




State of Our State: Health

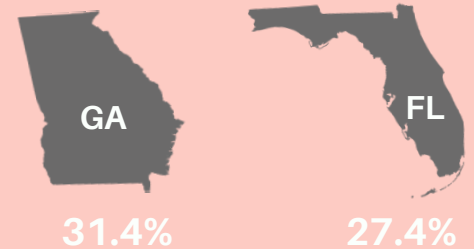
Tennesseans are More Likely to Die from Chronic Diseases than Most Americans

Adults in Tennessee suffer from some of the country's highest rates of the chronic diseases that are the leading causes of preventable death. From rates of obesity (45th) to diabetes (44th) to heart disease (44th), Tennessee consistently ranks toward the bottom of the nation.(i)



Obesity

-  **One in three Tennesseans (34.8%) is obese**, the highest rate of adult obesity in nearly three decades.
-  Just since 2012, obesity in Tennessee has spiked 19%, from 29.2% to 34.8%.
-  Obese adults are more likely to die from heart disease, stroke, type 2 diabetes and certain types of cancer.(ii)

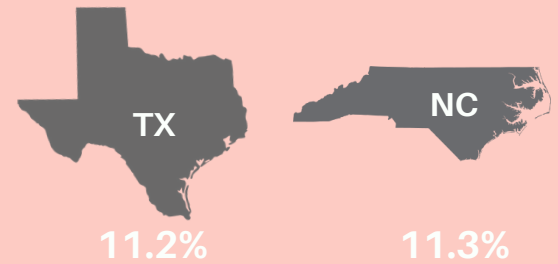
Who is doing better than Tennessee?





Diabetes

-  **More than one in ten Tennesseans (12.7%) has diabetes**, the second highest rate for the state in the last two decades.
-  Diabetes is a Top 10 leading cause of death in Tennessee. **Nearly 1,800 Tennesseans died from diabetes in 2015.**(iii)

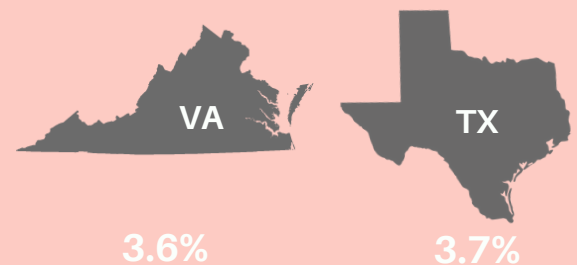
Who is doing better than Tennessee?



Heart Disease

-  **One in twenty Tennesseans (5.4%) has heart disease**, a significant increase from 2016 (4.9%).
-  Heart disease is the leading cause of death in Tennessee. **In 2015, nearly a quarter of all deaths—15,730 Tennesseans—were due to heart disease.**(iv)

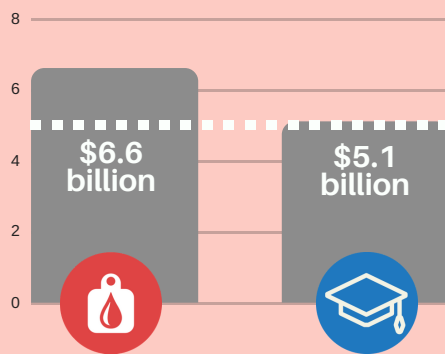
Who is doing better than Tennessee?



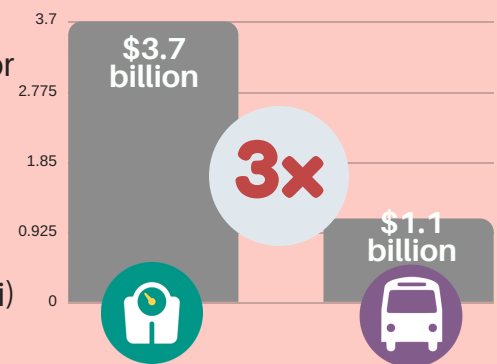
The growing prevalence of obesity, diabetes and heart disease creates a **vicious cycle of chronic disease** for Tennesseans: having one chronic disease means you are more likely to develop another. At the same time, the **conditions and behaviors that lead to these diseases are more prevalent in Tennessee** than in nearly any other state. Smoking (22.1%), high cholesterol (40.0%), high blood pressure (38.5%) and physical inactivity (28.4%) are all common.

The Pervasiveness of Chronic Disease Limits Tennessee's Capacity to Invest in Education and Infrastructure

The annual economic cost of diabetes for Tennessee exceeds the 2018-2019 state budget for K-12 education.(v)



The annual cost of obesity for Tennessee is over three times the 2018-2019 state budget for transportation.(vi)



The Economic Burden of Chronic Disease Is Financially Crippling for Individual Tennesseans

Obese adults in the United States spend **\$1,900 in excess** medical costs per year.(vii)

Heart disease costs Tennesseans **more than \$5,600 per year** in direct medical costs and lost productivity.(viii)



Adults with **diabetes** tend to have **medical expenses over two times higher** than those without diabetes.

On average in the United States, **medical costs for a person with diabetes are about \$13,700 per year**, of which \$7,900 is attributed directly to diabetes.(ix)

How is Tennessee Addressing Obesity, Diabetes and Heart Disease?

Chronic disease prevention through the promotion of healthy lifestyles is a top public health priority.



The Tennessee Department of Health's Project Diabetes funds 20 three-year \$150,000 grant programs and 16 two-year \$15,000 grant programs to promote the development of healthy physical activity and eating habits.(x)



Tennessee has 33 health organizations (including hospitals and community centers) that are CDC-recognized for providing **evidence-based type 2 diabetes prevention programs using a CDC-approved curriculum**.(xi)




The Healthier Tennessee initiative of the Governor's Foundation for Health and Wellness is a public-private partnership that provides web-based tools and resources to help individuals and communities adopt healthy exercise and eating habits, as well as reduce tobacco use.





State law requires early childhood education programs to have healthy eating options and time for physical activity, and K-12 students to participate in physical education. Other policies encourage "complete streets" that facilitate walking and biking and provide funding to support access to healthy foods.

Lessons from Other States: Community-Based Prevention Programs

In Indiana, North Carolina and Louisiana, successful state programs are making a difference at the local level.

 **The Indiana Department of Health community workshop model to promote active living.** Within a year of conducting 15 workshops and follow-up activities with state health agency public officials and community-based organizations across rural and urban localities, communities created active-living advisory committees, adopted new policies and programs and designed new funding allocations to expand active-living initiatives.(xii)

 **The Eat Smart, Move More (ESMM) initiative in North Carolina.** This partnership between the state's public health department and over 90 community organizations has succeeded in changing participant behavior to **improve weight, blood pressure, healthy food consumption and physical activity**. Its success hinges on providing local organizations not only with funding but also with evidence-based strategies and long-term policy guidance.(xiii)

 **Louisiana's Partnership for an Active Community Environment**, a project of the Prevention Research Center at Tulane University, collaborated with neighborhood-based groups in New Orleans to install **walking paths and playgrounds to create environments that incentivize greater physical activity** among low-income African American communities.(xiv)

What are the Next Steps in Chronic Disease Prevention for Tennessee?

*Prioritizing investment in **community-based prevention** would save Tennessee millions.* (xv)

- **Investing \$10 per person** in community-based chronic disease prevention programs would **save the state \$351 million over 5 years**, a return of almost \$6 for every \$1 invested.

*The state should follow the lead of **Healthy Tennessee** in its efforts to educate and empower communities about the importance of preventive health.*

- Healthy Tennessee promotes **public-private partnerships** and has worked with communities across Tennessee to provide **health education and community training** through health fairs and health screenings. The organization has also taken the lead role in coordinating the efforts of community health nonprofit organizations across the state through statewide symposiums.

*Expand statewide policies and programs like the **Tennessee Livability Collaborative** to **facilitate physical activity and access to healthy foods**.*

- Policymakers should place greater emphasis on developing **community infrastructure environments that prioritize greenways and sidewalks** to encourage physical activity.
- State and local government should enact policies that effectively **address food deserts** across the state to increase access to healthy food options.

NOTES AND REFERENCES

- (i) All data related to health rates and state rankings were obtained from the U.S. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016.
- (ii) U.S. Centers for Disease Control and Prevention, "Adult Obesity Facts," (March 5, 2018), *available at* <https://www.cdc.gov/obesity/data/adult.html>.
- (iii) U.S. Centers for Disease Control and Prevention, National Vital Statistics System, "Deaths, Percent of Total Deaths, and Death Rates for the 15 Leading Causes of Death in 10-year Age Groups, by Race and Sex: United States, 1999-2015," (May 17, 2017), *available at* <https://www.cdc.gov/nchs/nvss/mortality/lcwk2.htm>.
- (iv) Ibid.
- (v) \$4.9 billion in direct medical costs and \$1.7 billion in costs related to lost productivity. See American Diabetes Association, "The Burden of Diabetes in Tennessee," (April 3, 2018), *available at* <http://main.diabetes.org/dorg/assets/pdfs/advocacy/state-fact-sheets/Tennessee2018.pdf>. See also State of Tennessee, "The Budget, Fiscal Year 2018-2019," *available at* <https://www.tn.gov/content/dam/tn/finance/budget/documents/2019BudgetDocumentVol1.pdf>.
- (vi) Justin G. Trogon, et al., "State- and Payer-Specific Estimates of Annual Medical Expenditures Attributable to Obesity," *Obesity* (2012) 20, 214-220, *available at* <https://onlinelibrary.wiley.com/doi/abs/10.1038/oby.2011.169>.
- (vii) David D. Kim and Basu Anirban, "Estimating the Medical Care Costs of Obesity in the United States: Systematic Review, Meta-Analysis, and Empirical Analysis," *Value in Health* (2016) 9, 602-613, *available at* [https://www.valueinhealthjournal.com/article/S1098-3015\(16\)00055-3/fulltext?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1098301516000553%3Fshowall%3Dtrue](https://www.valueinhealthjournal.com/article/S1098-3015(16)00055-3/fulltext?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1098301516000553%3Fshowall%3Dtrue).
- (viii) The Sycamore Institute, "The Economic Impact of Chronic Disease in Tennessee: The Excess Cost of Diabetes, Hypertension, and Cardiovascular Disease to Tennessee Taxpayers and Businesses," (November 15, 2017), *available at* <https://www.sycamoreinstitutetn.org/2017/11/15/cost-chronic-disease-tennessee/>.
- (ix) American Diabetes Association, "Economic Costs of Diabetes in the U.S. in 2012," *Diabetes Care* (2013) 36, 1033-1046, *available at* <http://care.diabetesjournals.org/content/36/4/1033>.
- (x) Tennessee Department of Health, "Project Diabetes," *available at* <https://www.tn.gov/health/health-program-areas/mch-diabetes/d/project-diabetes.html>.
- (xi) Tennessee Department of Health, "Diabetes Prevention," *available at* <https://www.tn.gov/health/health-program-areas/mch-diabetes/d/diabetes-prevention-program.html>.
- (xii) Peter J. Fritz, et al., "Using a Community Workshop Model to Initiate Policy, Systems, and Environmental Change That Support Active Living in Indiana 2014-2015," *Preventing Chronic Disease* (August 2017) Volume 14, *available at* https://www.cdc.gov/pcd/issues/2017/16_0503.htm.
- (xiii) Carolyn Dunn, et al., "Delivering a Behavior-Change Weight Management Program to Teachers and State Employees in North Carolina," *American Journal of Health Promotion* (2013) 27, 378-383, *available at* <http://journals.sagepub.com/doi/10.4278/ajhp.120221-QUAN-101>.
See also subsequent reviews of ESMM success by Carolyn Dunn, "Development of a Movement and State Plan for Obesity Prevention, Eat Smart, Move More North Carolina," *Journal of Nutrition Education and Behavior* (2013), 45, 690-695; David Gardner, "Eat Smart, Move More North Carolina: An Obesity Prevention Movement," *North Carolina Medical Journal* (2014) 75, 407-412.
- (xiv) Jeanette Gustat, et al., "Effect of Changes to the Neighborhood Built Environment on Physical Activity in a Low-Income African American Neighborhood," *Preventing Chronic Disease* (2012) Volume 9, *available at* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3359102/>.
- (xv) Trust for America's Health, "Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities," (February 2009), *available at* <http://healthyamericans.org/reports/prevention08/Prevention08.pdf>.

