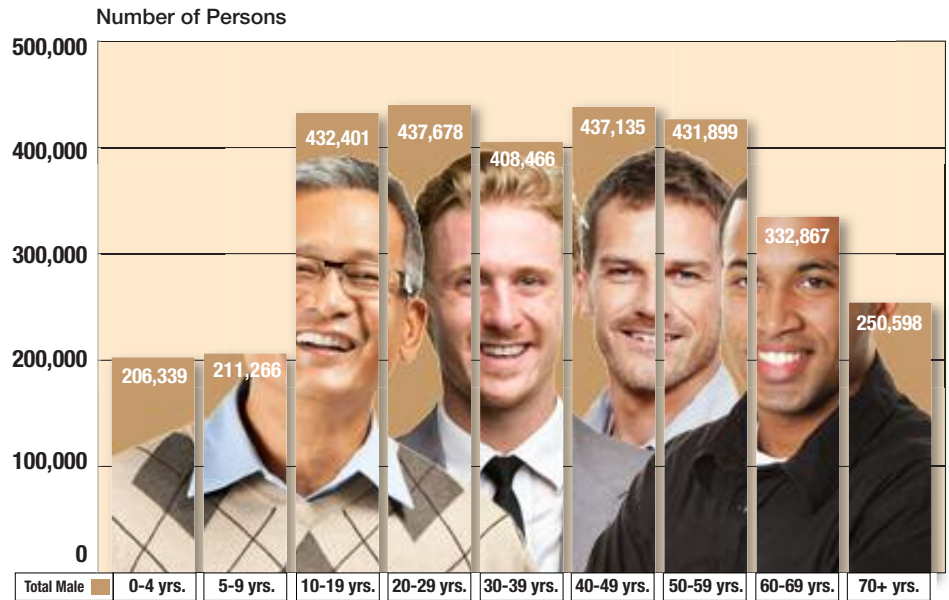




The Health of Tennessee's Men 2012 examines some of the factors that affect the health status of Tennessee's male population. Risk factors such as no physical activity, obesity, limited or no access to healthcare, smoking, having diabetes, not controlling blood pressure, and not having blood cholesterol monitored can precipitate premature loss of quality of life and early mortality.

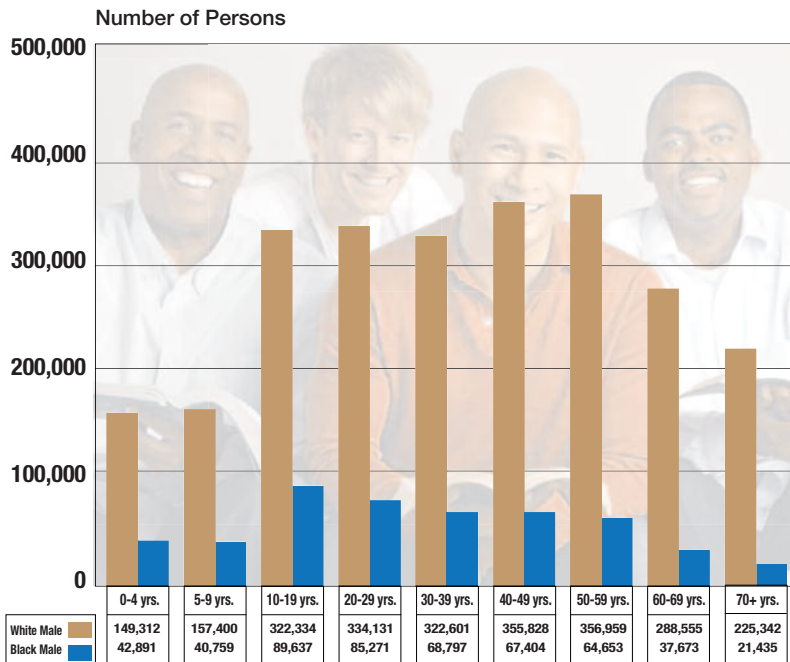
Mortality trends along with behavioral risk data are included in this report. The challenge facing men as individuals is to modify their lifestyles to maintain good health and prevent diseases. Health education, preventive screening, and early detection are important factors to reduce mortality risk from diseases such as cancer, cerebrovascular, and heart disease.

Tennessee Male Population, By Age Group, 2012



Population estimates for 2012 were interpolated from the Census five-year age cohort estimates.
Source: Tennessee Department of Health Division of Policy, Planning and Assessment.

Tennessee Male Population, By Age Group and Race, 2012



Population estimates for 2012 were interpolated from the Census five-year age cohort estimates.
Source: Tennessee Department of Health Division of Policy, Planning and Assessment.

Demographic Characteristics of Tennessee Male Population

- In 2012, the ten-year age group 20-29 contained Tennessee's greatest number of males (437,678). This age group accounted for 13.9 percent of Tennessee's total male population (3,148,649).
- The percentage of males under 10 years of age was 13.3, while 8.0 percent of males were aged 70 and older.
- It should be noted that Tennessee's black male population was greatest for the ten-year age group 10-19 years, while the white male population was greatest for the age group 50-59 years.
- The percent of the total black male population aged 70 and older was 4.1, while the percent of the total white males aged 70 years and older was 9.0 in 2012.

Leading Causes of Male Deaths (ICD-10 Codes), By Race, with Percentage of Deaths, Resident Data, Tennessee, 2012

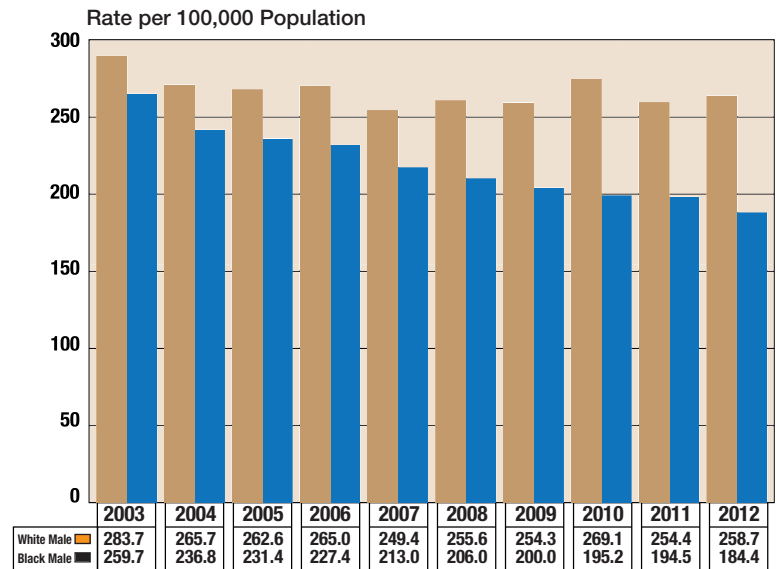
Causes	Total	Percent	White	Percent	Black	Percent
Total Deaths	30,767	100.0	26,302	100.0	4,239	100.0
1. Diseases of heart (I00-I09, I11, I13, I20-I51)	7,498	24.4	6,500	24.7	956	22.6
2. Malignant neoplasms (C00-C97)	7,413	24.1	6,311	24.0	1,051	24.8
3. Accidents (V01-X59, Y85-Y86)	2,017	6.6	1,769	6.7	223	5.3
4. Chronic lower respiratory diseases (J40-J47)	1,702	5.5	1,566	6.0	130	3.1
5. Cerebrovascular diseases (I60-I69)	1,254	4.1	1,030	3.9	206	4.9
6. Diabetes mellitus (E10-E14)	934	3.0	733	2.8	193	4.6
7. Intentional self-harm (X60-X84, Y87.0)	753	2.4	689	2.6	52	1.2
8. Alzheimer's disease (G30)	671	2.2	603	2.3	66	1.6
9. Influenza and pneumonia (J10-J18)	659	2.1	581	2.2	76	1.8
10. Chronic liver disease and cirrhosis (K70, K73-K74)	522	1.7	464	1.8	54	1.3

Source: Tennessee Department of Health Division of Policy, Planning and Assessment.

Leading Causes of Death for Tennessee Males

- In 2012, diseases of heart and malignant neoplasms accounted for 48.5 percent of all deaths to Tennessee's males.
- While diseases of heart was the leading cause of death for white males, malignant neoplasms was the leading cause for black males.
- Accidents ranked third accounting for 6.6 percent of the total male deaths. Chronic lower respiratory diseases accounted for 5.5 percent of all male deaths, while cerebrovascular diseases accounted for 4.1 percent.
- Lifestyle changes are seen as one of the best indicators toward improving the health of the male population. Not smoking, improved physical exercise, a better diet, and safety belt usage could increase quality of life and longevity.

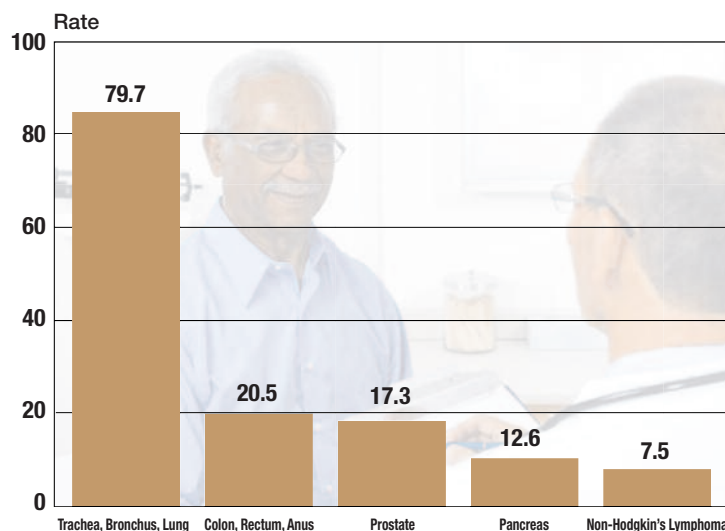
Male Heart Disease Death Rates By Race Resident Data, Tennessee, 2003-2012



Cause of death code (ICD-10) I00-I09,I11,I13,I20-I51

Source: Tennessee Department of Health Division of Policy, Planning and Assessment.

Male Selected Causes of Death for Malignant Neoplasms, with Rates Per 100,000 Population, Resident Data, Tennessee, 2012



Cause of death codes (ICD-10) trachea, bronchus and lung (C33-C34), colon, rectum and anus (C18-C21), prostate (C61), pancreas (C25), Non-Hodgkin's lymphoma (C82-C85).

Source: Tennessee Department of Health Division of Policy, Planning and Assessment.

- Heart disease, the leading cause of all deaths in Tennessee, has generally declined in recent years. There were 7,498 deaths to Tennessee males from diseases of heart in 2012.
- From 2003 to 2012, the crude death rate for white males declined 8.8 percent and for black males decreased 29.0 percent. The 2012 rate for black males (184.4) was the lowest for the 10-year period.
- There were 7,413 malignant neoplasms (cancer) deaths for males in 2012.
- Malignant neoplasms of the trachea, bronchus, and lung had the highest crude death rate at 79.7 per 100,000 males.
- Colon, rectum and anus cancer had a rate of 20.5, while the death rate for prostate cancer was 17.3 per 100,000 male population.
- The male crude death rate for cancer of the pancreas was 12.6, and Non-Hodgkin's lymphoma had a rate of 7.5 in 2012.

Behavioral Risk Factors that Affect Tennessee Men's Health

Beginning in 2011, the Centers for Disease Control and Prevention (CDC) made two important changes in the Behavioral Risk Factor Surveillance System (BRFSS) survey. First, they adopted a new statistical method for weighting data (i.e. raking) and second, they began incorporating cell phone users for the first time (cell phones were added to the Tennessee BRFSS in August 2011). These improvements were necessary to ensure that the survey data continue to represent the population in each state and to maintain an accurate picture of behaviors and chronic health conditions in the U.S.

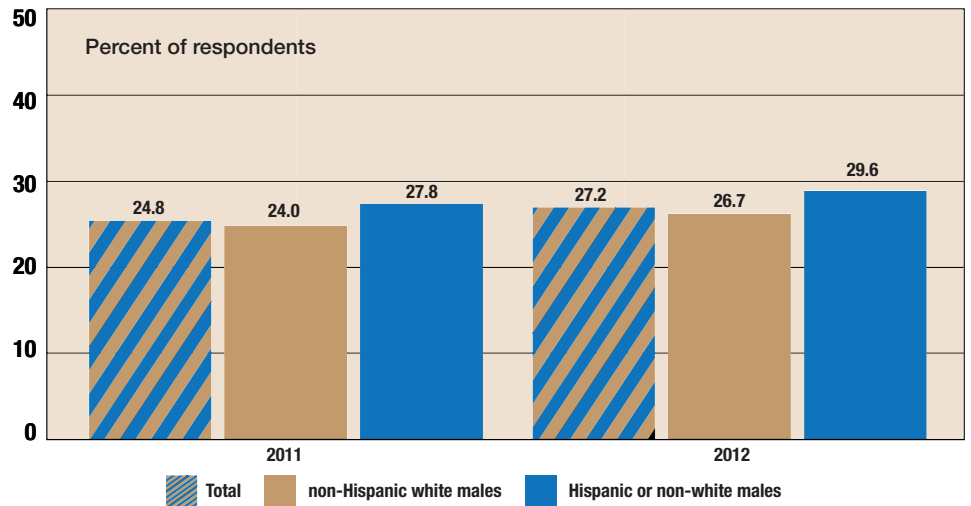
As a result of these changes, 2011 and 2012 BRFSS results cannot be compared to those from earlier years – any shifts in estimates from previous years to 2011 and future estimates may be the result of the new method and not a true change in behaviors.

A more detailed explanation of the changes described above can be found in the following Morbidity and Mortality Weekly Report from the CDC:

<http://www.cdc.gov/mmwr/PDF/wk/mm6122.pdf>

- Smoking data for males was collected from the 2012 Tennessee Behavioral Risk Factor Surveillance System. In 2012, Hispanic or non-white males reported a higher smoking percentage of 29.6, than the percent for non-Hispanic white males of 26.7.

Percent of Male Respondents Who Reported Current Smoking By Race, Tennessee, 2011-2012

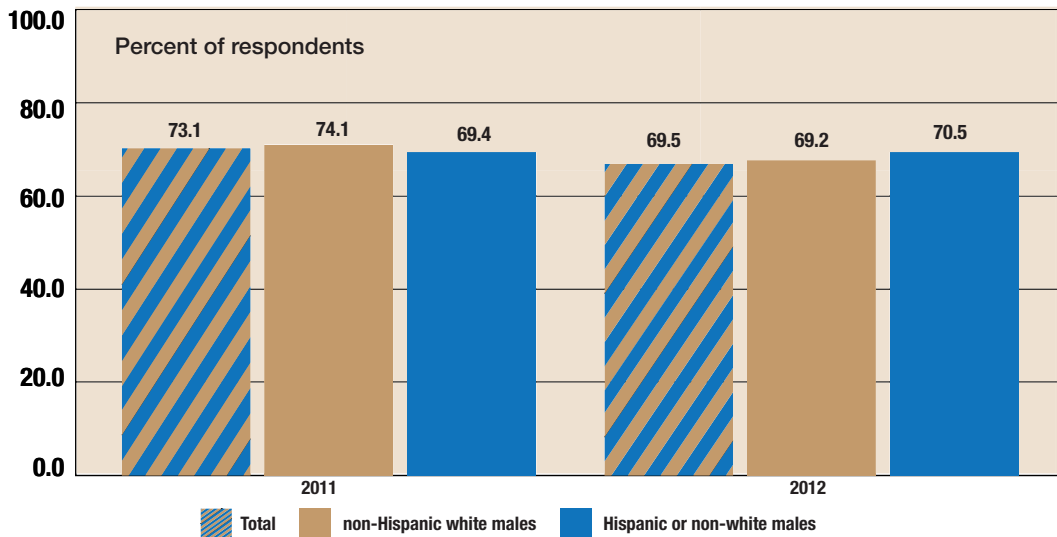


Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

- The total percent of 27.2 increased over the percentage of 24.8 respondents reporting smoking in 2011.
- Smoking is an extreme risk behavior and can contribute to other health problems including malignant neoplasms of the trachea, bronchus and lung, heart disease, and cerebrovascular diseases.
- Many health concerns can be directly attributed to obesity. The Behavioral Risk Factor Surveillance System indicated that in 2012 there continued to be a high percentage in the at risk male population for being overweight or

obese. This trend could be a risk factor for other health concerns such as hypertension, cerebrovascular diseases, heart disease, diabetes and other chronic respiratory diseases.

- Results of the 2012 surveillance showed that 69.2 percent of non-Hispanic white males reported overweight/obese and 70.5 percent of Hispanic or non-white males were in that category.
- The total percentage of 69.5 for overweight/obese decreased from the 2011 percentage of 73.1.

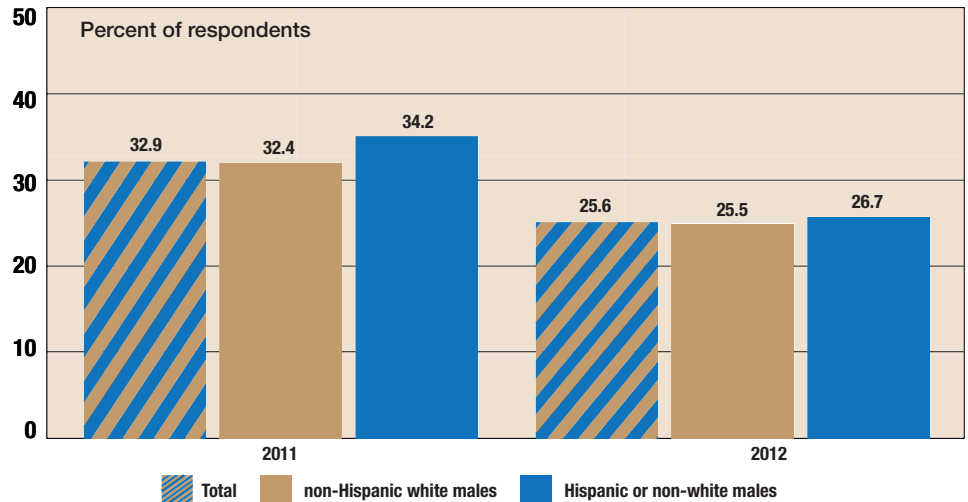


Percent of Male Respondents Who Reported Overweight/Obesity*, By Race, Tennessee, 2011-2012

*Includes all respondents to weight and height questions that have a computed body mass index greater than or equal to 25.0.
Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

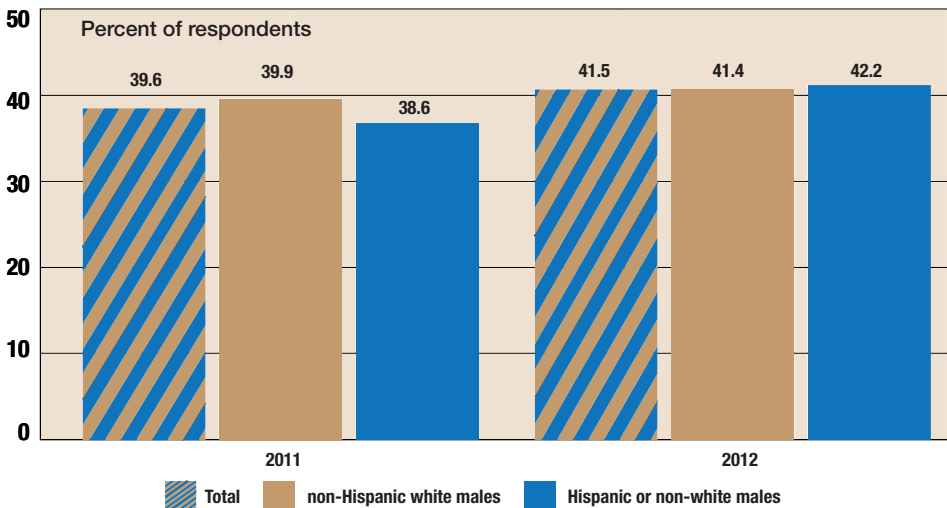
- The Behavioral Risk Factor Surveillance System collected the percent of male respondents who reported in 2012 no physical activity within the past 30 days.
- Both population groups, non-Hispanic white males and Hispanic or non-white males, reported a decrease in no physical activity from 2011.
- The 2012 percentage of all Tennessee male respondents reporting no physical activity (25.6) decreased 22.2 percent from the 2011 percent (32.9).
- Lack of exercise has been linked to obesity, high cholesterol, depression, high blood pressure and coronary heart disease.

Percent of Male Respondents Who Reported No Physical Activity, By Race, Tennessee, 2011-2012



Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

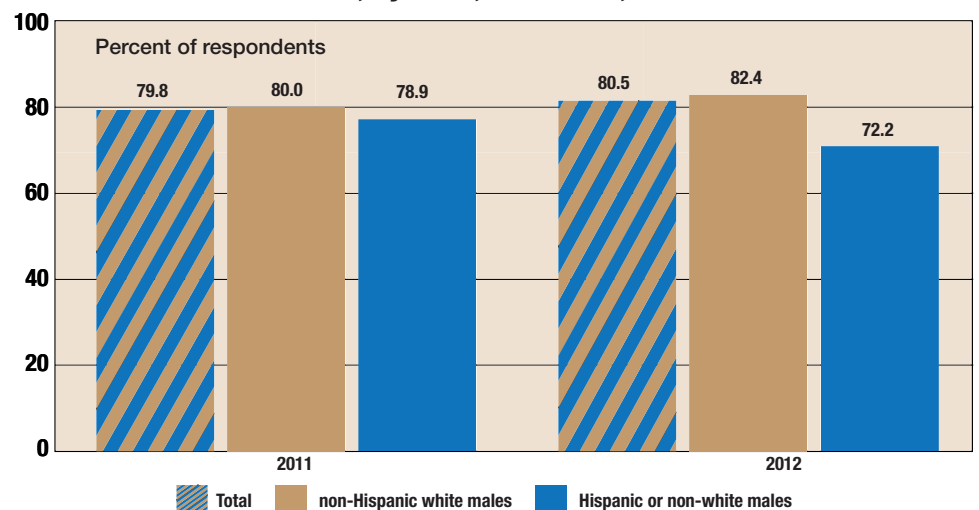
Percent of Male Respondents Who Reported Ever Having High Blood Pressure, By Race, Tennessee, 2011-2012



Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

- In 2012, Tennessee's at-risk male population for high blood pressure was reported at 41.5 percent, according to the Behavioral Risk Factor Surveillance System.
- The percent of non-Hispanic white males reporting high blood pressure was 41.4 while 42.2 percent of Hispanic or non-white males reported having high blood pressure. Both groups reported increases over 2011.
- The modifiable risk factors for heart disease and cerebrovascular diseases are high blood pressure, high blood cholesterol and smoking.

Percent of Male Respondents Who Reported Ever Having Blood Cholesterol Checked, By Race, Tennessee, 2011-2012

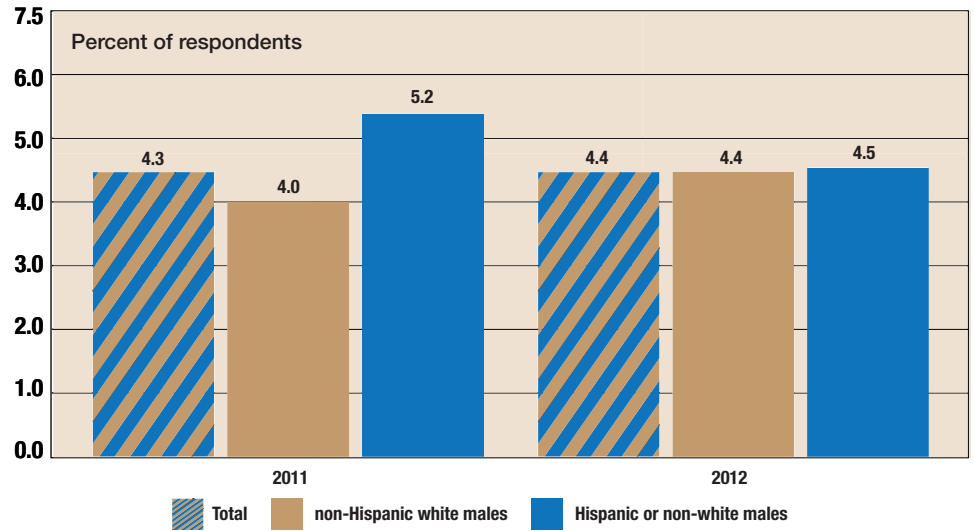


Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

- The Behavioral Risk Factor Surveillance System shows the percent of Tennessee's male population, who reported ever having their blood cholesterol checked was 80.5 in 2012.
- Non-Hispanic white males reported 82.4 percent, and Hispanic or non-white males reported 72.2 percent for ever having their blood cholesterol checked.
- While the percentages for the total and non-Hispanic white male respondents increased, the percent decreased for Hispanic or non-white males from 2011.

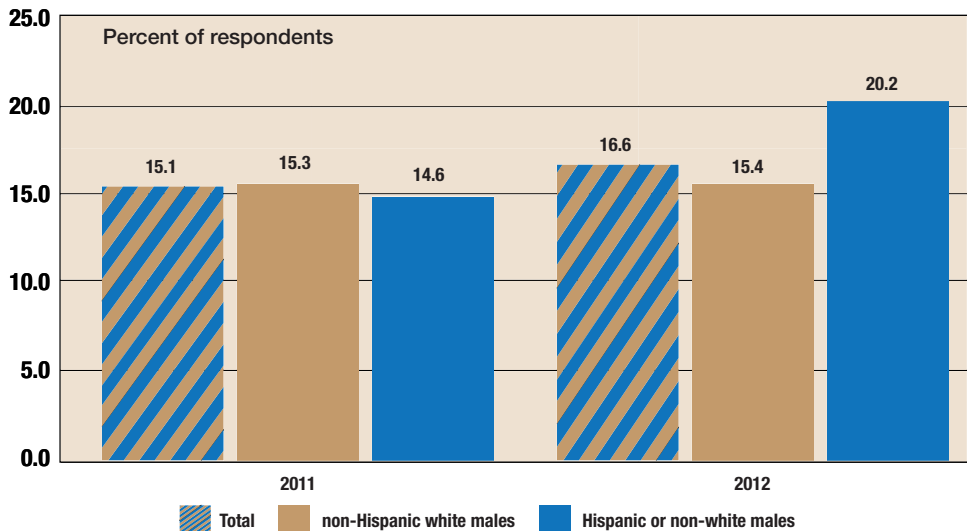
- In 2012, the Behavioral Risk Factor Surveillance System collected alcohol consumption data from Tennessee males.
- According to the BRFSS, 4.4 percent of male respondents reported (chronic or heavy drinking) having more than two drinks per day.
- For non-Hispanic white males the percentage was 4.4 increasing over the 2011 percentage.
- The 2012 percent for Hispanic or non-white males (4.5) decreased from the 2011 percent of respondents reporting chronic or heavy drinking.

Percent of Male Respondents Who Reported Chronic (Heavy Drinking)*, By Race, Tennessee, 2011-2012



*Male respondents reporting having more than two drinks per day.
 Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

Percent of Male Respondents Who Reported Binge Drinking*, By Race, Tennessee, 2011-2012

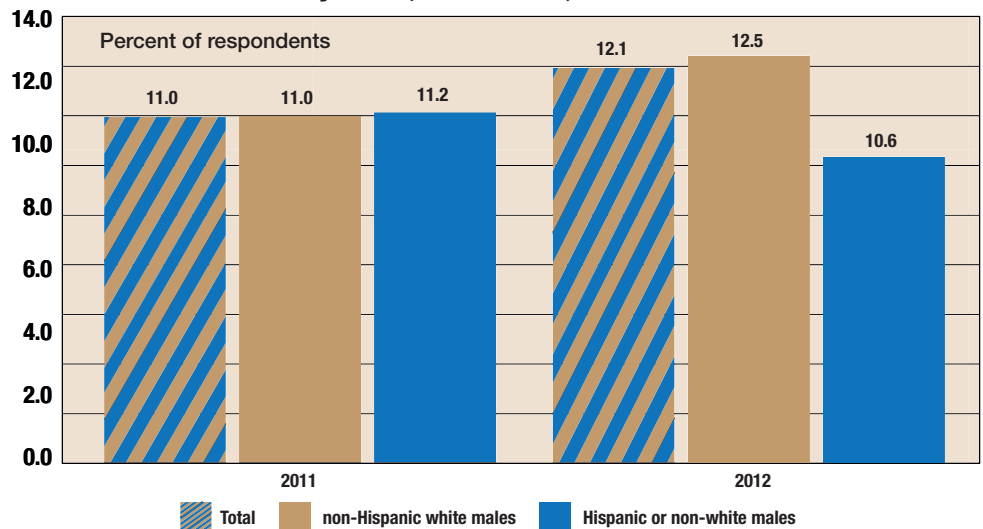


- The 2012 Behavioral Risk Factor Surveillance System showed that 16.6 percent of all male respondents reported they drank in the past 30 days and had five or more drinks on one or more occasion in the past month.
- The percent for non-Hispanic white males reporting binge drinking was 15.4, while Hispanic or non-white males reported 20.2 percent, increasing over the 2011 percentages for both population groups.

*Male respondents reporting having five or more drinks on one occasion.
 Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

- In 2012, the Behavioral Risk Factor Surveillance System indicated 12.5 percent of non-Hispanic white males and 10.6 percent of Hispanic or non-white males reported diabetes.
- For Tennessee males, diabetes was the 6th leading cause of death in 2012.
- Diabetes has been associated with end-stage renal disease, blindness, and lower extremity amputation.

Percent of Male Respondents Who Reported Diabetes*, By Race, Tennessee, 2011-2012

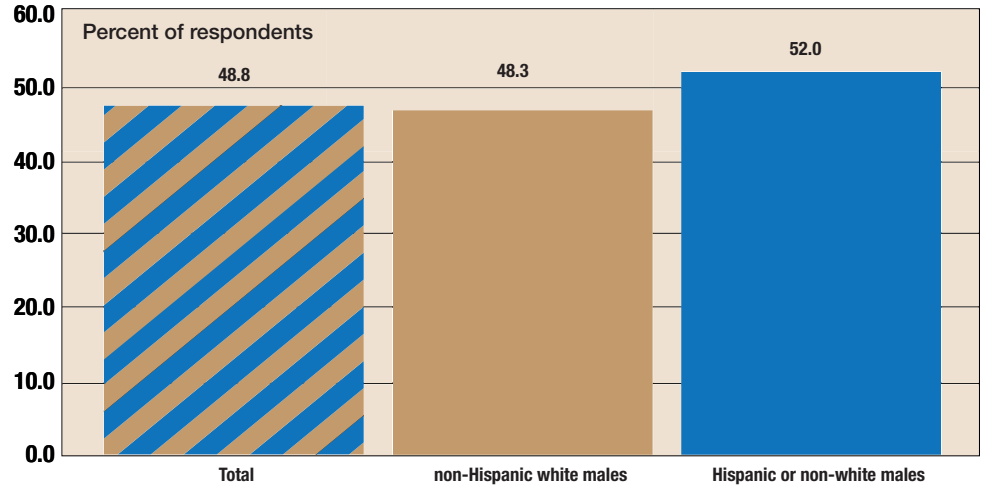


*Doctor diagnosed diabetes.
 Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

The Following Behavioral Risk Factor Surveillance System Data are Collected Every Two Years

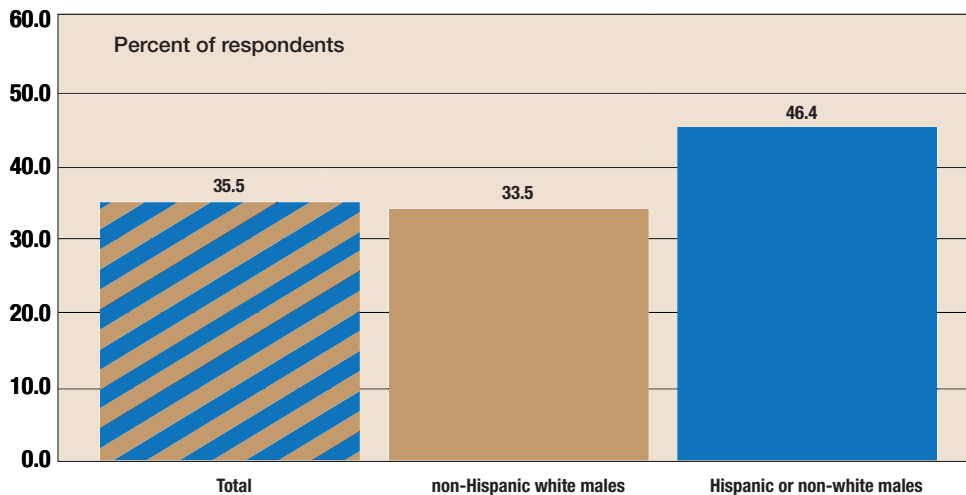
- Early detection is an important factor in reducing the mortality risk from prostate cancer.
- According to the 2012 Behavioral Risk Factor Surveillance System, 48.8 percent of the male respondents aged 40 years and older reported no PSA testing within the past two years.
- For non-Hispanic white males the percentage was 48.3, and for Hispanic or non-white males 52.0 percent reported no PSA testing within the past two years.

Percent of Male Respondents Aged 40 Years and Older Who Reported No PSA Testing Within the Past Two Years, By Race, Tennessee, 2012



Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

Percent of Male Respondents Aged 50 Years and Older Who Reported No Sigmoidoscopy or Colonoscopy, By Race, Tennessee, 2012



Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

- In 2012, malignant neoplasms deaths of the colon, rectum and anus was 16.2 percent of the total male cancer death.
- Detecting and removing precancerous polyps and treating the cancer in the earliest stages can reduce these deaths.
- The 2012 Behavioral Risk Factor Surveillance System showed that 35.5 percent of all males aged 50 and older reported never having a sigmoidoscopy or colonoscopy.
- The percent for non-Hispanic white males was slightly lower (33.5), while the percent for Hispanic or non-white males was 46.4 percent.

The Behavioral Risk Factor Surveillance System (BRFSS) 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 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 difference should be very minimal in the context of the report.

NOTE: The population estimates for Tennessee used to calculate the rates in this report for 2003 - 2009 were based on figures prepared from the 2000 Census in February 2008 by the Division of Policy, Planning and Assessment. The population estimates for 2010 were based on the 2010 Census data. Population estimates for 2011 and 2012 were interpolated from the Census five-year age cohort estimates (CC-EST2011-ALLDATA-[ST-FIPS] May 2012) by the Division of Policy, Planning and Assessment in October 2012. These population figures may result in rates that differ from those published in previous time periods.

Death certificates filed with the Office of Vital Records supplied the death data for this report.

***Do NOT compare 2011 and 2012 BRFSS data to previous years. Due to changes in methods, comparisons are NOT valid and may be misleading.**

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The mission of the Department of Health is to protect, promote and improve the health and prosperity of people in Tennessee.

Please visit the Health Statistics pages on the Tennessee Department of Health website at: health.state.tn.us

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