

North Carolina's Guide to Prevention and Management of Diabetes **3rd Edition**



What Else Can North Carolinians Do Together?



MANAGE WEIGHT | LIVE TOBACCO FREE | PARTICIPATE IN LIFESTYLE CHANGE PROGRAMS
PARTICIPATE IN DIABETES EDUCATION | ENGAGE IN TREATMENT PLAN | GET ADEQUATE SLEEP

What Else Can North Carolinians Do Together?

Given the enormity of the diabetes epidemic and the number of people at high risk of developing diabetes, approaches aimed exclusively at individual behavior change are inadequate. Improvements in policy and environmental factors that enable and reinforce healthy eating and active lifestyles are needed for widespread and sustained behavior change and overall impact.¹²⁴

All stakeholders highlighted in this Guide have a role in the coordination of advocacy, formulating, and implementing policies that benefit our society. The State of North Carolina has a special responsibility leveraging these efforts. Here we will call out just a few examples of what North Carolinians can do to reduce the burden of diabetes in our state.

- Living Tobacco Free
- Improving Nutrition and Reducing Obesity
- Improved health coverage for all
- Offer health screenings at work, particularly on diabetes point days (e.g., Diabetes Alert Day, National Diabetes Month) including screenings for complications (eye, hearing, feet)
- Cover continuous glucose monitors for all people with diabetes, regardless of type of diabetes, as a co-pay instead of as durable medical equipment

Living Tobacco Free

People who smoke are 30% to 40% more likely to get type 2 diabetes than people who don't smoke. The more you smoke, the higher your risk; and smokers with diabetes are more likely to have serious health problems.¹²⁵

Living tobacco free is a key public health strategy to prevent and manage the epidemic of diabetes. It is extremely important for people to stop smoking, but prevention is critical, and a multi-component approach is required to prevent people from starting to use tobacco in the first place. According to the **Surgeon General's report on Smoking and Tobacco**, nearly all tobacco use begins during youth and young adulthood. Policies and programs that make tobacco use more difficult and less accepted can help prevent young people from using tobacco.

Policies that change the environment to support and encourage a tobacco-free life (cigarette smoking, vaping, and chewing) are very effective in smoking prevention. For instance, making tobacco products less affordable, restricting tobacco marketing, banning smoking in public places and requiring labeling on tobacco packages are some policies that have been successful in deterring youth from starting tobacco use.¹²⁵ Additionally, mass reach health communication interventions, primarily television broadcasts, have proven effective to reduce initiation among young people.

The most effective strategies to prevent tobacco use should combine elements such as use of evidence-based curricula and policy changes implemented in a variety of settings such as work, home, school, health care, and in public places. Smoking cessation can be one of the most effective lifestyle interventions in limiting the burden of diabetes. Studies have reported that smoking cessation reduces the risk for diabetes to the level of non-smokers after five years of cessation for women and 10 years for men. Smoking cessation improves blood sugar management by increasing insulin reception and reducing the risk of diabetes-related complications.¹²⁶ The following strategies have proven effective to help smokers quit:

- Advice and assistance on quitting provided by a health care provider.
- Individual, group or telephone counseling.
- Behavioral therapies.
- Treatment with more one-on-one contact and more intensity.
- Programs that deliver treatments using mobile phones.
- Medications: over-the counter and prescription.

Secondhand smoke, also known as passive smoking, is the inhalation of tobacco smoke by those other than the actual (active) smoker. It is linked to many of the same diseases as smoking including lung cancer, respiratory disease and cardiovascular disease. Studies have reported that the incidence of type 2 diabetes increases with exposure to secondhand smoke during childhood and adulthood.¹²⁷ Smoking bans and increased smoke-free environments may prove to be an important approach in reducing the incidence of type 2 diabetes. Policies that prohibit smoking indoors reduce exposure to secondhand smoke, reduce the number of cigarettes smoked each day and increase the number of smokers who quit.

Improving Nutrition and Reducing Overweight and Obesity

North Carolina has a plan to address overweight and obesity by advocating how we balance how we eat, drink and move called ***North Carolina's Plan to Address Overweight and Obesity***.¹¹² It outlines eight core behaviors, including those at the public policy and environmental levels that would reduce overweight and obesity: move more; eat more healthy food, less junk and fast food; eat more fruits and vegetables; drink more water, drink fewer sugar sweetened beverages; sit less; start and continue to breastfeed; get enough sleep; and manage stress.

Improved Health Coverage for All

North Carolina expanded who can get Medicaid on December 1, 2023, making more than 600,000 North Carolinians age 19 through 64, with incomes up to 138% of the Federal Poverty Level, eligible to receive benefits. Expansion was implemented in conjunction with other major delivery system reforms and activities to address social determinants of health and reduce disparities. Medicaid health coverage is comprehensive and reduces barriers for people with chronic diseases like diabetes. It includes doctor visits, check-ups, emergency care, hospital services, maternity and postpartum care, vision and hearing services, prescription drugs, behavioral health, preventive and wellness services, dental care, medical-related devices and more. There is no monthly fee and copays are never more than \$4. Medicaid expansion has been shown to improve access to care, treatment and outcomes for cancer, chronic conditions, sexual and reproductive health, and behavioral health. Studies also point to evidence of reduced racial disparities in coverage and access, reduced mortality, and improvements in economic impacts for providers (particularly rural hospitals) and economic stability for individuals.¹²⁸

North Carolina has already seen an increase in access to care and medications, especially in rural areas.

We Will Be Successful When We Reach Our Goals

Accomplishing the following overarching goals will reduce the burden of diabetes in our state:

- Support efforts to find a cure for diabetes
- Lower the risk of pregnant women developing gestational diabetes so they and their babies can live healthy lives
- Increase efforts to reduce the incidence and prevalence of diabetes, including supporting the development and implementation of DPP programs across the state
- Decrease the rate of deaths directly and indirectly associated with diabetes
- Increase access to health care and personal care resources to reduce the risk of diabetes-related complications, particularly through DSMES programs
- Ensure that community stakeholders of all types are engaged and take action to create environments that support diabetes prevention as well as adequate education and care for those with diabetes including supporting behaviors that promote
 - Healthy weight
 - Healthy eating
 - Regular physical activity
 - Tobacco free
 - Adequate sleep



While there are a number of measures used to indicate changes in the burden of diabetes in North Carolina and monitor our progress toward our goals, collecting baseline and periodic outcome data consistently presents a number of challenges and will have to be left up to others.

We may however be able to assess the impact of this guide by documenting and measuring

- Presentations about and distributions of the guide at state conferences (e.g., NC Public Health Association, NC Primary Care Conference, NC Chronic Disease Conference, NC American Indian Unity Conference) and to state policymakers
- Distribution of print versions of the guide to stakeholders, particularly to those who work with populations at high risk for diabetes and its complications
- Number of times electronic versions of the guide are accessed via the NC DAC website and social media page
- Results of efforts of NC DAC members to advocate for guide implementation
- Communication and feedback on a regular basis at NC DAC meetings to ensure the guide is being effectively implemented

We will also know we are being successful in our goal of reducing the burden of diabetes when:

- People at risk for diabetes change behaviors enough to prevent progression of prediabetes to diabetes
- Everyone uses person-centric, affirmative, enabling, non-judgmental language when dealing with diabetes
- We prevent complications of all types, for those with diabetes, especially
 - Heart disease
 - Stroke
 - Kidney disease, including dialysis
 - Blindness
 - Amputation
 - Hearing loss
 - Risk of falls
- Everyone concerned about diabetes has access and affordability to
 - Medical treatment
 - Medications including insulin
 - Education
 - Diabetes Technology
- Community stakeholders of all types are engaged and take action to create environments that support diabetes prevention as well as adequate education and care for those with diabetes including supporting healthy behaviors that promote
 - Healthy weight
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