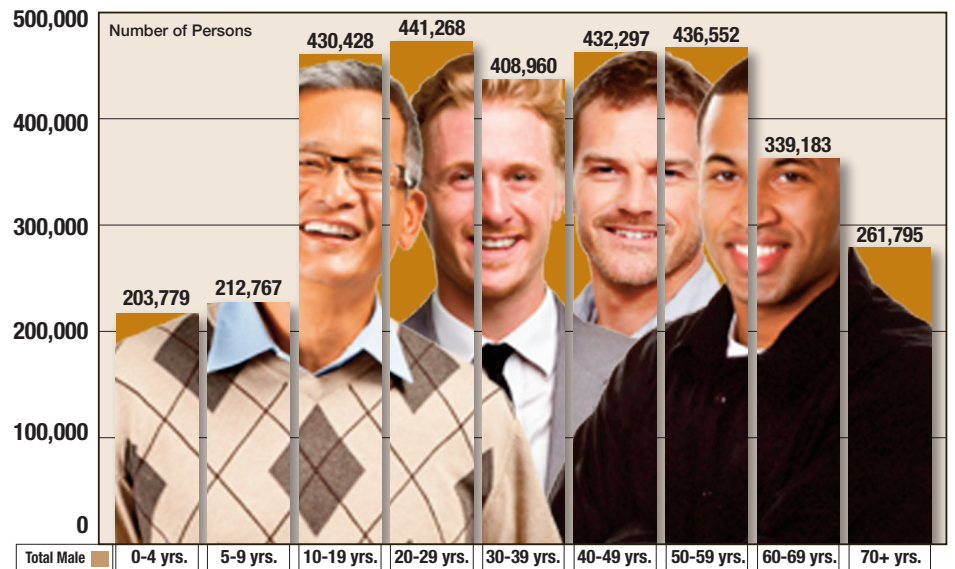




The Health of Tennessee's Men 2013 examines some of the factors that affect the health status of Tennessee's male population. Risk factors such as no physical activity, obesity, limited or no access to healthcare, smoking, having diabetes, not controlling blood pressure, and not having blood cholesterol monitored can precipitate premature loss of quality of life and early mortality.

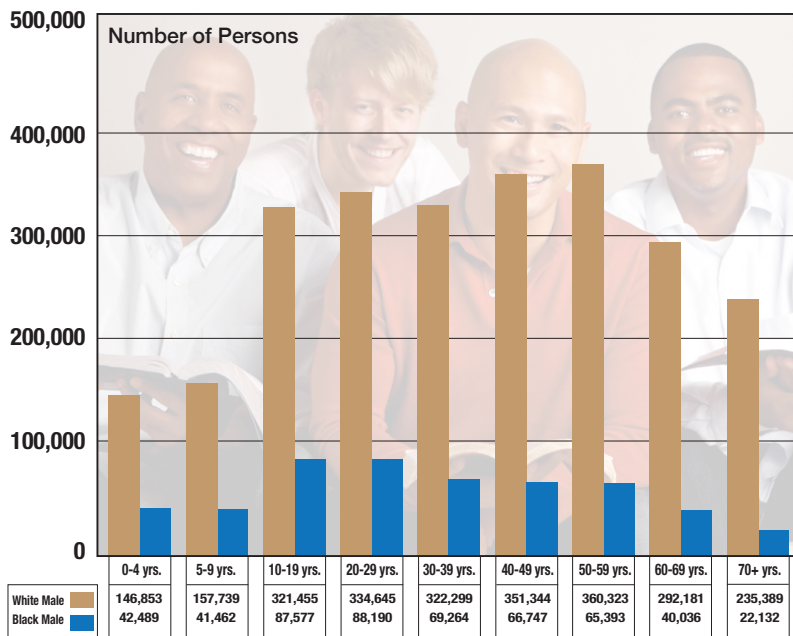
Mortality trends along with behavioral risk data are included in this report. The challenge facing men as individuals is to modify their lifestyles to maintain good health and prevent diseases. Health education, preventive screening, and early detection are important factors to reduce mortality risk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

Tennessee's Male Population, By Age Group, 2013



Population estimates for 2013 were interpolated from the Census five-year age cohort estimates. Source: Tennessee Department of Health, Division of Policy, Planning and Assessment.

Tennessee's Male Population, By Age Group and Race, 2013



Population estimates for 2013 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 2013, the ten-year age group 20-29 contained Tennessee's greatest number of males (441,268). This age group accounted for 13.9 percent of Tennessee's total male population (3,167,029).
- The percentage of males under 10 years of age was 13.2, while 8.3 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 20-29 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 4.2, while the percent of the total white males aged 70 years and older was 9.3 in 2013.

Leading Causes of Male Deaths (ICD-10 Codes), By Race, with Percentage of Deaths, Resident Data, Tennessee, 2013

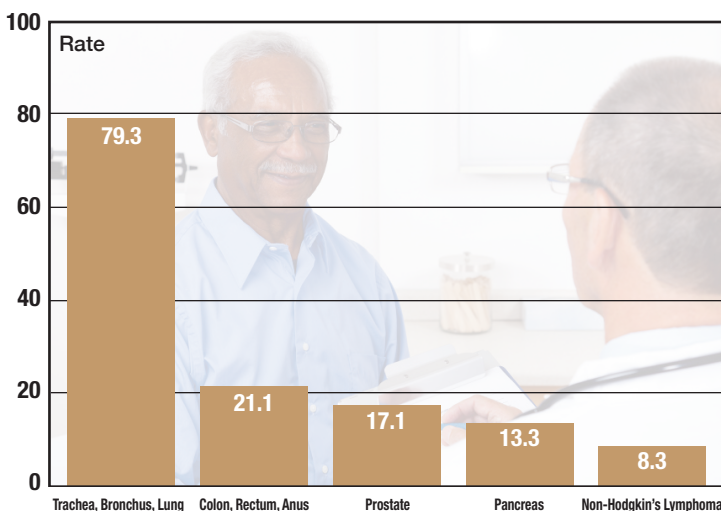
Causes	Total	Percent	White	Percent	Black	Percent
Total Deaths	31,875	100.0	27,319	100.0	4,327	100.0
1. Diseases of heart (I00-I09, I11, I13, I20-I51)	7,799	24.5	6,722	24.6	1,021	23.6
2. Malignant neoplasms (C00-C97)	7,583	23.8	6,561	24.0	974	22.5
3. Accidents (V01-X59, Y85-Y86)	2,093	6.6	1,808	6.6	270	6.2
4. Chronic lower respiratory diseases (J40-J47)	1,827	5.7	1,698	6.2	125	2.9
5. Cerebrovascular diseases (I60-I69)	1,315	4.1	1,084	4.0	225	5.2
6. Diabetes mellitus (E10-E14)	901	2.8	701	2.6	189	4.4
7. Intentional self-harm (X60-X84, Y87.0)	822	2.6	763	2.8	53	1.2
8. Alzheimer's disease (G30)	727	2.3	678	2.5	48	1.1
9. Influenza and pneumonia (J10-J18)	669	2.1	594	2.2	69	1.6
10. Chronic liver disease and cirrhosis (K70, K73-K74)	560	1.8	497	1.8	59	1.4

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

Leading Causes of Death for Tennessee Males

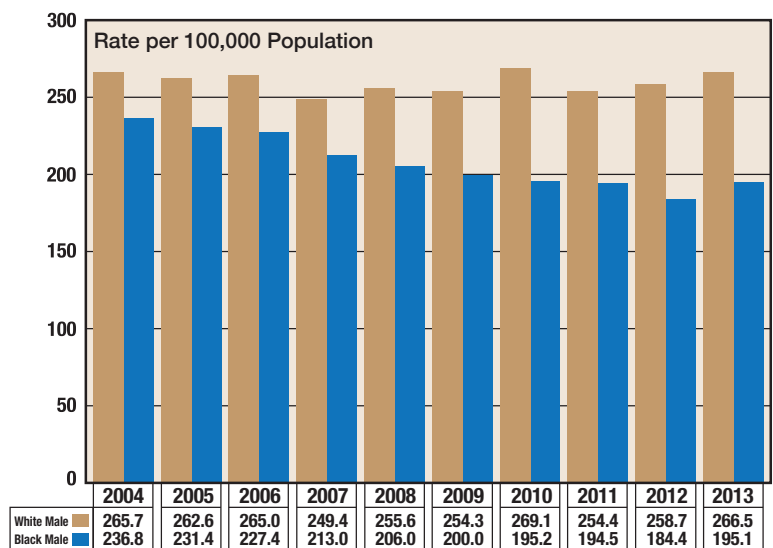
- In 2013, diseases of heart and malignant neoplasms accounted for 48.3 percent of all deaths to Tennessee's males, ranking as the first and second causes respectively.
- Accidents ranked third accounting for 6.6 percent of the total male deaths. Chronic lower respiratory diseases accounted for 5.7 percent, while cerebrovascular diseases accounted for 4.1 percent of all male deaths.
- 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 Selected Causes of Death for Malignant Neoplasms, with Rates Per 100,000 Population, Resident Data, Tennessee, 2013



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.

Male Heart Disease Death Rates By Race Resident Data, Tennessee, 2004-2013



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

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

- In 2013, there were 7,799 deaths to Tennessee males from diseases of heart. The 2013 crude rate of 246.3 increased over the 2012 rate of 238.1.
- From 2004 to 2013, the heart crude death rate for white males increased slightly while the rate for black males decreased 17.6 percent.
- There were 7,583 malignant neoplasms (cancer) deaths for males in 2013.
- Malignant neoplasms of the trachea, bronchus, and lung had the highest crude death rate at 79.3 per 100,000 males.
- Colon, rectum and anus cancer had a rate of 21.1, while the death rate for prostate cancer was 17.1 per 100,000 male population.
- The male crude death rate for cancer of the pancreas was 13.3, and Non-Hodgkin's lymphoma had a rate of 8.3 in 2013.

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.

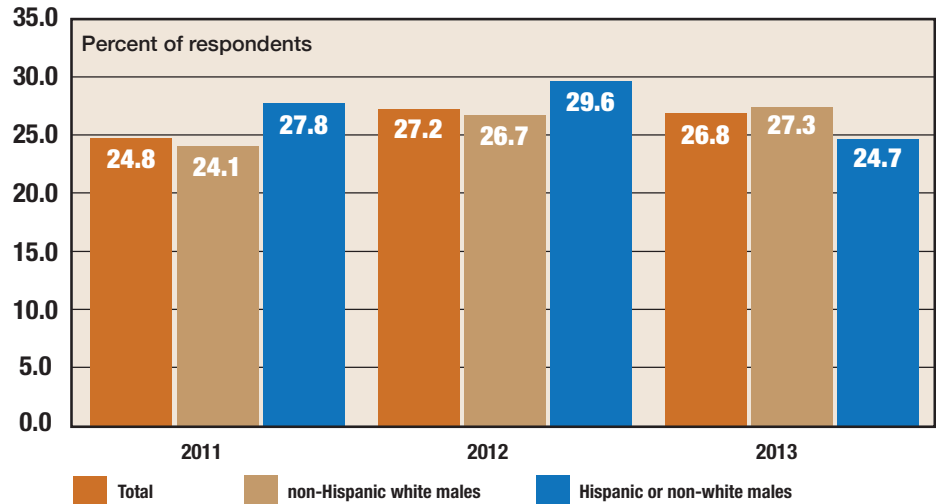
As a result of these changes, 2011 and later BRFSS results cannot be compared to those from earlier years – any shifts in estimates from previous years to 2011 and future estimates may be the result of the new method and not a true change in behaviors.

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 2011-2013 Tennessee Behavioral Risk Factor Surveillance System. In 2013, non-Hispanic white males reported a higher smoking percentage of 27.3, than the percent for Hispanic or non-white males of 24.7.

Percent of Male Respondents Who Reported Current Smoking By Race, Tennessee, 2011-2013

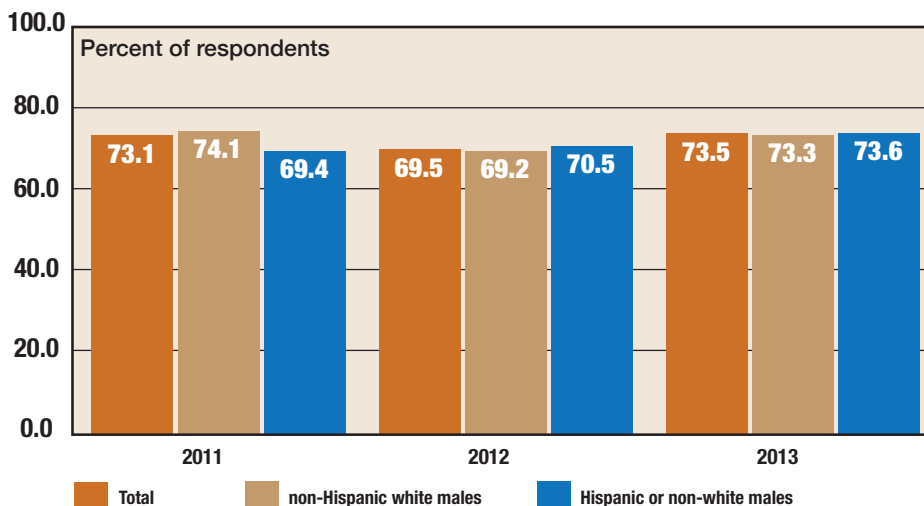


Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

- The total percentages for 2012 and 2013 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 2013 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 2013 surveillance showed that 73.3 percent of non-Hispanic white males reported overweight/obese and 73.6 percent of Hispanic or non-white males were in that category.
- The 2013 total percentage of 73.5 for overweight/obese increased over the 2011 and 2012 percentages of 73.1 and 69.5 respectively.

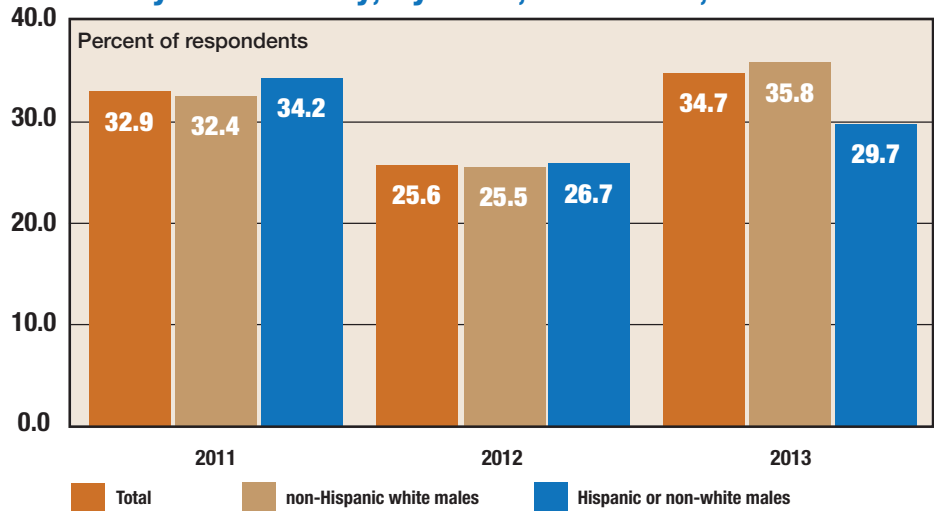


*Includes all respondents to weight and height questions that have a computed body mass index greater than or equal to 25.0.
Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

Percent of Male Respondents Who Reported Overweight/Obesity*, By Race, Tennessee, 2011-2013

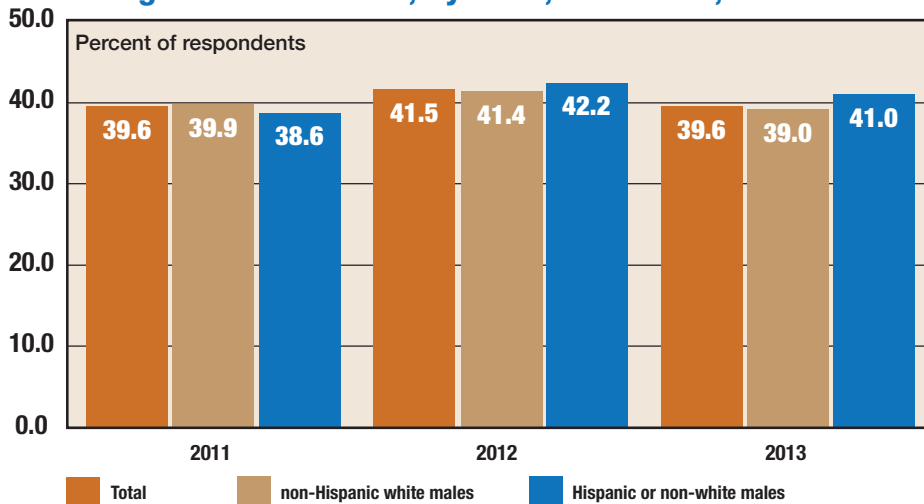
- The Behavioral Risk Factor Surveillance System collected the percent of male respondents who reported no physical activity within the past 30 days for 2011 through 2013.
- In 2013, both population groups, non-Hispanic white males and Hispanic or non-white males, reported an increase in no physical activity over 2012.
- The 2013 percentage of all Tennessee male respondents reporting no physical activity (34.7) increased 5.5 percent over 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, 2011-2013



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, 2011-2013

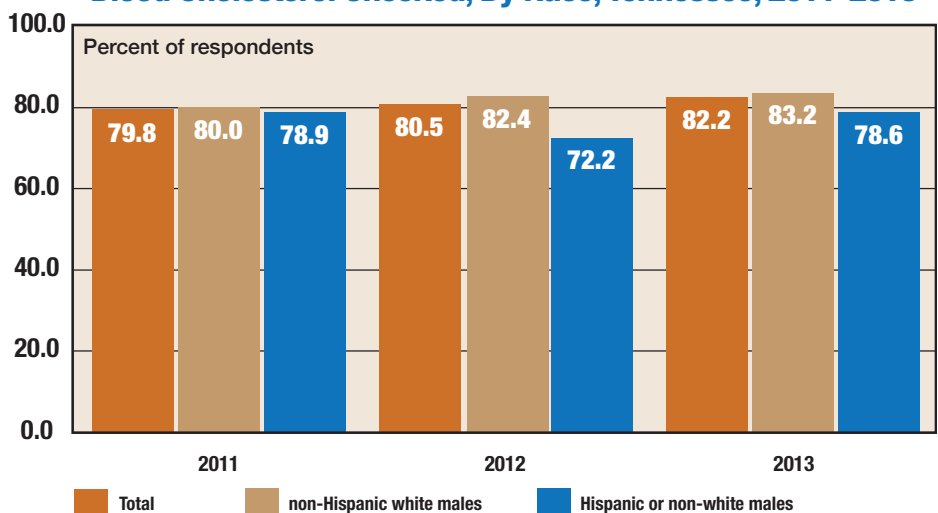


Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, Behavioral Risk Factor Surveillance System.

- For the three-year period of 2011 through 2013, Tennessee's at-risk male population for high blood pressure remained fairly constant, according to the Behavioral Risk Factor Surveillance System.
- The population group of Hispanic or non-white males reported the highest percentage of high blood pressure for 2012 and 2013.
- The modifiable risk factors for heart disease and cerebrovascular diseases are high blood pressure, high blood cholesterol and smoking.

- The Behavioral Risk Factor Surveillance System showed the total and non-Hispanic white percentages of Tennessee's males, who reported ever having their blood cholesterol checked, increased over 2011 through 2013.
- The population group of Hispanic or non-white males reported the lowest percentages for ever having their blood cholesterol checked for the three-year period.
- Controlling blood cholesterol is a positive factor in reducing heart disease, the leading cause of male deaths.

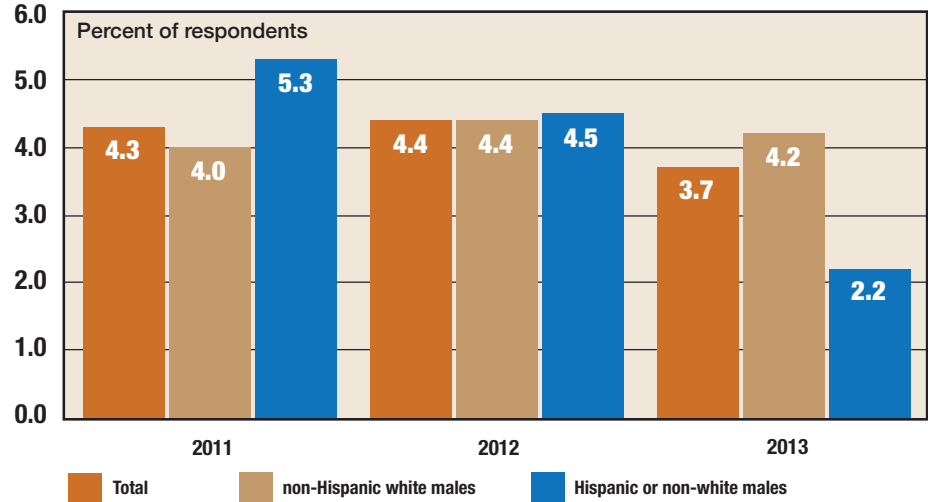
Percent of Male Respondents Who Reported Ever Having Blood Cholesterol Checked, By Race, Tennessee, 2011-2013



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

- For 2011 - 2013, the Behavioral Risk Factor Surveillance System collected alcohol consumption data from Tennessee males.
- According to the 2013 BRFSS, 3.7 percent of total male respondents reported (chronic or heavy drinking) having more than two drinks per day, decreasing from the percentages in 2011 and 2012.
- For non-Hispanic white males the 2013 percentage of 4.2 decreased slightly from the 2012 percentage of 4.4.
- The 2013 percent for Hispanic or non-white males (2.2) decreased 58.5 percent from the 2011 percent of respondents reporting chronic or heavy drinking.

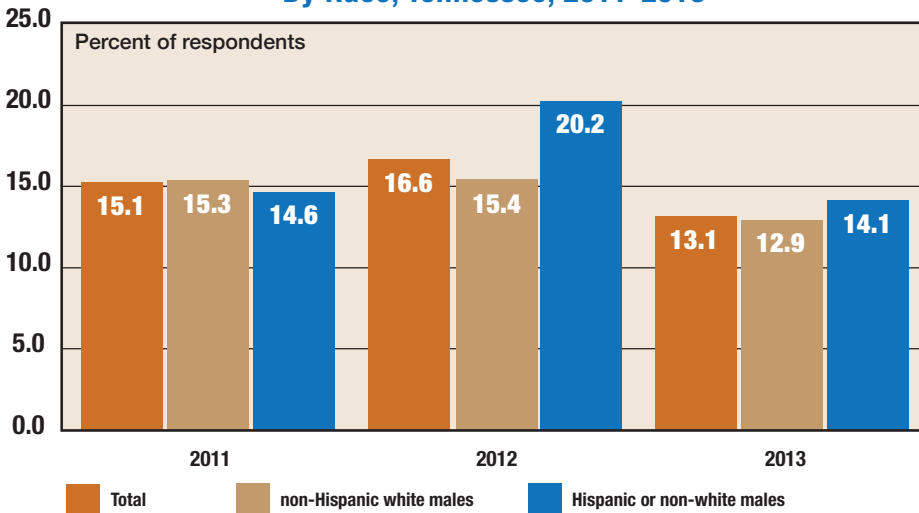
Percent of Male Respondents Who Reported Chronic (Heavy Drinking*), By Race, Tennessee, 2011-2013



*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, 2011-2013

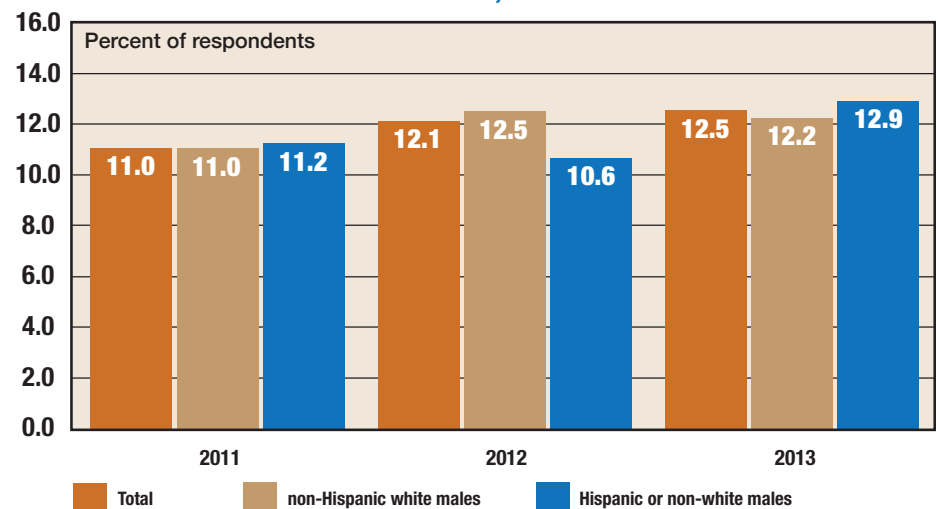


- According to the Behavioral Risk Factor Surveillance System, the percent of all male respondents reporting they drank in the past 30 days and had five or more drinks on one or more occasion in the past month decreased in 2013.
- Excessive alcohol consumption is a leading preventable cause of death and also a risk for unintentional injuries, motor vehicle accidents, and violence.

*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 2013, the Behavioral Risk Factor Surveillance System indicated an increase in male respondents reporting diabetes.
- For Tennessee males, diabetes was the 6th leading cause of death in 2013.
- Diabetes has been associated with end-stage renal disease, blindness, and lower extremity amputation.

Percent of Male Respondents Who Reported Diabetes*, By Race, Tennessee, 2011-2013



*Doctor diagnosed diabetes.

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

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 2004 - 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 - 2013 were interpolated from the Census five-year age cohort estimates (CC-EST2011-ALLDATA-[ST-FIPS] June 2014) by the Division of Policy, Planning and Assessment. 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 - 2013 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 Policy, Planning and Assessment pages on the Tennessee Department of Health website at: health.state.tn.us

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