 6.9% in the percentage of the population living in rural areas (39.1% in 1990 to 36.4% in 2000) and a much larger decline of 30.4% in the percentage living on farms (from 2.3% in 1990 to 1.6% in 2000).

Household by Type

- Based on the 1990 Census, the population of Tennessee living in family households was 72.7%, falling to 69.3% in the 2000 Census. Married couple families declined from 57.2% to 52.6% of households over the decade. Female householders (no husband present) families increased very slightly from 12.5% to 12.9% of households. The 2000 average family size was 2.99 persons.

- The proportion of the population living in non-family households increased from 27.3% to 30.7%, while householders living alone increased from 23.8% to 25.8%.

- The most dramatic decline was observed in the proportion of female-headed households with children under 5 in Tennessee; those households decreased from 22.9% in 1989 to 12.3% in 1999 - a decline of nearly 50%.

Social Characteristics

Educational Attainment

- Between 1990 and 2000, the percentage of persons age 25 years and older who were not high school graduates fell by 26.8% as a percentage of the population, from 32.9% to 24.1%. An increase was observed over the period in the proportion of the Tennessee population age 25 years and older that were high school graduates, rising from 67.1% to 75.9%. This rate still lagged behind the national average of 80.4%, however. The proportion of the population of Tennessee 25 years and older with a bachelorís degree or higher also increased from 16% in 1990 to 19.6% in 2000, but it still lags behind the national average (24.4%).

- Among youth from 16 to 19 years of age in 2000, high school dropouts represented 9.7%, compared to 13.4% in 1990, a drop of 27.6%. Among older adults age 18 and up, 24.2% were high school dropouts in 2000, a decrease of 24.1% from the 1990 rate of 31.9%.

Disability Status of the Civilian Noninstitutionalized Population

- In 2000, 8.8% of the population of Tennessee aged 5 to 20 years had a disability. While 21.9% of the population 21 to 64 years of age had a disability, 53.2% were employed. From 1990 to 2000, the proportion of persons 65 years and older with a disability increased dramatically from 24% to 47.8%.

- The percentage of Tennesseans aged 16 to 64 years with a work disability increased by 115%, from 9.6% in 1990 to 20.6% in 2000, while those suffering a work disability and prevented from working rose from 5.7% to 9.7% over the decade. Among persons aged 16-64, 10.5% had a mobility or self-care limitation, as did 44% of those age 65 and over in 2000. This percentage compares with 4.9%

and 22.7% of persons in those two age-groups, respectively, with mobility or self-care limitations in 1990.

Employment Status

- From 1990 to 2000, the proportion of the population of Tennessee age16 years and older who were in the labor force remained stable (64% and 63.5%, respectively). The unemployment rate decreased from 4.1% to 3.5%.

Income

- The median household income in Tennessee rose from $24,807 in the year before the 1990 Census to $36,360 in the year before the 2000 Census, an increase of almost 47%. The Tennessee median household income was still lower than that for the U.S. in 1999, which was $41,994.

- In Tennessee at the most recent Census, the median earnings for male full-time, year-round workers were $32,313, and for female full-time, year-round workers they were $23,978, a difference of 25.8%.

- Median family income has also risen dramatically in Tennessee over the decade, from $29,546 in 1990 to $43,517 in 2000. This total amounts to an increase of 32.1%.

- Per capita income also rose sharply in Tennessee, from $12,255 to $19,393, an increase of 36.8%, between 1990 and 2000.

Poverty Status

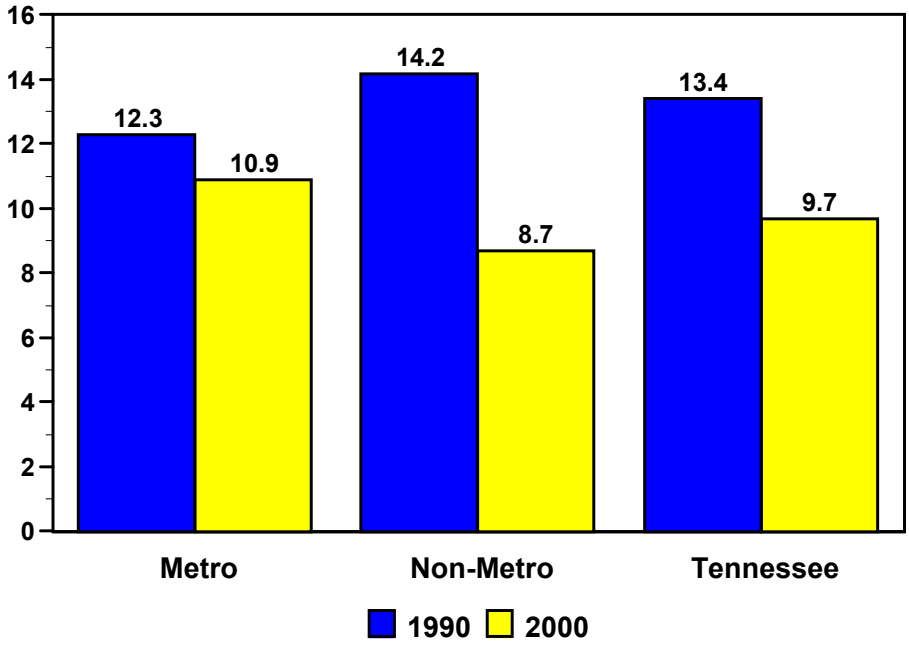
- In 1999, 13.5% of persons in Tennessee were at or below poverty level, which is a decrease from 15.7% in 1989. The 1999 national average is 12.4%.

- Poverty rates by age-group remained relatively stable with one exception - that of seniors age 65 years and older, whose poverty rate went from 20.9% in 1989 to 13.5% in 1999, a decline of 35.4%. By contrast, although experiencing declines in poverty rates over the decade, rates among persons aged 0-17 declined from 21.0% in 1989 to 18% in 1999, while rates for persons age 18 and older fell from 13.9% in 1989 to 12% in 1999.

Home Ownership Rate

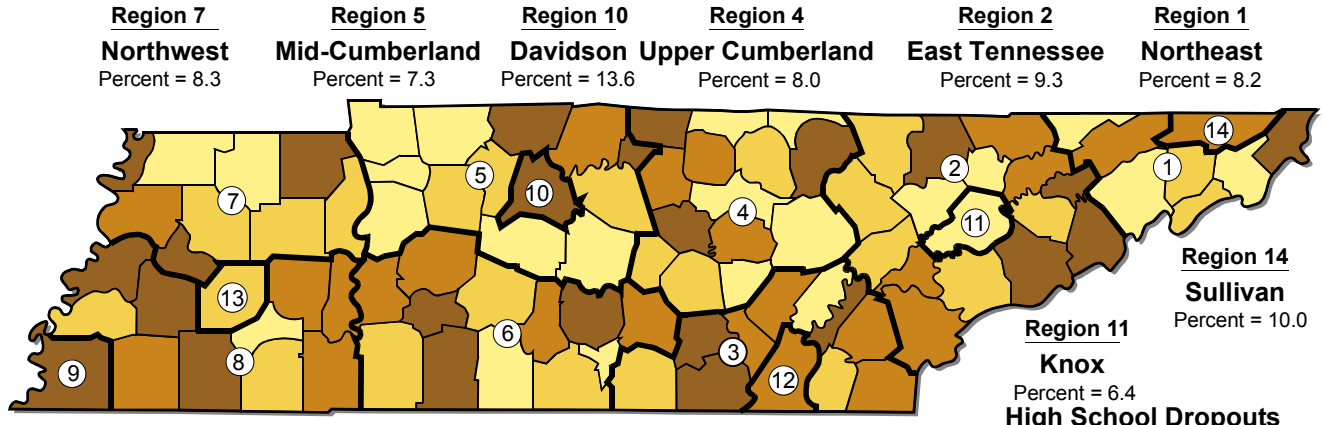
- The 2000 home ownership rate in Tennessee is 69.9%, compared to the U.S. rate of 66.2%.

Percent of Persons Aged 16-19 Who Are High School Dropouts, Metro, Non-Metro, Tennessee, 1990, 2000

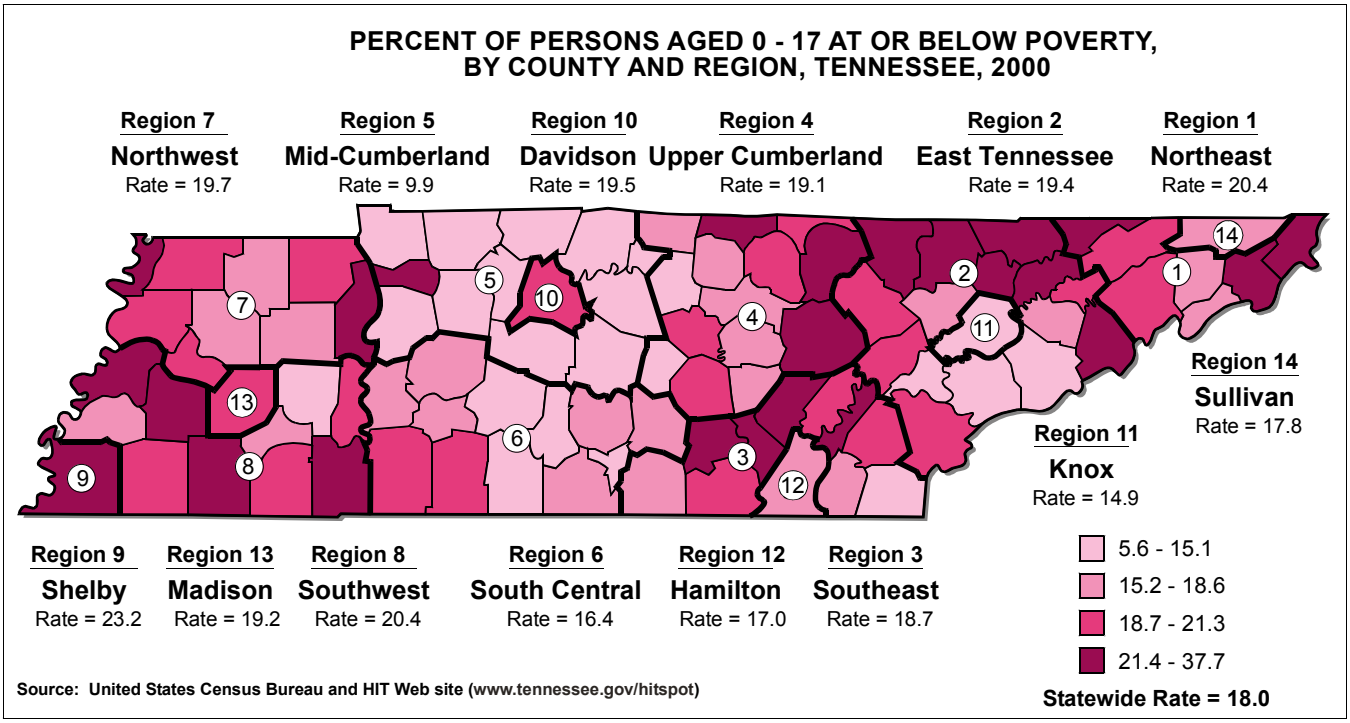


Source: Health Statistics and Research, Tennessee Department of Health and HIT/SPOT Web site (www.tennessee.gov/hitspot)

PERCENT OF PERSONS AGED 16-19 WHO ARE HIGH SCHOOL DROPOUTS BY COUNTY AND REGION, TENNESSEE, 2000



Source: United States Census Bureau and HIT Web site (www.tennessee.gov/hitspot)


PERCENT OF PERSONS AGED 0 - 17 AT OR BELOW POVERTY,
BY COUNTY AND REGION, TENNESSEE, 2000
Region 7
Northwest
Rate = 19.7
Region 5
Mid-Cumberland
Rate = 9.9
Region 10
Davidson
Rate = 19.5
Region 4
Upper Cumberland
Rate = 19.1
Region 2
East Tennessee
Rate = 19.4
Region 1
Northeast
Rate = 20.4
Region 14
Sullivan
Rate = 17.8
Region 11
Knox
Rate = 14.9
Region 9
Shelby
Rate = 23.2
Region 13
Madison
Rate = 19.2
Region 8
Southwest
Rate = 20.4
Region 6
South Central
Rate = 16.4
Region 12
Hamilton
Rate = 17.0
Region 3
Southeast
Rate = 18.7
5.6 - 15.1
15.2 - 18.6
18.7 - 21.3
21.4 - 37.7
Statewide Rate = 18.0
Source: United States Census Bureau and HIT Web site (www.tennessee.gov/hitspot)

EMERGING HEALTH CARE INITIATIVES AT TDH

Public Health Bioterrorism Preparedness

The Anthrax incidents of October and November, 2001 made it abundantly clear that the United States was at risk for acts of biological terrorism. The response throughout the country has been a major effort to become prepared to confront such incidents to reduce the morbidity and mortality associated with those acts. Because such acts are most likely to be clandestine and covert, the development of an effective syndromic surveillance program was essential. There is an Epidemiologist in each of the health regions in Tennessee now conducting syndromic surveillance. In the event of a suspected event, the Epidemiologists are prepared to initiate active surveillance and intervention to reduce the morbidity and mortality which could result. Each region also has acquired an Emergency Response Coordinator and a Network Technical Specialist to assist in developing a robust, redundant communication system. As part of these initiatives there has been an increase in training for health care practitioners throughout Tennessee, and the establishment of drug and vaccine supplies to respond to such an event. There is also a major effort to enhance the ability to communicate with hospitals, EMS, law enforcement, the Tennessee Emergency Management Agency, the Department of Homeland Security and other agencies whose involvement in responding to an event is essential. There has been a major effort to prepare for a smallpox event by vaccinating nearly 2,500 health care providers to act as a first line of defense in responding to such an event. A number of TDH staff have received training in risk communication; and the state laboratory has developed the capability to identify a number of the potential bioterrorism agents and continues to expand those capabilities. In addition, there is close cooperation between the bioterrorism efforts of public health and the state's hospitals in developing preparedness programs. During the last two years Tennessee has made major strides in efforts to prepare for bioterrorist threats and acts.

Hospital Bioterrorism Preparedness Program

The Health Resources and Services Administration Tennessee Hospital Bioterrorism Preparedness Program is also being successfully implemented to prepare Tennessee hospitals to respond to a bioterrorism incident or other outbreaks of infectious diseases. A Hospital Bioterrorism Preparedness Survey was conducted in 2002 and completed on January 25, 2003 by 100% of all hospitals. In 2002, Tennessee was divided into six hospital regions based on the normal referral patterns of hospitals to the Regional Referral Centers. During March and May 2003, six multidisciplinary health care planning groups composed of representatives from hospitals, public health, primary care, Emergency Medical Services and other healthcare and governmental agencies successfully developed a Regional Hospital Bioterrorism Plan with six annexes to address the different requirements in each of the hospital regions. Six bioterrorism tabletop exercises will be conducted in July and August 2003 to test the plan and make the final changes to the Hospital Bioterrorism Plan. Based on the survey and the regional planning activities, the Hospital Bioterrorism Program will be disbursing a significant portion of the FY 2002 $2.4 million grant to hospitals to help them better prepare to respond to a bioterrorism incident.

In addition, the FY 2003 HRSA Grant Application has been developed and will be submitted on or before July 1, 2003 requesting $9.7 million to fund next year's Hospital Bioterrorism Preparedness Program.

Dental Program

The Division of Oral Health Services is currently very active in the area of dental prevention. Tennessee has a statewide dental sealant project that provides screenings, referrals for care with follow-up, education, and dental sealants in the school setting in grades K-8. This fiscal year 40,972 children have been screened, with 15,572 having dental sealants placed on 89,428 teeth. Also 51,371 children have received dental health education. In the area of treatment, two mobile dental clinics are now operating in Middle Tennessee and Northeast Tennessee. A third mobile dental clinic is to begin providing services in West Tennessee in August. These clinics provide comprehensive dental services to elementary school-aged children. The mobile clinics park at targeted elementary schools where the children leave class to see the dentist, and return to class. It is a very efficient and cost-effective way to provide dental services and overcome the access to care issue for children.

Tennessee's Targeted Tuberculin Testing Initiative

The Tennessee Department of Healthís TB Elimination Program implemented a statewide Targeted Tuberculin Testing Initiative (TTI) in March 2002. Although Tennessee's TB Elimination Program is committed to identifying and treating latent TB infection (LTBI) in all high-risk populations, the state-funded pilot project focused on testing and treating foreign-born persons (immigrants, refugees and residents from high-incidence countries) living in Tennessee. Preliminary data from March 2002 to February 2003 shows that approximately 40,538 individuals received education and individual risk assessment for TB and LTBI. Of these, 22,239 individuals were identified as having increased risk for TB infection and received tuberculin skin testing. Five cases of active TB were detected as a direct result of targeted testing activities. LTBI was diagnosed in 15.3% (3,406/22,239) of high-risk persons tested, and in 36.1% (2,166/6,004) of foreign-born persons tested. In contrast, only 1.3% (134/10,503) low-risk individuals were found to have a positive TST. Tuberculin testing programs targeting high-risk populations enable early detection of TB cases and identification of persons who would benefit from treatment of LTBI. The resulting decreased transmission of TB infection in the community will be a significant advance towards the elimination of tuberculosis.

EPSDT

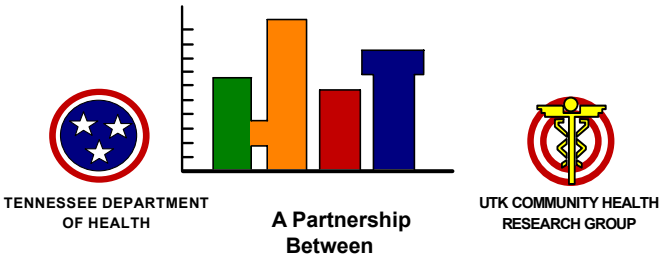
The State of Tennessee is under court decree to improve the level of Early and Periodic Screening, Diagnosis and Treatment (EPSD&T) screenings. In an effort to accomplish the goal of 80%, the Bureau of TennCare required the Managed Care Organizations to contract with the local health departments to provide screenings. During FY 2001- 2002, 43,512 screenings were done in local health departments. It is projected that approximately 50,000 screenings will be done in FY 2002-2003.

Health Disparities Workgroup

The Community Services Section Director recently formed a Health Disparities Workgroup within the Community Services Section. The goal of the health disparities workgroup will be to identify and make recommendations on how to address health disparities in Tennessee in seven areas: (1) access to care, (2) cardiovascular disease, (3) diabetes, (4) cancer screening and management, (5) stroke, (6) tobacco use, and (7) unintentional and intentional (suicide and homicide) injury. This workgroup will review all available data sources to identify disparities and identify gaps in the current data sets as well as make recommendations for improving data quality and collection. Moreover, this group will utilize the latest technology available, including GIS mapping, to pinpoint specific areas of the state with the most significant disparities, such as instances of excess morbidity, premature mortality or health risk factors. Furthermore, this group will review the literature to gain a better understanding of health disparities, potential causes of these disparities, and strategies to reduce the incidence of disparities. Based on its review of the literature, and data sources utilized to identify disparities within the state, the workgroup will make recommendations for funding distribution and program development and implementation based on model programs and best practices to address these disparities. For those disparities identified, the workgroup will also identify and recommend policy and environmental changes which can be made to reduce these disparities. In addition, the workgroup will identify and describe barriers to access that affect significant numbers of racial and ethnic minorities, including lack of health insurance, cultural and linguistic differences, health care literacy and physical barriers to identify strategies to reduce these barriers.

This report has been authored by Ying Xiang, Mary Alice Barth, Jean-Francois Riand and Sandra L. Putnam of the Community Health Research Group, The University of Tennessee, Knoxville. Special thanks are extended to Renee Johnson, William Reseigh, Stephen Holcombe, Elizabeth Collier, and Vickie Chiocca of the CHRG for their excellent work on the report. The assistance of Marguerite Lewis, Tom Spillman, George Plumlee and their colleagues at the Tennessee Department of Health, Health Statistics and Information, essential to producing this report, is much appreciated.

HEALTH INFORMATION TENNESSEE



Visit us on the Web at *www.tennessee.gov/hitspot*

ABOUT THE HEALTH INFORMATION TENNESSEE (HIT) WEB SITE

The Health Information Tennessee (HIT) Web site **(www.tennessee.gov/hitspot)** is the innovative product of a partnership of the Tennessee Department of Health (TDH) and The University of Tennessee Community Health Research Group (UT CHRG). It was designed as an interactive means of disseminating vital statistics, manpower, facilities, survey and other data collected by the TDH and reported on by the UT CHRG in the **Tennessee Health Status Reports of 1997, 1998, 1999, 2000 and 2001-2002**. The goal of the project has been to support the bottom-up, community-based health planning effort called the Community Diagnosis Initiative adopted by the TDH in 1995. Through the Health Status Reports and the HIT Web site, fourteen regional health councils representing 95 counties have assessed and prioritized community needs and are planning for effective prevention and intervention. The Internet was the chosen medium for data and report dissemination to provide ready access to summary statistics, data tables, and maps at the local level.

HIT (Health Information Tennessee) was created in January 1997. HIT not only provides a variety of previously calculated health and population statistics and prepared tables, but incorporates Statistical Profiling of Tennessee or SPOT. SPOT employs a lesser used Internet feature, Common Gateway Interface (CGI), to allow the user the opportunity to query various Tennessee health data bases in such a way that personalized plots, maps, charts and tables can be produced upon demand, interactively. The requested information is calculated at the moment the query is submitted by a self-modifying SAS program residing on a server computer at The University of Tennessee. In this way data can be analyzed and presented in an infinitely flexible manner; statewide and substate comparisons can be made; data can be standardized and updated regularly; data quality and accuracy can be assured; and access can be widespread and multifocal.

Data from three random sample surveys conducted in Tennessee by the Community Health Research Group for the Bureau of Alcohol and Drug Abuse Services are available for use on HIT/SPOT. These include the Tennessee Adult Alcohol, Tobacco and Other Drug (ATOD) Needs Assessment Survey of 1993 (n = 8000), Tennessee High School ATOD Survey of 1995/1997 (n = 102,000), the Tennessee Middle School Health Survey of 2002 (n=45,000), and the Tennessee Health and Lifestyles Survey of 1998 (n = 11,000). The first three data sets

provide regional and statewide data for comparison and analysis in SPOT; the latter survey provides county-level comparisons.

Survey and other data sets, including mortality, natality, population, hospital, nursing home, census, crash, and school data sets, can be used to triangulate on community problems. Examples of questions that can be answered using SPOT include what are the leading causes of death among particular gender, racial/ethnic, age, socioeconomic status and geographic groups, or how do cause-specific illness or injury death rates in a county or region seem to be related to adult and youth health risks in that county or region and what hospital-based and other services are available for treatment. Such questions can be answered using comparisons of excess death rates by cause, excess risk factors for those death rates from survey data, and resource availability and accessibility data from joint annual surveys of facilities.

The burden of illness and injury mortality can be displayed as data listings and tables, county rankings, shaded maps, pie or bar charts, or plots at county, regional, and statewide levels. Interactive GIS capabilities on the Web site on HIT MAPMAKER allow for customized mapping of related exposures by overlaying census data with vital statistics, as well as overlays of cities and towns, hospitals, nursing homes, schools, and alcohol and drug treatment facilities. Data can be analyzed by age, sex, race, education, poverty status, Hispanic origin, and residence to yield comprehensive profiles of health exposures, risk and need for services in Tennessee using HIT and SPOT.

The mapping ability in HIT MAPMAKER greatly expands the utility of SPOT for community-based health needs assessment. The GIS component of HIT enables the user to customize maps at county and census tract levels. Basic atlas functions are provided interactively, along with bivariate overlay mapping using SPOT data. The user interface is friendly and straightforward. Site users are able to create, view, alter, download, and print maps. Pan, zoom and identify functions are available as are limited buffer functions. Data from the SPOT component is able to be transferred to the mapping program to produce age-sex-race and region-specific one and two variable maps of mortality, population, birth and census data, mapped in relation to locations of hospitals, nursing homes, schools, and other facilities.

Another addition to HIT is Summary County Results Explorer (SCORE). SCORE uses aggregate, rather than case-level, data to provide customized outputs similar to SPOT. The prototype of SCORE uses Tennessee KIDS COUNT data by year and supports the Tennessee Governor's Initiative on Children and Youth, TNKIDS. SCORE also provides GIS functions through HIT MAPMAKER.

For more information, please contact The University of Tennessee, Community Health Research Group, Suite 309, Conference Center Building, Knoxville, Tennessee 37996-4133, phone: 856-974-4511 or e-mail: chrg@utk.edu or sputnam1@utk.edu.

DATA COMPENDIUM AND SOURCES FOR THE TENNESSEE HEALTH STATUS REPORT, 2002

The Tennessee Department of Health (TDH) collected the majority of the raw data cited here, or collaborated with and sponsored other organizations to collect the data. Collaborating with TDH, the Community Health Research Group of The University of Tennessee (UTK-CHRG) analyzed and reported on the data for this preview. In addition to data analysis and reporting, the UTK-CHRG conducted the Tennessee Middle School Health Survey under sponsorship of the Tennessee Department of Health.

The data compendium and other sources are alphabetized by name of study/data set.

- **Name of the Study/Data Set: Adult Behavioral Risk Factor Surveillance System (BRFSS), 2000, 2001**
  Sponsor: Tennessee Department of Health
  Source: Tennessee Statewide Survey Data, 2000, 2001 (Weighted), Centers for Disease Control and Prevention
  Description: This weighted data set is based on a survey administered to a random sample of the general population of adults, age 18 and over, living in households in all 50 states. It provides general information about health risks, behaviors, and attitudes of those sampled. The survey is designed to provide uniform data to identify chronic disease risks and to guide health promotion and disease prevention programs. Interviews were conducted by telephone with respondents who were randomly selected from adult members of households in Tennessee.

- **Name of the Study/Data Set: Census, 2000**
  Sponsor: Tennessee Department of Health
  Source: U.S. Census Bureau
  Description: Census 2000, taken April 1, 2000, counted 281,421,906 people in the 50 states and the District of Columbia. The questionnaire included seven questions for each household: name, sex, age, relationship, Hispanic origin, race, and whether the housing unit was owned or rented. In addition to these seven questions, about 17 percent of the households got a much longer questionnaire including questions about ancestry, income, mortgage, and size of the housing unit. Census 2000 not only counted the population, but also sampled the socio-economic status of the population, providing a tool for government, educators, business owners, and others to get a snapshot of the state of the nation.

- **Name of the Study/Data Set: Childrenís Health and Well-Being Data, 1992 - 2000**
  Sponsor: Tennessee Department of Health and Tennessee Department of Education
  Source: Tennessee Department of Health TNKIDS data set
  Description: A collection of demographic and other health status measures relevant to childrenís health and well-being in Tennessee. This data is available for custom queries on the HIT/SPOT Web site (**www.tennessee.gov/hitspot**). Measures cover the years spanning 1992 to 2000.

- **Name of the Study/Data Set: Communicable Disease Data, Tennessee, 2001**
  Sponsor: Tennessee Department of Health
  Source: Tennessee Department of Health
  Description: This data is from the Tennessee Department of Health Surveillance Program, Tuberculosis Control Program, and Division of HIV/AIDS/STD Branch.

- **Health Care Licensee** information for 2001 was obtained from an unpublished year-end raw data set provided by the Tennessee Department of Health. The raw data contains counts of licensees by area of licensure by county.

- **Health Manpower** information for Tennessee was drawn from the **Health Access Plan Update: Health Shortage Areas,** Tennessee Department of Health, Bureau of Health Services, July 2000.

- **Healthy People 2000 Objectives** Data:

  Summary of Notifiable Diseases, United States, 2000. Morbidity and Mortality Weekly Report, CDC, June 14, 2002, 49(53); 1-102.

  Healthy People 2000: Healthy People 2000 Review, 1997. National Center for Health Statistics, Hyattsville, MD: 1997.

  Tennessee's Healthy People 2000. Tennessee Department of Health, Health Statistics and Information, Nashville, TN: 1996.

- **Healthy People 2010 Objectives** Data:

  Source: Tennessee Department of Health, Death Certificate Data; and under "Healthy People 2010 Mortality Objectives" on the HIT web site.

  Source: Tennessee Department of Health, Birth Certificate Data; and under "Healthy People 2010" on the HIT web site.

  Sources: 2000, 2001 Behavioral Risk Factor Surveillance System (BRFSS) Summary Prevalence Report (CDC), based on weighted data.

  Source: 2001 Tennessee State Department of Education Youth Risk Behavior Survey Results.

  Sources: Tennessee Department of Health, Surveillance Program, TB Control Program, HIV/AIDS/STD Branch and under "Healthy People 2010" on the HIT web site.

  Source of U.S. Goals: U.S. Department of Health and Human Services. *Healthy People 2010.* 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000, and Healthy People web site (www.healthypeople.gov).

- **Health Facilities** data is drawn from:

  Joint Annual Report of Hospitals. Tennessee Department of Health, Health Statistics and Research, 2000. This is also accessible online at the HIT/SPOT Web site (**www.tennessee.gov/hitspot**).

  Joint Annual Report of Nursing Homes. Tennessee Department of Health, Health Statistics and Research, 2000. This information is also accessible at (**www.tennessee.gov/hitspot**).

  Joint Annual Report of Home Health Agencies. Tennessee Department of Health, Health Statistics and Research, 2000-2001. This information is also accessible at (**www.tennessee.gov/hitspot**).

- **Intentional and Unintentional Injury** data*. Fact Book and Injury Profile for Tennessee, 2000.* National Center for Injury Prevention and Disease Control, Centers for Disease Control and Prevention, 2000. This report covers rates of mortality due to specific causes of injuries in Tennessee as compared with the United States.

- **Name of the Study/Data Set: Tennessee Middle School Health Survey, 2001-2002**
  Sponsor: Tennessee Department of Health, Bureau of Alcohol and Drug Abuse Services
  Source: Community Health Research Group at The University of Tennessee, Knoxville
  Description: This was a cross-sectional survey of approximately 44,000 middle school students (grades 6 through 8) in 165 randomly selected Tennessee public schools in 13 Tennessee health department regions in 2002 (Davidson County did not participate).

- **Name of the Study/Data Set: Mortality Data**
  Sponsor: Tennessee Department of Health
  Source: Tennessee Department of Health, Certificates of Death
  Description: This data set includes information on all deaths occurring in Tennessee as well as deaths occurring out-of-state to Tennessee residents for the years 1990-2001. Basic demographic characteristics are available for the decedent along with detailed information pertaining to the cause of death. Data linking infant deaths (under 1 year of age) with their corresponding Tennessee birth record are available.

- **Name of the Study/Data Set: Population Data, 1990 - 2001**
  Sponsor: Tennessee Department of Health
  Source: Tennessee Department of Health
  Description: Population estimates are available for the years 1990 - 2001, by race, gender, age, and county. [Note: the 1990 and 2000 data are the actual Census counts for that year.] Data are available by single years of age through age 79. Ages 80-84 are grouped together into one category and ages 85 and over are represented by 85+. Race categories are white, black, and other.

- **Name of the Study/Data Set: School Health Data, 1993-1994 to 2001-2002**
  Sponsor: Tennessee Department of Education
  Source: Tennessee Department of Education Annual Statistical Report, 2001-2002
  Description: The Annual Statistical Report, which includes information on students' health in Tennessee, is available at the Tennessee Department of Education Web site (www.state.tn.us\education).

- **TennCare enrollment** data is from the Bureau of TennCare, Tennessee Department of Health, Tennessee Medicaid Management Information System, Recipient Enrollments by County, MCO and Class, 03/08/03.

- **Name of the Study/Data Set: Tennessee Adolescent Pregnancy Summary Data, 1990-2000**
  Sponsor: Tennessee Department of Health
  Source: Tennessee Department of Health, Health Statistics and Research
  Description: Published in December of 2001, this report covers adolescent pregnancy, birth rates, and adverse conditions during pregnancy and after childbirth in Tennessee for the years 1990 through 2000.

- **Name of the Study/Data Set: Tennessee Middle School Health Survey, 2001-2002**
  Sponsor: Tennessee Department of Health, Bureau of Alcohol and Drug Abuse Services
  Source: Community Health Research Group at The University of Tennessee, Knoxville
  Description: This was a statewide random digit dial telephone survey of approximately 11,000 Tennessee adults age 18 and over living in households in 1998. The purpose of the survey was to provide data necessary for alcohol and other drug prevention planning, evaluation, and resource allocation. The study employed a county-level two-stage probability sample. The 14 Tennessee Department of Health regions - 6 metropolitan counties and 8 nonmetropolitan regions - served as analytic units. Data on a range of health behaviors and risks, particularly those related to AOD, are available for 70% of Tennesseeís population.

- **Name of the Study/Data Set: Tennessee Highway Crash Data Base, 1990 - 2000**
  Sponsor: Tennessee Department of Safety
  Source: Tennessee Department of Safety
  Description: Information is available on the characteristics of highway crashes throughout the state, compiled by year. Categories of data include characteristics of the crash, roadway, environmental conditions, vehicles, and persons. Highway crash data is also available on the HIT/SPOT Web site (www.tennessee.gov/hitspot).

- **Name of the Study/Data Set: Youth Risk Behavior Surveillance System (YRBSS), 2001**
  Sponsor: Tennessee Department of Health and Tennessee Department of Education
  Source: Centers for Disease Control and Prevention
  Description: The Youth Risk Behavior Surveillance System (YRBSS) includes both a national school-based survey conducted by the CDC as well as state and local school-based surveys conducted by state and local education agencies. The system monitors six categories of priority health-risk behaviors among youth and young adults: behaviors that contribute to unintentional and intentional injuries; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and STD's, including HIV infection; unhealthy dietary behaviors; and physical inactivity.

For more information please contact Dr. Sandra Putnam, CHRG-UTK, sputnam1@utk.edu; (865) 974-4511, or Marguerite Lewis at Tennessee Department of Health, marguerite.lewis @state.tn.us; (615) 532-6566.

LEADING HEALTH INDICATORS. . .
Touch Everyone

Healthy People 2010, a broad-based collaborative effort among government, private, public, and nonprofit organizations, has set national disease prevention and health promotion objectives to be achieved by the end of this decade. The effort has two overarching goals: to increase the quality and length of healthy life and to eliminate health disparities.

Healthy People 2010 features 467 science-based objectives and 10 Leading Health Indicators, which are a smaller set of objectives chosen to track progress toward meeting *Healthy People 2010* goals.

The Leading Health Indicators represent the important determinants of health for the full range of issues in the 28 focus areas of *Healthy People 2010*. The chart indicates which indicators are most closely related to each of the 28 focus areas and suggests opportunities for collaboration across focus areas.

	Leading Health Indicators									
Focus Area	**Physical Activity**	**Overweight and Obesity**	**Tobacco Use**	**Substance Abuse**	**Responsible Sexual Behavior**	**Mental Health**	**Injury and Violence**	**Environmental Quality**	**Immunization**	**Access to Health Care**
Access to Quality Health Services	✓	✓	✓	✓	✓	✓	✓		✓	✓
Arthritis, Osteoporosis, and Chronic Back Conditions	✓	✓					✓			
Cancer	✓	✓	✓	✓	✓				✓	✓
Chronic Kidney Disease	✓	✓	✓					✓		
Diabetes	✓	✓	✓						✓	✓
Disability and Secondary Conditions	✓	✓	✓	✓		✓			✓	✓
Educational and Community-Based Programs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Environmental Health								✓		
Family Planning				✓	✓					✓
Food Safety								✓		✓
Health Communication	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Heart Disease and Stroke	✓	✓	✓					✓		
HIV				✓	✓	✓				✓
Immunization and Infectious Diseases									✓	✓
Injury and Violence Prevention			✓	✓		✓	✓			
Maternal, Infant, and Child Health	✓	✓	✓	✓	✓	✓	✓		✓	✓
Medical Product Safety					✓					
Mental Health and Mental Disorders			✓	✓	✓	✓				✓
Nutrition and Overweight	✓	✓	✓			✓				
Occupational Safety and Health				✓			✓	✓		
Oral Health		✓	✓	✓				✓		✓
Physical Activity and Fitness	✓	✓	✓		✓	✓		✓		
Public Health Infrastructure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Respiratory Diseases	✓		✓					✓		
Sexually Transmitted Diseases				✓	✓					
Substance Abuse			✓	✓	✓		✓			✓
Tobacco Use			✓					✓		✓
Vision and Hearing										✓

For more information about the *Healthy People 2010* Leading Health Indicators www.healthypeople.gov/lhi.

U.S. Department of Health and Human Services
Office of Disease Prevention and Health Promotion
200 Independence Avenue, SW, Room 738G
Washington, DC 20201
(202) 205-8611

Selected HP2010 Focus Areas and Objectives for Which Data are Available
Tennessee, 2000-2001

	TN 2000	TN 2001	2010 TARGET	LHI	STATUS
1. Access to Quality Health Services					
HP2010 Objective 1-1: Increase the Proportion of Persons with Health Insurance, Target=100% (1)	88.1%	89.3%	100%	X	
3. Cancer					
HP2010 Objective 3-1: Malignant Neoplasms, Target=159.9 Deaths Per 100,000 (3)	218.3	215.0	159.9		
HP2010 Objective 3-2: Lung Cancer, Target=44.9 Deaths Per 100,000 (3)	69.0	69.5	44.9		
HP2010 Objective 3-3: Females, Breast Cancer, Target=22.3 Deaths Per 100,000 (3)	26.4	26.0	22.3		
HP2010 Objective 3-4: Females, Uterine/Cervical Cancer, Target=2.0 Deaths Per 100,000 (3)	3.6	3.6	2.0		
HP2010 Objective 3-5: Colorectal Cancer, Target=13.9 Deaths Per 100,000 (3)	22.4	22.1	13.9		
HP2010 Objective 3-6: Oropharyngeal Cancer, Target=2.7 Deaths Per 100,000 (3)	2.8	3.4	2.7		
HP2010 Objective 3-7: Males, Prostate Cancer, Target=28.8 Deaths Per 100,000 (3)	34.0	31.3	28.8		
HP2010 Objective 3-8: Melanoma Cancer, Target=2.5 Deaths Per 100,000 (3)	3.2	2.5	2.5		**Met**
HP2010 Objective 3-11a: Increase the Proportion of Women 18+ who have ever Received a Pap Test, Target=97% (1)	93.6%		97%		
HP2010 Objective 3-11b: Increase the Proportion of Women 18+ who Received a Pap Test within the Preceding 3 Years, Target=90% (1)	88.1%	87.7%	90%		
HP2010 Objective 3-12a: Increase the Proportion of Adults 50+ who Received a Fecal Occult Blood Test (FOBT) within the Preceding 2 Years, Target=50% (1)		28.2%	50%		
HP2010 Objective 3-12b: Increase the Proportion of Adults 50+ who have ever Received a Sigmoidoscopy, Target=50% (1)		40.1%	50%		
HP2010 Objective 3-13: Increase the Proportion of Women 40+ who Received a Mammogram within the Preceding 2 Years, Target=70% (1)	75.6%	76.3%	70%		**Met**

5. Diabetes					
HP2010 Objective 5-5: Diabetes, Target=45.0 Deaths Per 100,000 (3)	28.4	31.0	45.0		**Met**
9. Family Planning					
HP2010 Objective 9-7: Adolescent Pregnancy Rate (per 1,000 Females Aged 15-17), Target=43 (4)	41.9	37.3	43		**Met**
10. Food Safety					
HP2010 Objective 10-4: Food Allergies, Target=0 Deaths Per 100,000 (3)	0.0	0.0	0.0		**Met**
12. Heart Disease and Stroke					
HP2010 Objective 12-1: Coronary Heart Disease, Target=166.0 Deaths Per 100,000 (3)	236.1	231.4	166.0		
HP2010 Objective 12-7: Stroke, Target=48.0 Deaths Per 100,000 (3)	78.4	73.6	48.0		
HP2010 Objective 12-12: Increase the Proportion of Adults who had their Blood Pressure Checked within Preceding 2 Years, Target=95% (1)	97.4%		95%		**Met**
HP2010 Objective 12-15: Increase the Proportion of Adults who had their Blood Cholesterol Checked within Preceding 5 Years, Target=80% (1)	71.1%	69.5%	80%		
13. HIV					
HP2010 Objective 13-1: AIDS Rate (per 100,000 Population), Target=1.0 (4)	11.6	11.4	1.0		
HP2010 Objective 13-14: HIV, Target=0.70 Deaths Per 100,000 (3)	5.0	4.8	0.7		
14. Immunization and Infectious Diseases					
HP2010 Objective 14-6: Hepatitis A Rate (per 100,000 Population), Target=4.5 (4)	2.7	3.3	4.5		**Met**
HP2010 Objective 14-7: Meningococcal Disease Rate (per 100,000 Population), Target=1.0 (4)	1.0	1.1	1.0		
HP2010 Objective 14-8: Lyme Disease Rate (per 100,000 Population), Target=9.7 (4)	0.5	0.5	9.7		**Met**
HP2010 Objective 14-9: Hepatitis C Rate (per 100,000 Population), Target=1.0 (4)	1.7	1.1	1.0		
HP2010 Objective 14-11: Tuberculosis Rate (per 100,000 Population), Target=1.0 (4)	6.7	5.5	1.0		
HP2010 Objective 14-24: Increase the Proportion of Children Aged 19 to 35 Months who Receive the Recommended Vaccines, Target=80% (5)	81%	84%	80%		**Met**
HP2010 Objective 14-29a: Increase the Proportion of Adults 65+ who are Vaccinated	67.3%	65.6%	90%	X	

Annually against Influenza, Target=90% (1)					
HP2010 Objective 14-29b: Increase the Proportion of Adults 65+ who are Vaccinated Against Pneumococcal Disease, Target=90% (1)	76.7%	55.4%	90%	X	
15. Injury and Violence Prevention					
HP2010 Objective 15-3: Firearm-Related Deaths, Target=4.1 Deaths Per 100,000 (3)	15.6	14.5	4.1		
HP2010 Objective 15-8: Poisoning, Target=1.5 Deaths Per 100,000 (3)	9.7	10.3	1.5		
HP2010 Objective 15-9: Suffocation, Target=3.0 Deaths Per 100,000 (3)	4.8	5.0	3.0		
HP2010 Objective 15-13: Unintentional Injuries, Target=17.5 Deaths Per 100,000 (3)	48.2	47.5	17.5		
HP2010 Objective 15-15a: Motor Vehicle Crashes, Target=9.2 Deaths Per 100,000 (3)	24.1	22.5	9.2	X	
HP2010 Objective 15-16: Pedestrian Deaths per 100,000 Population, Target=1 (4)	1.8		1.0		
HP2010 Objective 15-17: Nonfatal Motor Vehicle Crash Injuries per 100,000 Population, Target=933 (4)	892.2		933		**Met**
HP2010 Objective 15-19: Increase Use of Safety Belts, Target=92% (2)		82.3%	92%		
HP2010 Objective 15-21: Increase the proportion of Motorcyclists Using Helmets, Target=79% (2)		66.8%	79%		
HP2010 Objective 15-25: Residential Fire Deaths, Target=0.2 Deaths Per 100,000 (3)	2.2	2.0	0.2		
HP2010 Objective 15-27: Falls, Target=3.0 Deaths Per 100,000 (3)	4.6	5.8	3.0		
HP2010 Objective 15-29: Drownings, Target=0.9 Deaths Per 100,000 (3)	1.7	1.3	0.9		
HP2010 Objective 15-32: Homicides, Target=3.0 Deaths Per 100,000 (3)	8.2	7.8	3.0	X	
HP2010 Objective 15-38: Reduce Physical Fighting among Adolescents, Target=32% (2)		30.4%	32%		**Met**
HP2010 Objective 15-39: Reduce Weapon Carrying by Adolescents on School Property, Target=4.9% (2)		6.7%	4.9%		
16. Maternal, Infant, and Child Health					
HP2010 Objective 16-1c: All Infant Deaths, Target=4.5 Deaths Per 1,000 Live Births (3)	9.0	8.7	4.5		
HP2010 Objective 16-1d: Neonatal Infant Deaths, Target=2.9 Deaths Per 1,000 Live Births (3)	5.9	5.6	2.9		
HP2010 Objective 16-1e: Postneonatal Infant Deaths, Target=1.2 Deaths Per 1,000 Live Births (3)	3.2	3.1	1.2		
HP2010 Objective 16-1f: Birth Defects Infant Deaths, Target=1.1 Deaths Per 1,000 Live	1.6	1.7	1.1		

Births (3)					
HP2010 Objective 16-1g: Congenital Heart Defects Infant Deaths, Target=0.38 Deaths Per 1,000 Live Births (3)	0.5	0.5	0.38		
HP2010 Objective 16-1h: SIDS Infant Deaths, Target=0.25 Deaths Per 1,000 Live Births (3)	1.2	0.8	0.25		
HP2010 Objective 16-2a: Aged 1-4, Child Deaths, Target=18.6 Deaths Per 100,000 (3)	34.7	35.3	18.6		
HP2010 Objective 16-2b: Aged 5-9, Child Deaths, Target=12.3 Deaths Per 100,000 (3)	18.9	13.0	12.3		
HP2010 Objective 16-3a: Aged 10-14, Adolescent and Young Adult Deaths, Target=16.8 Deaths Per 100,000 (3)	29.6	22.3	16.8		
HP2010 Objective 16-3b: Aged 15-19, Adolescent and Young Adult Deaths, Target=39.8 Deaths Per 100,000 (3)	89.8	81.2	39.8		
HP2010 Objective 16-3c: Aged 20-24, Adolescent and Young Adult Deaths, Target=49.0 Deaths Per 100,000 (3)	129.7	121.4	49.0		
HP2010 Objective 16-4: Maternal Deaths, Target=3.3 Deaths Per 100,000 Live Births (3)	10.1	14.0	3.3		
HP2010 Objective 16-6a: Prenatal Care Beginning in First Trimester, Target=90% of Live Births (4)	81.4%	80.5%	90%	X	
HP2010 Objective 16-6b: Adequate Prenatal Care, Target=90% of Live Births (4)	73.1%	70.5%	90%		
HP2010 Objective 16-9a: Reduce Cesarean Births Among Women Giving Birth for the First Time, Target=15% of Live Births (4)	26.0%	27.3%	15%		
HP2010 Objective 16-10a: Low Birth Weight (LBW), Target=5% of Live Births (4)	9.2%	9.2%	5%		
HP2010 Objective 16-10b: Very Low Birth Weight (VLBW), Target=0.9% of Live Births (4)	1.7%	1.7%	0.9%		
HP2010 Objective 16-11a: Total Preterm Births, Target=7.6% of Live Births (4)	10.7%	11.3%	7.6%		
HP2010 Objective 16-17a: Abstinence from Alcohol by Pregnant Women, Target=94% of Live Births (4)	98.9%	99.0%	94%		**Met**
HP2010 Objective 16-17c: Abstinence from Tobacco by Pregnant Women, Target=99% of Live Births (4)	82.7%	82.6%	99%		
18. Mental Health and Mental Disorders					
HP2010 Objective 18-1: Suicides, Target=5.0 Deaths Per 100,000 (3)	12.7	12.2	5.0		
HP2010 Objective 18-2: Reduce the Rate of Suicide Attempts by Adolescents, Target=1% (2)		8.6%	1%		
19. Nutrition and Overweight					
HP2010 Objective 19-1: Increase the Proportion of Adults who are at a Healthy Weight,	40.6%		60%		

Target=60% (1)					
HP2010 Objective 19-2: Reduce the Proportion of Adults who are Obese, Target=15% (1)	22.9%	23.4%	15%	X	
21. Oral Health					
HP2010 Objective 21-9: Increase the Proportion of Population Served by Community Water Systems with Optimally Fluoridated Water, Target=75% (1)	94.5%		75%		**Met**
22. Physical Activity and Fitness					
HP2010 Objective 22-1: Reduce the Proportion of Adults who Engage in No Leisure-Time Physical Activity, Target=20% (1)	32.7%	35.1%	20%		
HP2010 Objective 22-2: Increase the Proportion of Adults who Engage in Moderate Physical Activity, Target=30% (1)	14.5%		30%	X	
HP2010 Objective 22-3: Increase the Proportion of Adults who Engage in Vigorous Physical Activity, Target=30% (1)	10.6%		30%		
HP2010 Objective 22-6: Increase the Proportion of Adolescents who Engage in Moderate Physical Activity, Target=35% (2)		25.4%	35%		
HP2010 Objective 22-7: Increase the Proportion of Adolescents who Engage in Vigorous Physical Activity, Target=85% (2)		61.2%	85%	X	
HP2010 Objective 22-9: Increase the Proportion of Adolescents who Participate in Daily School Physical Education, Target=50% (2)		25.6%	50%		
HP2010 Objective 22-10: Increase Physical Activity in Physical Education Class, Target=50% (2)		84.2%	50%		**Met**
HP2010 Objective 22-11: Increase the Proportion of Adolescents who View Television 2 or Fewer Hours on a School Day, Target=75% (2)		55.4%	75%		
24. Respiratory Diseases					
HP2010 Objective 24-1a: Under 5, Asthma, Target=1.0 Deaths Per 1,000,000 (3)	10.7	5.3	1.0		
HP2010 Objective 24-1b: Aged 5-14, Asthma, Target=1.0 Deaths Per 1,000,000 (3)	2.5	2.5	1.0		
HP2010 Objective 24-1c: Aged 15-34, Asthma, Target=2.0 Deaths Per 1,000,000 (3)	5.6	5.6	2.0		
HP2010 Objective 24-1d: Aged 35-64, Asthma, Target=9.0 Deaths Per 1,000,000 (3)	18.9	14.3	9.0		
HP2010 Objective 24-1e: Aged 65 and older, Asthma, Target=60.0 Deaths Per 1,000,000 (3)	62.6	43.7	60.0		**Met**

HP2010 Objective 24-10: Adults Aged 45 Years and Older, COPD, Target=60.0 Deaths Per 100,000 (3)	140.4	141.6	60.0		
25. Sexually Transmitted Diseases					
HP2010 Objective 25-2: Gonorrhea Rate (per 100,000 Population), Target=19.0 (4)	208.7	176.7	19.0		
HP2010 Objective 25-3: Primary and Secondary Syphilis Rate (per 100,000 Population), Target=0.2 (4)	9.4	5.8	0.2		
HP2010 Objective 25-9: Congenital Syphilis (Less than1 Year) Rate (per 100,000 Live Births), Target=1.0 (4)	22.6	30.6	1.0		
HP2010 Objective 25-11: Increase Responsible Adolescent Sexual Behavior, Target=95% (2)		84.6%	95%	X	
26. Substance Abuse					
HP2010 Objective 26-2: Cirrhosis, Target=3.0 Deaths Per 100,000 (3)	10.3	10.5	3.0		
HP2010 Objective 26-6: Reduce the Proportion of Adolescents Riding with a Driver who has been Drinking, Target=30% (2)		32.3%	30%		
HP2010 Objective 26-11a: Reduce the Proportion of High School Seniors Engaging in Binge Drinking of Alcoholic Beverages, Target=11% (2)		35.6%	11%		
HP2010 Objective 26-11c: Reduce the Proportion of Adults Engaging in Binge Drinking During Past Month, Target=6% (1)	8.0%	6.8%	6%	X	
27. Tobacco Use					
HP2010 Objective 27-1a: Reduce the Proportion of Adults Smoking Cigarettes, Target=12% (1)	25.7%	24.4%	12%	X	
HP2010 Objective 27-2a: Reduce Tobacco Products Use by Adolescents, Target=21% (2)		37%	21%		
HP2010 Objective 27-2b: Reduce Use of Cigarettes by Adolescents, Target=16% (2)		29.1%	16%	X	
HP2010 Objective 27-2c: Reduce Use of Spit Tobacco by Adolescents, Target=1% (2)		12%	1%		
HP2010 Objective 27-2d: Reduce Use of Cigars by Adolescents, Target=8% (2)		16.9%	8%		
HP2010 Objective 27-7: Increase Smoking Cessation Attempts by Adolescent Smokers, Target=84% (2)		53.6%	84%		

Sources: (1) 2000, 2001 Behavioral Risk Factor Surveillance System (BRFSS); (2) 2001 Tennessee State Department of Education Youth Risk Behavior Survey Results (YRBS); (3) Under "Healthy People 2010 Mortality Objectives" on the HIT web site; (4) Under 'Healthy People 2010 Objectives' on the HIT web site; (5) Health, United States, 2000, Table 74 Vaccination Coverage among children 19-35 months of age according to geographic division, State, and selected urban areas: United States 1995-2001 (cdc.gov/nchs/).