



CYNTHIA TALLEY  
Cynthia has type 2 diabetes

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## USPSTF publishes draft diabetes screening recommendation

On October 6, the United States Preventive Services Task Force (USPSTF) published a draft recommendation statement on screening for abnormal glucose and type 2 diabetes. The Grade B recommendation states, “The USPSTF recommends screening for abnormal blood glucose and type 2 diabetes mellitus in adults who are at increased risk for diabetes.”<sup>1</sup> This recommendation updates the 2008 diabetes screening guidelines, which recommended screening only asymptomatic adults with hypertension.<sup>2</sup>

The USPSTF defines the risk factors for abnormal glucose—or what is commonly called prediabetes—and type 2 diabetes as<sup>1</sup>:

- 45 years of age or older
- Overweight or obese
- A first-degree relative with diabetes
- Women with a history of gestational diabetes or polycystic ovarian syndrome
- Certain racial/ethnic minorities, including African Americans, American Indians/Alaska Natives, Asian Americans, Hispanics/Latinos, and Native Hawaiians/Pacific Islanders

**“The USPSTF recommends screening for abnormal blood glucose and type 2 diabetes mellitus in adults who are at increased risk for diabetes.”<sup>1</sup>**

The USPSTF reviewed a number of studies on lifestyle interventions, including the Diabetes Prevention Program, and concluded that lifestyle modifications focusing on physical activity, nutrition, and healthy eating behaviors can prevent or delay progression to type 2 diabetes.<sup>1</sup> The draft guideline states that these interventions are “the first line of therapy for the prevention of [impaired fasting glucose], [impaired glucose tolerance], and diabetes.”<sup>1</sup>

For the first time, the guideline recognizes hemoglobin A1C as a screening option, noting, “Because hemoglobin A1C measurements do not require a fasting state, it is more convenient than using fasting plasma glucose or the oral glucose tolerance test.”<sup>1</sup>

You can access the draft recommendation [here](#).

# new & news in diabetes policy

## Rates of diabetes begin to plateau, mirroring obesity trends

A recent study published in the *Journal of the American Medical Association* examined the long-term trends in diabetes prevalence and incidence among adults in the United States from 1980 to 2012. The data suggest that rates of diabetes in the United States have begun to plateau after 2008, following rapid doubling from 1990 to 2008. The authors point to the recent leveling off of obesity rates as a primary reason for the concurrent plateau in diabetes rates.<sup>3</sup>

The researchers used cross-sectional data from the National Health Interview Survey (NHIS) over the time period 1980 to 2012 to estimate trends in diabetes prevalence, incidence, and body mass index (BMI). The NHIS gathered self-reported data from personal household interviews of the noninstitutionalized, civilian, US population aged 20 to 79 years.

**While the overall rates of diabetes were found to plateau, the authors note that rates in certain subpopulations may be exceptions to this trend and stress the importance of further diabetes prevention efforts.<sup>3</sup>**

- The prevalence of diabetes increased significantly among young adults aged 20 to 44 years over this time period
- The prevalence of diabetes in Americans with a high school education or less increased at a higher rate than those with higher levels of education
- The incidence of diabetes increased at a greater rate among non-Hispanic black and Hispanic adults than among non-Hispanic white adults

The authors note that the data on diabetes diagnoses are self-reported and therefore do not capture cases of undiagnosed diabetes, which is predicted to be nearly 28% of all diabetes cases according to the Centers for Disease Control and Prevention.<sup>4</sup>

You can access the full study [here](#).



SYLVESTER LAWRENCE  
Sylvester has type 2 diabetes

# new & news in diabetes policy

## Intensive lifestyle interventions reduce care utilization and costs

Intensive lifestyle interventions can be effective in reducing hospitalizations, medication use, and health care costs for overweight and obese adults with type 2 diabetes, according to results from a study published in *Diabetes Care*.<sup>5</sup>

This study used data from the Look AHEAD trial, which examined the impact of intensive lifestyle interventions (ILI) in 5,121 overweight and obese adults with type 2 diabetes between the ages of 45 to 76. Study participants were randomly assigned to an ILI targeting weight loss or to a control group that received limited diabetes support and education (DSE). The ILI consisted of weekly group and individual face-to-face meetings with trained interventionalists. Each ILI participant was assigned goals for calorie and dietary fat intake, as well as physical activity targets. The DSE participants attended 3 group sessions per year on diabetes self-care over the 4 years of the

study. Health care utilization of participants was tracked throughout.

Specific study findings include<sup>5</sup>:

- ILI participants saw an 11% reduction in hospitalizations and a 15% reduction in average annual days spent in the hospital
- ILI participants took 14% fewer diabetes medications than the DSE group
- Average per-patient spending on diabetes drugs was 17% lower among ILI participants

You can access the full study [here](#).

**“The savings in total medical care costs associated with ILI accrued gradually over time, resulting in a 10-year difference of \$5,280.”<sup>5</sup>**

## Study: Type 1 diabetes rate increases in non-Hispanic white youth

Findings from a recent study published in the journal *Diabetes* indicate that the rate of new diagnoses of type 1 diabetes in non-Hispanic white youth increased significantly from 2002 to 2009 in most age groups.<sup>6</sup>

The study included data on more than 2 million children and adolescents from across the United States from the SEARCH for Diabetes in Youth registry. The SEARCH for Diabetes in Youth study is a national multicenter study that seeks to develop a deeper understanding of type 1 and type 2 diabetes among children and adolescents in the United States. The study is funded by the Centers for Disease Control and Prevention and the National Institute of Diabetes and Digestive and Kidney Diseases at the National Institutes of Health.

In this database, researchers identified 5,842 non-Hispanic white youth, aged 19 years and

younger, who were newly diagnosed with type 1 diabetes over the 8-year study period. They found that from 2002 to 2009, the rate of type 1 diabetes rose from 24.4 per 100,000 youth in the first year of the study to 27.4 per 100,000 youth in the final year of the study.<sup>6</sup>

Other study findings include<sup>6</sup>:

- The increases were most pronounced among children aged 5 to 9 years and aged 10 to 14 years and with smaller increases among those aged 15 to 19 years
- There was no increase in incidence among children aged 4 years and younger
- The rate of increase was slightly higher for boys than for girls

# new & news in diabetes policy

## Impact of age at diabetes diagnosis and disease duration on complications

A study published in *Diabetologia* examined the relationship between age at diagnosis, diabetes duration, and risk of microvascular and macrovascular events.

The authors conclude "In patients with type 2 diabetes, age or age at diagnosis and diabetes duration are independently associated with macrovascular events and death, whereas only diabetes duration is independently associated with microvascular events, and this effect is greater in the youngest patients."<sup>7</sup>

This study used data from the Action in Diabetes and Vascular Release Controlled Evaluation (ADVANCE) randomized control trial, which included 11,140 individuals over the age of 55 years diagnosed with type 2 diabetes. Participants were randomly assigned to an intensive glucose control regimen or a standard glucose control regimen to assess the outcomes of macrovascular events, microvascular events, and death. Macrovascular events included cardiovascular death or non-fatal myocardial infarction or stroke, while microvascular events included new or progressing nephropathy.

Major findings include<sup>7</sup>:

- The researchers found that for a 5 year increase of age at diabetes diagnosis, the multiple adjusted risk of macrovascular events increased by 33% and the risk of all-cause death increased by 56%
- For every 5 year increase in diabetes duration, the risk of macrovascular events increased by 13% and the risk of death by 15%
- For microvascular events, age at diagnosis was not associated with increased risk. However, every 5 year increase in diabetes duration increased the multiple adjusted risk of microvascular events by 28%
- An interesting interaction between age at diagnosis and diabetes duration was discovered, where for the same duration of diabetes, the risk for microvascular events was greater in those who were younger rather than older at time of diagnosis

According to the authors, "Clearly, when type 2 diabetes occurs in younger people, good glycemic control appears to be less often achieved."<sup>7</sup> They contend, "These results support the need for more intensive surveillance and glycemic control to prevent major microvascular complications in younger people living with type 2 diabetes."<sup>7</sup>

# new & news in diabetes policy

## Knowledge of glycemic status impacts dietary patterns

A recent study published in *Diabetes Care* looked at the relationship between diabetes or prediabetes diagnosis and macronutrient intake. The researchers found that “knowledge of glycemic status may favorably affect some dietary patterns for people with diabetes.”<sup>8</sup> The results among individuals aware of their diabetes are consistent with the ADA recommendations of lower intake of sugar and carbohydrates and greater consumption of protein.<sup>8</sup>

The researchers used data from the 2005 to 2010 National Health and Nutrition Examination Surveys, which are representative of the US civilian population. The data used for this analysis included both self-reported diabetes diagnoses, dietary recalls, and also physical examinations.

Some other findings include<sup>8</sup>:

- More women than men were aware of their diabetes or prediabetes status
- For both men and women, those who were aware of their diabetes consumed less sugar and more protein, on average
- For both men and women, awareness of their prediabetes status had no impact on their diet

- Individuals who had visited a dietitian or diabetes nurse educator within the past year consumed fewer calories than individuals who did not have a recent visit

The authors recommend “more intensive identification and referral of adults with prediabetes to primary prevention that addresses and promotes changes to dietary habits and consumption.”<sup>8</sup>

The authors also recommend ongoing education and nutrition therapy for patients with diabetes and those recently diagnosed because nutrition recommendations have changed over time. These efforts would promote dietary modification and promote glycemic management.<sup>8</sup>



CHERYL ANN BORNE  
Cheryl has type 2 diabetes

**“Because the proportion aware of their prediabetes status was quite low (11%) and those with prediabetes, on average, were obese, diabetes screening and primary prevention counseling could be improved because only one-half of the present study participants with prediabetes reported having been tested for diabetes in the past 3 years.”<sup>8</sup>**

# new & news in diabetes policy

## CDC awards nearly \$212 million in grants to address chronic disease

On September 25, Health and Human Services Secretary Sylvia Burwell announced that the Centers for Disease Control and Prevention (CDC) was awarding nearly \$212 million in grants to address chronic disease. There were a total of 193 grants awarded directly to states, cities or counties, and tribal, national, or community organizations.<sup>9</sup>

The grants are partially funded by the Affordable Care Act (ACA) and aim to reduce the prevalence rates and the rates of death and disability of chronic diseases, which could ultimately also lower health care costs. The grants primarily focus on tobacco use, obesity, diabetes, heart disease, and stroke, and are especially sensitive to populations most impacted by these diseases.

The awards fall into 6 major categories, listed below with the number of awards and total award amount per category. Overall, 28 awards, totaling \$35 million, will be going to the state of California, the most of any state.<sup>9</sup>

Program Areas	Number of Awards	Total Amount
1. State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease	21	\$69.5 million
2. Partnerships to Improve Community Health (PICH)	39	\$49.3 million
3. Racial and Ethnic Approaches to Community Health (REACH)	49	\$34.9 million
4. National Implementation and Dissemination for Chronic Disease Prevention	5	\$9.4 million
5. A Comprehensive Approach to Good Health and Wellness in Indian Country	22	\$11.3 million
6. Programs to Reduce Obesity in High-Obesity Areas	6	\$4.2 million
7. State Public Health Actions Enhanced Awards, FY 2014	51 (50 states and DC)	\$33 million

“These grants will empower our partners to provide the tools that Americans need to help prevent chronic diseases like heart disease, stroke, and diabetes,” said Health and Human Services Secretary Sylvia M. Burwell.<sup>10</sup>

You can access the full list of awards [here](#).

# new & news in diabetes policy

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