Vanderbilt Institute for Medicine and Public Health Vanderbilt Institute for Research on Men's Health





TENNESSEE MEN'S HEALTH REPORT CARD







PROGRESS REPORT

The goal of the Tennessee Men's Health Report Card is to provide data to help monitor efforts to ensure that all men and women have equal opportunities to be healthy in Tennessee. Men in Tennessee make up half of the state's population. On average, men have a five-year shorter life expectancy than women in our state. Results from this Report Card suggest that making modest progress in men's health outcomes could increase the health profile of the state considerably.

The 2014 Report Card looks at how men were doing on a series of health indicators in 2012 and grades health outcomes for men in our state in comparison to Healthy People 2020 goals for the nation. The Report Card also looks at changes in performance on these indicators, both positive and negative, between 2007 and 2012.

Education, poverty and access to quality health care are important determinants of men's health. White, Black and Hispanic men's rates of high school graduation since 2007 are improving, but all of these groups received failing grades on this indicator when compared to the national goal of 97.9%. The percentage of White, Black and Hispanic men whose earning fell below poverty guidelines increased during the economic recession that occurred between 2007 and 2012. The U.S. Census Bureau American Community Survey estimated that in 2012, 21% of men in our state, or about one in five, did not have health insurance coverage.

More than half of the deaths of men in Tennessee in 2012 were due to heart disease, cancer and lung disease. White, Black and Hispanic men had lower rates of deaths from heart disease, stroke and diabetes in 2012 than in 2007. While this progress is important, the rates for each of these outcomes remain unacceptably high. However, there are a number of initiatives in Tennessee focused on increasing healthy eating, reducing time sitting and increasing physical activity, and reducing tobacco use that should help us make progress toward the Healthy People 2020 goals. In addition to encouraging changes in health behaviors, it is also important to consider policy changes that increase the opportunities men have to be healthier in communities where they live, work, play and pray across the state, and to improve access to health care for all Tennesseans.

One of the most important findings of the 2014 Tennessee Men's Health Report Card is that men's health varies by age, race, ethnicity and geography across the state. White, Black and Hispanic men each had areas where their health could improve, highlighting that health disparities are not only represented by Black and Hispanic men.

White men had A or B grades on death rates from prostate cancer and HIV/AIDS. When compared with Black and Hispanic men, White men also are doing better in rates of death from lung cancer and lung disease, influenza and pneumonia, colorectal cancer and prostate cancer. On the other hand, White men received failing grades for death rates related to several cancers linked to smoking, chronic liver disease, and motor vehicle accidents. White men had higher rates than Black or Hispanic men for deaths from chronic lung disease, chronic liver disease, motor vehicle accidents, suicide, all unintentional injuries combined and deaths related to accidental drug poisonings. Alarmingly, White men's rates of suicide, and death from accidental poisonings related to drugs and other substances also increased between 2007 and 2012.

Black men had a B, their highest grade, on death rates from unintentional injuries (non-motor vehicle). Between 2007 and 2012, Black men's death rates from lung cancer, lung disease, prostate cancer, HIV/AIDS and homicide improved, but the disparities in these outcomes between Black men and White and Hispanic men remain very large. Black men experienced failing grades on death rates from heart disease, stroke, diabetes, kidney disease, lung cancer, head and neck cancer, colorectal cancer, prostate cancer, chronic liver disease, HIV/AIDS, motor vehicle deaths and homicide. Black men's rates of new cases of HIV, syphilis, and gonorrhea are improving, but remain at least seven times higher than rates for White and Hispanic men.

Hispanic men were at or better than national goals and scored A's on all indicators reviewed except for C's on for chronic liver disease, motor vehicle accidents and suicide, and a D in colorectal cancer. From 2007 through 2012, Hispanic men showed a significant reduction in death rates from homicide, pneumonia and influenza, and new case rates of sexually transmitted illnesses. Death rates from kidney disease for Hispanic men, however, increased significantly over this same period (2007-2012).

In summary, men's health is improving in our state but it is important to put more effort into understanding and addressing the disparities among men if we are to improve the health profile of Tennessee men and Tennessee as a whole.

Additional information on and maps of health concerns described in this report, links to organizations which provide support and advocacy around men's health issues, and a survey to give us your feedback on this report, can be found on the Tennessee Men's Health Report Card website: http://TNMensHealthReportCard.vanderbilt.edu

HISTORY AND PURPOSE OF THE TENNESSEE MEN'S HEALTH REPORT CARD

- The Tennessee Men's Health Report Card (Report Card) has been issued in 2010, 2012 and now 2014.
- The Report Card is a tool to monitor the health status of men in Tennessee. It provides both a snapshot of how men are doing in a particular year and also evaluates trends over the previous six years as well.
- The Report Card also hopes to educate Tennesseans about men's health and to stimulate conversations and efforts to improve men's health in places where they live, work, play and pray across our great state.

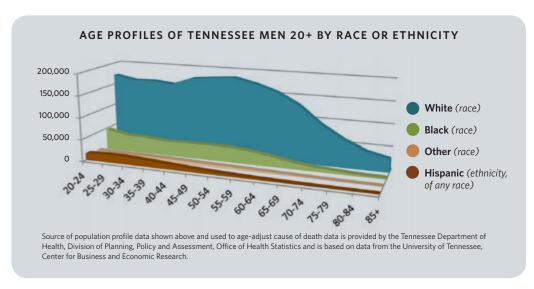


WHAT ARE THE SOURCES OF DATA FOR THE TENNESSEE MEN'S HEALTH REPORT CARD?

- **Death certificate data** for 2012 are provided by the Tennessee Department of Health. Deaths are reported as rates per 100,000 men.
- **New cases of infectious diseases** are required to be reported to the Tennessee Department of Health from certified medical testing laboratories. These data are also reported as a rate per 100,000 men.
- Health use and health behavior indicator data are from the Behavioral Risk Factor Surveillance Survey (BRFSS). These data are reported as a percentage of all men sampled. BRFSS is a random land-line phone and cell-phone based survey of Tennessee men and women ages 18 and older. It is conducted annually by the Tennessee Department of Health in collaboration with the U.S. Centers for Disease Control and Prevention (CDC). Changes in the sampling methods used to collect BRFSS data in 2011 mean that we cannot analyze trends for the BRFSS data.
- Social issues that impact men's health data are estimated from the 2012 American Community Survey, conducted annually by the U.S. Census Bureau.
- **Population profile data** used in the overview, to calculate rates, and to age-adjust data, are provided by the Tennessee Department of Health and based on data from the University of Tennessee, Center for Business and Economic Research.

The 2014 Report Card Progress Report also includes information on statistically significant changes in health outcomes over time from 2007 through 2012. Both positive trends (doing better) and negative trends (doing worse) are reported. Graphs of these trends can be found on the Tennessee Men's Health Report Card website at http://TNMensHealthReportCard.vanderbilt.edu.

Information on health outcomes is reported for men in Tennessee ages 18 and older unless otherwise noted. Data are also presented by race (Black or White), ethnicity (Hispanic or non-Hispanic), age, and Tennessee Department of Health region. In contrast to previous report cards, the 2014 Report Card death data have been age-adjusted statistically to increase the accuracy of comparisons between racial and ethnic groups that have different patterns of ages. The graph below shows the differences in age profiles by race and ethnicity for Tennessee adult men in 2012.

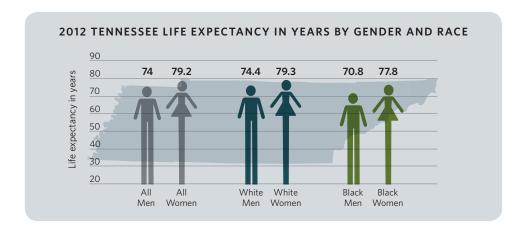


OVERVIEW OF MEN AND MEN'S HEALTH IN TENNESSEE

- The estimated adult male population of Tennessee (ages 20 and over) in 2012 was 2,298,643 men.
- Men made up approximately 48% of the adult Tennessee population in 2012.
- Race designation of Tennessee men in 2012 was 82% White, 15% Black, 3% Native American, Asian/Pacific Islander/ other race.
- Ethnicity is recorded independently of race for Tennessee Department of Health data. In 2012 4% of Tennessee adult men were identified as Hispanic (who may be of any race).

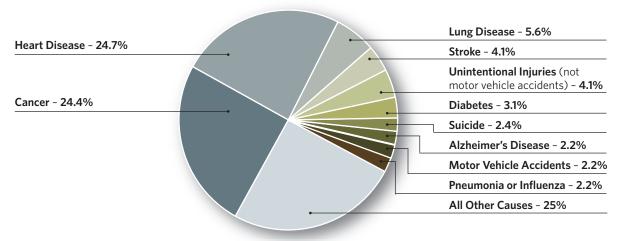
LIFE EXPECTANCY (TENNESSEE DEPARTMENT OF HEALTH)

- Life expectancy is considered an important measure of overall health.
- Men in Tennessee lived on average five years less than women in 2012.
- Black men in Tennessee have a shorter life expectancy than White men and Black and White women.



LEADING CAUSES OF DEATH AMONG MEN IN TENNESSEE (DEATH CERTIFICATE DATA)

Three-quarters (75%) of deaths for Tennessee men age 18 and older are from the following ten causes:



- The three leading causes of death for men in Tennessee heart disease, cancer and lung disease account for over 50% of deaths.
- Tobacco use, unhealthy eating, not being physically active and spending a lot of time sitting are important contributors to heart disease, cancer, lung disease, stroke and diabetes.

LEADING CAUSES OF DEATH BY AGE (DEATH CERTIFICATE DATA)

- Men 55 and older account for 82% of deaths among men in Tennessee.
- In young adult men (18-34), almost 40% of deaths are due to unintentional injuries and motor vehicle accidents. Homicide and suicide are responsible for 30% of deaths of young adult men.
- In middle-aged men (35-54), over 40% of deaths are due to heart disease and cancer. Unintentional injuries, suicide and motor vehicle accidents claim another 22% of men in this age group.
- In men 55 and older, well over 50% of deaths are due to cancer and heart disease.

TOP 10 AGE-SPECIFIC CAUSES OF DEATH FOR TENNESSEE MEN IN 2012

Age 18-34		Age 35-54		Age 55 and older		
Cause	Percent	Cause	Percent	Cause	Percent	
Accidents (not motor vehicle)	19.5%	Diseases of the Heart	23.1%	Malignant Neoplasms	26.4%	
Motor Vehicle Accidents	18.9%	Malignant Neoplasms	18.4%	Diseases of the Heart	25.9%	
Assault (Homicide)	15.8%	Accidents (not motor vehicle)	9.7%	Chronic Lower Respiratory Disease	6.5%	
Suicide	14.4%	Suicide	6.8%	Cerebrovascular Disease	4.6%	
Diseases of the Heart	5.7%	Motor Vehicle Accidents	5.4%	Diabetes Mellitus	3.1%	
Malignant Neoplasms	4.5%	Chronic Liver Disease and Cirrhos	is 4.0%	Alzheimer's Disease	2.7%	
Human Immunodeficiency Virus (HIV) 1.7%	Diabetes Mellitus	3.3%	Pneumonia Influenza	2.5%	
Congenital Anomalies	1.2%	Cerebrovascular Disease	2.5%	Accidents (not motor vehicle)	2.4%	
Diabetes Mellitus	1.1%	Assult (Homicide)	2.2%	Nephritis, Nephrotic Syndrome, Nephr	osis 1.7%	
Chronic Liver Disease and Cirrhos	is 1.0%	Chronic Lower Respiratory Disease	e 1.8%	Chronic Liver Disease and Cirrhosis	1.4%	
Total # deaths men 18-34 - 1,149		Total # deaths men 35-54 - 4,302		Total # deaths men 55 and older - 24,788		

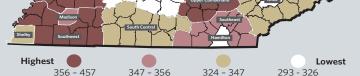
Tennessee Department of Health, Division of Policy, Planning and Assessment, Death Statistical System 2012

MAPPING THE TWO LEADING CAUSES OF DEATH FOR MEN IN TENNESSEE

Death rates from disease appear to vary across the state depending on where men live. The maps below show variations in rates from the two leading causes of death for men in 2012 - heart disease and cancer. The groupings of counties shown in these maps are by Tennessee Department of Health region. Each county containing a major urban area also has its own Health Department.

The regional variations seen may reflect environmental factors, differences in access to emergency or specialty health care services, or differences in urban and rural occupations and lifestyles.

HEART DISEASE DEATH RATE FOR MEN AGES 18 AND OVER

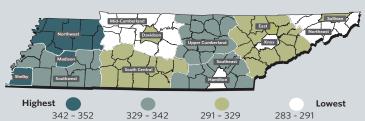


Age-adjusted death rates from heart disease per 100,000 adult men

With some exceptions, rates of heart disease deaths appear to be higher in more rural regions of our state.

Outcomes in acute and chronic heart disease can be impacted by access to timely medical care; prevention and treatment of risk factors such as high blood pressure, high cholesterol, obesity, limited physical activity, and smoking; and community awareness of CPR and rapidness of response to signs of heart trouble and stroke.

CANCER DEATH RATE FOR MEN AGES 18 AND OVER



Age-adjusted death rates from cancer per 100,000 adult men

In Tennessee, three types of cancer account for half of all cancer deaths in men:

- lung (33%)
- colorectal cancer (9%)
- prostate cancer (8%)

Cancer outcomes may also be improved by efforts to reduce smoking, increase physical activity, improve eating habits and reduce obesity. Earlier detection of cancers through routine screenings also improves treatment outcomes.

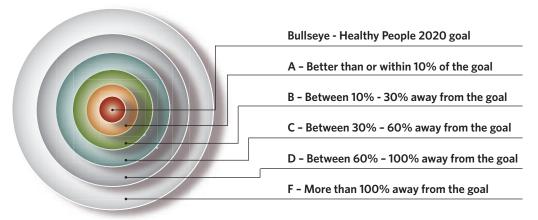
Tennessee Department of Health, Division of Policy, Planning and Assessment, Death Statistical System 2012 and Surveillance, Epidemiology and Evaluation

HOW CLOSE ARE WE TO THE HEALTHY PEOPLE 2020 GOALS?

This section of the Report Card examines how close men in Tennessee were in 2012 (the most recent data available) to the Healthy People 2020 national objectives or goals. These national goals were set by the U.S. Centers for Disease Control and Prevention (CDC) by taking average rates for adult men and women in the United States in 2007 and then aiming to do at least 10% better by the year 2020. These goals were considered by the CDC to be realistic and attainable for the nation. Tennessee does not have state-specific goals available for comparison.

HOW DID WE CALCULATE GRADES?

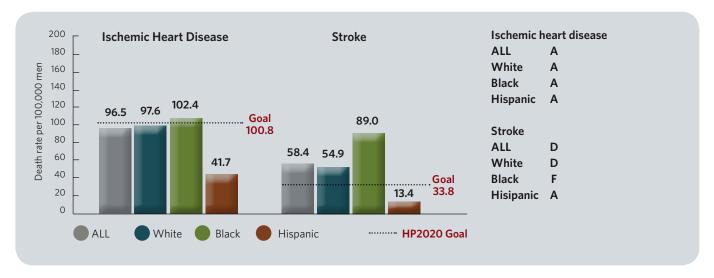
The grading system we have used for each available health outcome is illustrated by the target below, with the Healthy People 2020 goal at the center of the bullseye. Grades are based on how far away an indicator rate or percentage for Tennessee men is from the goal/bullseye. Links to additional information about individual Healthy People 2020 goals and additional indicator data can be found on the Report Card website at http://healthypeople.gov/2020/.



Social issues that impact men's health (U.S. Census Bureau	Percent in 2012	HP 2020 Goal	Grade	
Tennessee men 25 and older who did not	ALL	15.7%	2.1%	F
graduate from high school or earn a GED	White	14.0%	2.1%	F
	Black	18.9%	2.1%	F
	Hispanic	39.5%	2.1%	F
Tennessee men whose incomes were below 2012 federal	ALL	12.8%	no goal established	
poverty guidelines (\$11,170 for household for a single	White	10.8%		
person; \$23,050 for household of four people)	Black	19.1%		
	Hispanic	22.3%		
Health use indicators for all men in Tennessee (BRFSS data	 1)			
Received a colorectal cancer screening (men over 50)	64.5%	70.5%	Α	
Have a personal health care provider		72.7%	83.9%	В
Received a flu shot in the past year (men 65 and older)		72.3%	90.0%	В
Diagnosed with hypertension		41.5%	26.9%	С
Unable to get care they needed due to affordability of care		19.1%	4.7%	F
Health behavior indicators for all men in Tennessee (BRFSS	 S data)			
Consumed 5 or more alcoholic drinks on one occasion	,,			
in the past month		16.6%	24.4%	Α
Always wear seatbelts	81.0%	92.4%	В	
Current smokers	27.2%	12.0%	F	
Use smokeless tobacco	9.2%	0.3%	F	
Did not engage in any physical activity outside of work in pa	25.6%	32.6%	Α	
Report body mass index in obese range (>30)	32.6%	30.5%	Α	
	Consume 5 or more servings of fruits and vegetables daily			

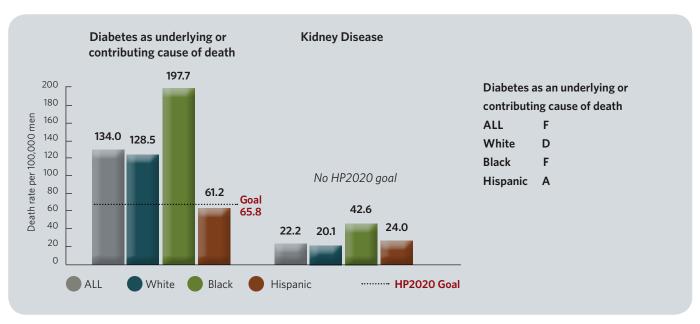
HEART DISEASE AND STROKE (DEATH CERTIFICATE DATA)

- Ischemic heart disease (coronary artery disease) refers to deaths from acute heart attacks.
- Black men have higher rates of death from coronary artery disease and stroke than White and Hispanic men.
- Physical inactivity, a lifestyle with too much sitting, unhealthy eating, and having a belt size 40" or larger increase risk of heart disease and stroke. Undiagnosed or poorly managed high blood pressure, stress, and limited access to primary, specialty and emergency care also contribute to heart disease and stroke deaths.



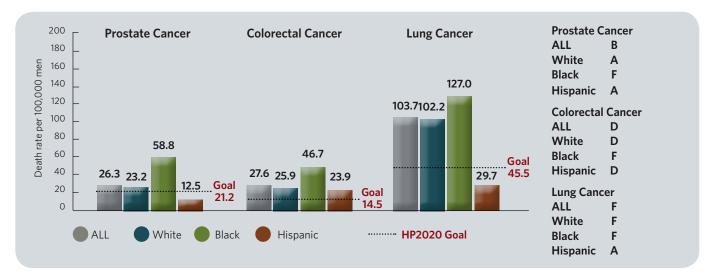
DIABETES AND KIDNEY DISEASE (DEATH CERTIFICATE DATA)

- Diabetes is a group of metabolic diseases in which a person has high blood sugar. Nationally, the numbers of men and women living with diabetes are similar, but men are more than twice as likely to have undiagnosed diabetes, probably because they are less likely to see a doctor regularly for preventive care.
- Black men have higher rates of diabetes than White and Hispanic men.
- Being male also means being more likely to suffer from obstructive sleep apnea, or OSA, a breathing disorder in which the
 airway is blocked when the mouth and throat relax during sleep. OSA is linked to an increased risk for diabetes and can
 also make diabetes harder to control.
- Kidney diseases have several risk factors including poorly controlled diabetes, high blood pressure, high cholesterol and obesity.



CANCER (DEATH CERTIFICATE DATA)

- Cancer is the name for a class of diseases that develop from abnormal cells that grow out of control. Each type of cancer has different causes and requires different treatment.
- Both Black and White men have higher death rates from prostate and lung cancer than Hispanic men or the Healthy People 2020 goal; Black men's death rates from prostate cancer are more than twice that of White men and four times that of Hispanic men.
- High ground levels of naturally occurring radon gas contribute to lung cancer rates in our state. Testing of homes and other buildings where people regularly spend long periods of time is recommended.
- Routine screenings for colorectal cancer are recommended for men over 50 and should start at earlier ages if there is family
 history of this cancer. Screening tests are also available for men at high risk of prostate cancer and should be discussed
 with your health provider. Recently, low-dose CT (computed tomography) screening to detect early stage lung cancer was
 recommended for men and women over age 55 who are current or former smokers with a 30 pack-year history of smoking.



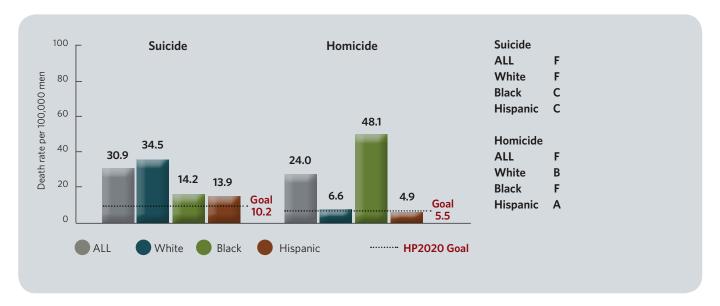
MOTOR VEHICLE ACCIDENTS, UNINTENTIONAL INJURIES AND ACCIDENTAL POISONINGS (DEATH CERTIFICATE DATA)

- When compared with Black and Hispanic men, White men have the highest death rates from both motor vehicle accidents and deaths from other unintentional injuries (which include work-related deaths, drowning, and accidental poisonings from overdoses). Death rates from accidental poisonings due to overdoses from prescription and illegal drugs and other substances are also shown separately to emphasize this growing problem in our state.
- Unintentional deaths from poisonings and overdoses from drugs and other substances have increased significantly from 2007 to 2012 for White men.



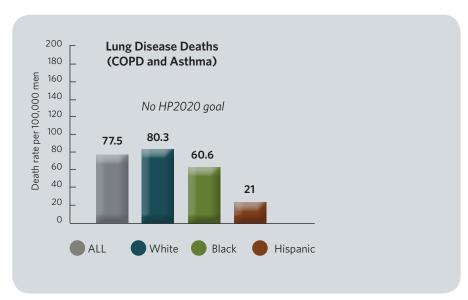
SUICIDE AND HOMICIDE (DEATH CERTIFICATE DATA)

- When compared with Black and Hispanic men, White men have more than twice the death rate from suicide, and all groups of men in Tennessee have rates above the national goal.
- When compared with White and Hispanic men, Black men have more than seven times the death rate from homicide.
- Signs and symptoms of depression in men may look different from depression in women. Routine screening for depression is recommended during regular physical examinations and treatment of depression and other mental and emotional health problems is now covered under new health insurance regulations.



LUNG DISEASE (DEATH CERTIFICATE DATA)

- Lung disease includes chronic obstructive pulmonary disease (COPD) and asthma.
- Lung disease deaths are more prevalent among White men than Black or Hispanic men in our state.
- Tobacco smoking, exposure to secondhand smoke, and exposure to other indoor and outdoor pollutants contribute to high rates of lung disease deaths.
- Health insurance coverage of tobacco cessation counseling and treatments has been expanded for new health insurance plans, and those insured by Medicare and TennCare.

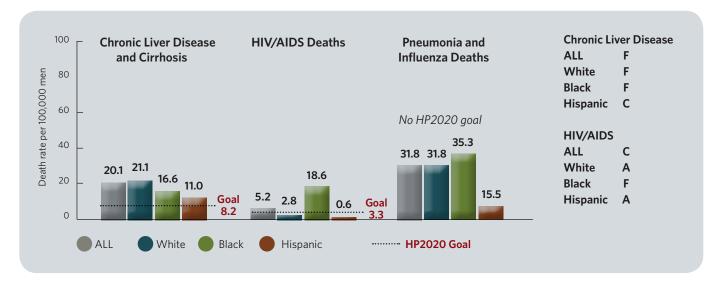




The Tennessee Tobacco Quit Line provides FREE coaching and referrals to help all Tennessee residents quite smoking. You can also check out the program online at www.tnquitline.com.

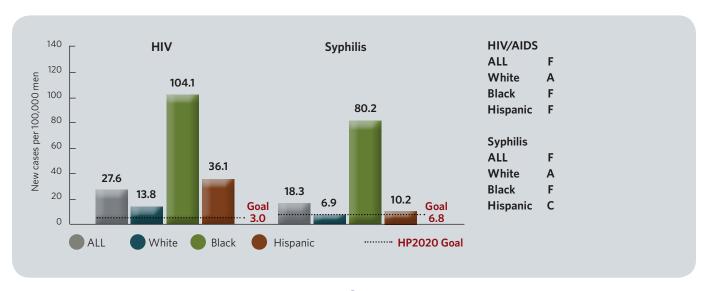
LIVER DISEASE AND INFECTIOUS DISEASE DEATHS (DEATH CERTIFICATE DATA)

- Chronic liver disease is a process that involves ongoing loss of liver function. Risk factors for liver disease include alcohol abuse, obesity, diabetes and viral hepatitis infection, which is why it is included in this section. Vaccines are available against hepatitis type A and B, but not type C. A one-time screening test for hepatitis C infection is now recommended for adults born between 1945 and 1965.
- White, Black and Hispanic men have higher rates of liver disease than the Heathy People 2020 goal.
- When compared to White and Hispanic men, Black men have more than six times the death rate from AIDS.
- Deaths from influenza or pneumonia can be prevented by adult vaccinations. Flu vaccine should be administered every year. Pneumonia vaccine is recommended for all adults 65 or older and those 19 or older with risk factors such as sickle cell disease, diabetes, lung or heart disease.



NEW CASES OF INFECTIOUS DISEASE (DATA FROM MANDATORY LABORATORY REPORTS)

- New cases of HIV infection for Black men are more than seven times that of White men and almost three times that of Hispanic men. Black men also experience higher rates of syphilis infection.
- Although Hispanic men had lower death rates from AIDS than White men in 2012, the rate of new HIV infections is higher in Hispanic men than White men.
- Testing for sexually transmitted infections in at-risk men is now covered under new health insurance regulations as part of routine annual physical examinations.



LIMITATIONS OF THE DATA AND LIMITATIONS OF THE REPORT CARD

- Healthy People 2020, which sets goals for the entire adult population of the United States, does not consider state-specific patterns of health and disease, or suggest specific goals for men. Some goals may seem inappropriately low for men in our state (such as for obesity and physical activity) while others may seem too high.
- Cause of death data provide a picture of the relative severity of diseases, but do not necessarily provide an accurate picture of how many people are living with illnesses and how disabling these conditions can be.
- The change in the Behavioral Risk Factor Surveillance Survey (BRFSS) in 2011 prevented us from being able to make comparisons between the reported 2012 BRFSS data and previous years. Thus, we could not determine whether health behaviors were improving significantly between 2007 and 2012. The BRFSS sample size did not allow us to look separately at White, Black and Hispanic men.
- Men who are incarcerated represent a significant portion of the adult Black male population in Tennessee but their data are not included in the BRFSS survey.
- We report only limited data on mental and emotional health issues for men. Other 2012 data on behavioral health indicators were available from national surveys, but were not readily accessible separately for White, Black and Hispanic men. Given the high rates of suicide, homicide and accidental drug-related deaths, and the differences in these outcomes by race and ethnicity among men, we need to look more closely at indicators of behavioral health.
- Another important social indicator of health that we have tracked in previous years is health insurance coverage. Estimates from the U.S. Census Bureau American Community Survey in 2012 were that one in five adult men (21%) age 18-64 in Tennessee were without health insurance coverage. Since 2012, changes in eligibility and affordability of health coverage as a result of national health reforms have changed the enrollment picture for men in our state. Current coverage estimates will be reported on our website as these data become available.

POTENTIAL STRATEGIES FOR IMPROVING MEN'S HEALTH IN TENNESSEE

- A state-specific plan for men's health improvement is needed to promote and prioritize healthy changes for all men and guide community efforts to reduce the disparities men experience.
- More resources are needed for mental health and substance abuse treatment given the high rates of suicide, homicide, and drug-related overdoses.
- Greater public awareness and community involvement are needed to address the continuing disparities among men in sexually-transmitted infections.
- Increased attention is needed to geographic disparities in health outcomes across the state to better understand how to target health interventions and organize health resources to reduce them.
- Efforts to increase access to primary and specialty healthcare for all men need to be expanded. Men need to become aware of and make use of expanded preventive care, nutrition, and mental health counseling options in healthcare coverage. It is important to monitor the impact of the Affordable Care Act on access to health care coverage and on the organization of community health services.
- Because education is an important determinant of poverty and health, investments in programs like the Tennessee Promise to make post-high school education more accessible also are investments in improving health.
- The commitment of the Governor's Foundation for Health and Wellness to coordinating efforts that focus on improving physical activity, a healthy diet, and reduction of tobacco and e-cigarette use is creating new partnerships, supports and services for Tennesseans trying to make personal lifestyle changes. Continued community engagement in this effort needs to be encouraged.

CONCLUSIONS

There have been notable gains in men's health since the first Tennessee Men's Health Report Card was issued in 2010. Men in our state have seen some areas of steady improvement in health outcomes. Keeping Tennessee's workforce healthy is recognized as essential to sustaining the rapid economic and population growth that our state is experiencing.

Health outcomes for men continue to vary, however, by age, place, race and ethnicity in significant ways. It is important to seek a deeper understanding of the sources of these disparities. It also is important to recognize how changes in access to education, health care, jobs, community resources and faith-based supports, safer recreational spaces and improved environmental quality can reduce these disparities and improve men's health overall.

Monitoring health outcomes – as this Report Card attempts to do – helps to identify where problems are and which communities might need help addressing them. But we cannot forget that behind the numbers and grades and trends are our sons, fathers, brothers, spouses, co-workers and friends. The challenge is how to engage men where they live, work, play and pray in thoughtful dialogue on how to change health outcomes in ways that are sustainable over longer and healthier lifetimes.



Thank You to Sponsors of the 2014 Men's Health Report Card

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