## The Health of <br> lennessee's Women <br> 

The Health of Tennessee's Women 2009 provides information about some of the factors that affect the health status of Tennessee's female population. Maternal risk factors such as inadequate prenatal care, smoking, poor nutrition, and age greatly impact pregnancy outcomes. Adolescent mothers are at particular risk of having low-weight babies, as are mothers age 40 years and older.

Mortality trends and behavioral risks for women of all ages are also the focus of this report. The challenge facing women as individuals is to modify their lifestyles to maintain good health and prevent diseases. Health education, preventive screening, and early detection are important factors to reduce mortality risk from diseases such as cancer, cerebrovascular, and heart disease.

In 2009, the ten-year age group 40-49 contained Tennessee's greatest number of females $(456,191)$. This age group accounted for 14.4 percent of Tennessee's total female population. The percentage of females under 10 years of age was 12.4 , while 10.7 percent of females were ages 70 and older. The ethnic group Hispanic females accounted for 2.7 percent of the total female population.

TENNESSEE'S FEMALE POPULATION,
500 Thousands BY AGE GROUP, 2009


PERCENT OF LOW-WEIGHT* BIRTHS BY AGE GROUP, RESIDENT DATA, TENNESSEE, 2009


Source: Tennessee Department of Health, Division of Health Statistics, February 2008 Population Estimates.

Low-weight babies are at higher risk of dying in the first months of life than babies of normal weight. Of the total resident births in 2009, 7,535 or 9.2 percent of the babies weighed under 2,500 grams. The greatest percent of low-weight babies were born to mothers ages 45 years and older (18.0), followed by mothers age $40-44$ years (11.3), and mothers age 10-14 (10.7). Of the total low-weight births, 26.3 percent of mothers reported tobacco use during pregnancy. White mothers reported the highest percentage (34.1), while black mothers reported a much lower tobacco use percentage (13.4). The national objective for lowweight births for the year 2010 is 5.0 percent of total live births.


Percentages based on number of births with prenatal care reported.

The number of multiple births decreased from 2008 to 2009, but the percent of total births that were multiple births (3.2) remained the same. The 2009 number of multiple births included 2,485 twins, 97 triplets, 3 quadruplets, and 8 births of quintuplets or more.

In 2009, of the births to mothers ages 10-14 reporting prenatal care, 41.2 percent began care in the first trimester. The percentage of first trimester care by age group increased to a high of 77.2 percent for mothers ages 30-34. The total percent of Tennessee resident births that reported care beginning in the first trimester was 69.0. The 2010 national objective is for 90.0 percent of all births to begin prenatal care in the first trimester.

Nationally recommended changes to the birth certificate were implemented in Tennessee on January 1, 2004. The collection of prenatal care information changed significantly; thus prenatal care data for 2004 and later years are not comparable to that of earlier years.

## NUMBER OF MULTIPLE BIRTHS, RESIDENT DATA, TENNESSEE, 2005-2009

|  | Total | Twins | Triplets | Quadruplets | Quintuplets |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | 2,593 | 2,485 | 97 | 3 | 8 |
| 2008 | 2,747 | 2,652 | 92 | 3 | - |
| 2007 | 2,739 | 2,607 | 114 | 15 | 3 |
| 2006 | 2,631 | 2,522 | 105 | 4 | - |
| 2005 | 2,709 | 2,569 | 128 | 12 | - |

The number of live births occurring in multiple deliveries may not be indicative of the number of sets of multiple births due to one or more members of a set not being born alive.

ADOLESCENT PREGNANCY RATES (10-17), BY RACE, RESIDENT DATA, TENNESSEE, 2000-2009


Adolescent pregnancies include births, abortions, and reportable fetal deaths. The total pregnancy rate for females ages 10-17 declined 27.7 percent from 16.6 pregnancies per 1,000 females of all races in 2000 to 12.0 in 2009. The white adolescent rate dropped 31.1 percent from 13.2 in 2000 to 9.1 in 2009. The 2000 black rate of 30.6 decreased 28.4 percent to 21.9 pregnancies per 1,000 females in 2009. Overall the adolescent 10-17 pregnancy rates showed a declining trend from 2000 through 2009.

In 2009, 18.4 percent of Tennessee birth certificates for all races indicated tobacco use. For the 10-year period 2000-2009, the reporting of tobacco use on Tennessee resident birth certificates showed the percent for white females twice the percent for black females. In 2009, the percent for white females who reported smoking during pregnancy was 21.4 , while the percent for black females who smoked was 10.3. The Year 2010 national objective for tobacco abstinence is 99 percent.

REPORTED TOBACCO USE DURING PREGNANCY, BY RACE, RESIDENT DATA, TENNESSEE, 2000-2009


PERCENT OF BIRTHS TO UNMARRIED MOTHERS, BY AGE GROUP, TENNESSEE, 2000-2009


For 2000 through 2009, the highest percent of out-of-wedlock births was to mothers under 18 years of age. These babies were at greatest risk for negative social and economic consequences due to the fact that adolescent mothers very often lack education and job skills. From 2000 to 2009 , the percent of out-of-wedlock births increased 9.1 percent for mothers aged 10-17, 20.8 percent for mothers 18-19, and 38.5 percent for mothers 20 years and older.

Mortality data collected from Tennessee's death certificates ranks malignant neoplasms as the second leading cause of death for females. There were 6,108 cancer deaths reported for resident females in 2009. Of these deaths, cancer of the trachea, bronchus, and lung had the highest rate per 100,000 females (56.7) followed by breast cancer (27.8). These two causes accounted for 43.9 percent of the total cancer deaths for females in 2009.

CANCER DEATH RATES FOR FEMALES, FOR SELECTED CAUSES, RESIDENT DATA, TENNESSEE, 2009


Heart disease, the leading cause of death in Tennessee, has generally declined in recent years. The crude death rate for females decreased 24.3 percent from 2000 to 2009 , while the rate for males declined 14.6 percent for the same period. The 2009 death rate per 100,000 males (241.6) exceeded the death rate per 100,000 females (215.1) by 12.3 percent. In the years 2000-2002, the death rates for females were greater than the rates for males.

HEART DISEASE DEATH RATES BY GENDER, RESIDENT DATA, TENNESSEE, 2000-2009
Rate per 100,000 Population


## CEREBROVASCULAR DISEASE DEATH RATES BY GENDER, RESIDENT DATA, TENNESSEE, 2000-2009



Tennessee's cerebrovascular diseases crude death rate was higher for females than males for the period 2000-2009, although the rate for both genders decreased during the ten years. The 2009 rate of 57.3 per 100,000 females was 1.3 times higher than the rate of 43.5 per 100,000 males.

In 2009, diseases of heart and malignant neoplasms accounted for 44.9 percent of the total resident deaths to Tennessee's women and 46.1 percent of the total deaths for black females. Cerebrovascular diseases ranked as
the third leading cause of death for the total female population but was the fourth leading cause for white females. Chronic lower respiratory disease was the cause for 6.8 percent of deaths for white females, while diabetes accounted for 5.6 percent of deaths for black females. Alzheimer's disease ranked as the fifth cause for white females while nephritis, nephrotic syndrome and nephrosis rank fifth for black females.

## LEADING CAUSES OF DEATH (ICD-10 CODES) FOR FEMALES, BY RACE, WITH PERCENT OF DEATHS PER 100,000 POPULATION, RESIDENT DATA, TENNESSEE, 2009

| LEADING CAUSES OF DEATH (ICD-10 CODES) FOR FEMALES, BY RACE, WITH PERCENT OF DEATHS PER 100,000 POPULATION, RESIDENT DATA, TENNESSEE, 2009 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cause | Total | Percent | White | Percent | Black | Percent |
| Total Deaths | 28,782 | 100.0 | 24,658 | 100.0 | 3,974 | 100.0 |
| 1. Diseases of heart (100-109, $111,113,120-151)$ | 6,824 | 23.7 | 5,848 | 23.7 | 949 | 23.9 |
| 2. Malignant neoplasms (C00-C97) | 6,108 | 21.2 | 5,188 | 21.0 | 885 | 22.3 |
| 3. Cerebrovascular diseases (160-169) | 1,818 | 6.3 | 1,532 | 6.2 | 274 | 6.9 |
| 4. Chronic lower respiratory disease (J40-J47) | 1,794 | 6.2 | 1,676 | 6.8 | 109 | 2.7 |
| 5. Alzheimer's disease (G30) | 1,595 | 5.5 | 1,463 | 5.9 | 126 | 3.2 |
| 6. Accidents (V01-X59, Y85-Y86) <br> Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0-V89.2) | $\begin{array}{r} 1,214 \\ 321 \end{array}$ | $\begin{gathered} 4.2 \\ 1.1 \end{gathered}$ | $\begin{array}{r} 1,084 \\ 274 \end{array}$ | $\begin{gathered} 4.4 \\ 1.1 \end{gathered}$ | 126 43 | 3.2 1.1 |
| 7. Diabetes (E10-E14) | 921 | 3.2 | 694 | 2.8 | 224 | 5.6 |
| 8. Influenza and pneumonia (J10-J18) | 800 | 2.8 | 712 | 2.9 | 84 | 2.1 |
| 9. Nephritis, nephrotic syndrome and nephrosis (N00-N07, N17-N19, N25-N27) | 501 | 1.7 | 363 | 1.5 | 137 | 3.4 |
| 10. Septicemia (A40-A41) | 362 | 1.3 | 289 | 1.2 | 69 | 1.7 |



Source: Tennessee Department of Health, Behavioral Risk Factor Surveillance System.

## PERCENT OF WOMEN AGED 18 YEARS AND OLDER WHO REPORTED THEY ARE CURRENT SMOKERS, BY RACE, TENNESSEE, 2005-2009

Tobacco use is a major risk factor for heart disease, cancer, respiratory, and other diseases. The percent of women aged 18 years and older who reported they were smokers was greater for non-Hispanic whites than Hispanic or non-white females according to data collected from the 2005-2009 Tennessee Behavioral Risk Factor Surveillance System. The survey revealed that in 2009 the smoking percentages decreased slightly for total females and non-Hispanic white females and were the lowest for the 5 -year period. The Hispanic or non-white female percentage increased from 2008 to 2009.

Breast cancer is the second leading cause of cancer death among Tennessee's women. Screening for breast cancer can provide early detection and reduce mortality. Data from the Tennessee Behavioral Risk Factor Surveillance System provides information by race on the percent of women aged 40 and older who stated they had a mammogram within the last two years. The national objective for 2010 is for 70.0 percent of all women aged 40 and older to have had a mammogram within the last two years. Tennessee's 2005 through 2009 survey results have exceeded the 2010 national objective.

## PERCENT OF WOMEN AGED 40 AND OLDER WHO REPORTED THEY HAD A MAMMOGRAM WITHIN THE LAST TWO YEARS, BY RACE, TENNESSEE, 2005-2009



Source: Tennessee Department of Health, Behavioral Risk Factor Surveillance System.

## PERCENT OF WOMEN AGED 18 YEARS AND OLDER WHO REPORTED THEY DID NOT HAVE A PAP SMEAR WITHIN THE PAST THREE YEARS*, BY RACE, TENNESSEE, 2005-2009

Mortality from invasive cervical cancer can be reduced with early detection from the Pap test. The Tennessee Behavioral Risk Factor Surveillance System results indicate that the percent of women 18 years and older that did not have a pap smear within the past three years increased from 2005 to 2009. The survey also showed the 2009 percentages of women not having a Pap test were highest for total females, and non-Hispanic white females for the 5 -year period. The percentage for Hispanic or non-white females increased from 2008 to 2009. The 2010 national objective is for 90 percent of women aged 18 years and older to have received a Pap test within the preceding three years.

In 2009, the Tennessee Behavioral Risk Factor Surveillance System indicated 10.2 percent of non-Hispanic white women and 12.3 percent of Hispanic or non-white women reported diabetes. Diabetes was the 7th leading cause of death for women in Tennessee for 2009. Diabetes has been associated with end-stage renal disease, blindness, and lower extremity amputation. Women with diabetes have increased pregnancy complications and higher rates of infants born with birth defects.

The Behavioral Risk Factor Surveillance System is a state-based computer-assisted telephone interviewing effort conducted in cooperation with the Centers for Disease Control and Prevention. Since 1984, adults have been surveyed every month in randomly selected households throughout the state. Questions are constructed to determine the behaviors of individuals that will affect their risk of developing chronic diseases that may lead to premature mortality and morbidity. Beginning in 1999, the Centers for Disease Control and Prevention (CDC) redefined its demographic classification scheme to include the ethnicity factor of Hispanic or non-Hispanic origin in its data collection and presentations. Thus where Tennessee Behavioral Risk Factor Surveillance System (BRFSS) data were previously analyzed and presented according to the broad categories of white, black, and other races groups, current BRFSS data are now presented using the categories of non-Hispanic white and Hispanic or nonwhite. Since the Hispanic population in Tennessee is relatively small in comparison to the total population this new classification scheme is basically a change in terminology and does not does not significantly differ from the previous classification used. However, the population and vital statistics data presented in this report still follows a racial classification scheme of white, black and other races. Please note that there are technically two different racial definitions employed in this report depending upon the source of the data. This different should be very minimal in the context of the report.

NOTE: Tennessee population estimates used to calculate the rates in this report were based

## PERCENT OF WOMEN WHO REPORTED DIABETES, BY RACE, TENNESSEE, 2005-2009


on estimates and projections prepared from the census data for 1990-2000 and 20002010 by the Division of Health Statistics in August 2003 and February 2008. These population figures may result in rates that differ from those previously published.

Birth and death certificates filed with the Office of Vital Records supplied statistical data maintained by the Division of Health Statistics for the pregnancy, birth, and death data presented in this report. The source for year 2010 National Objectives was Healthy People 2010: Objectives for Improving Health.

Please visit the Division of Health Statistics pages on the Tennessee Department of Health web site at: http://health.state.tn.us

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