

# Diabetes: Risk Factors and Prevention

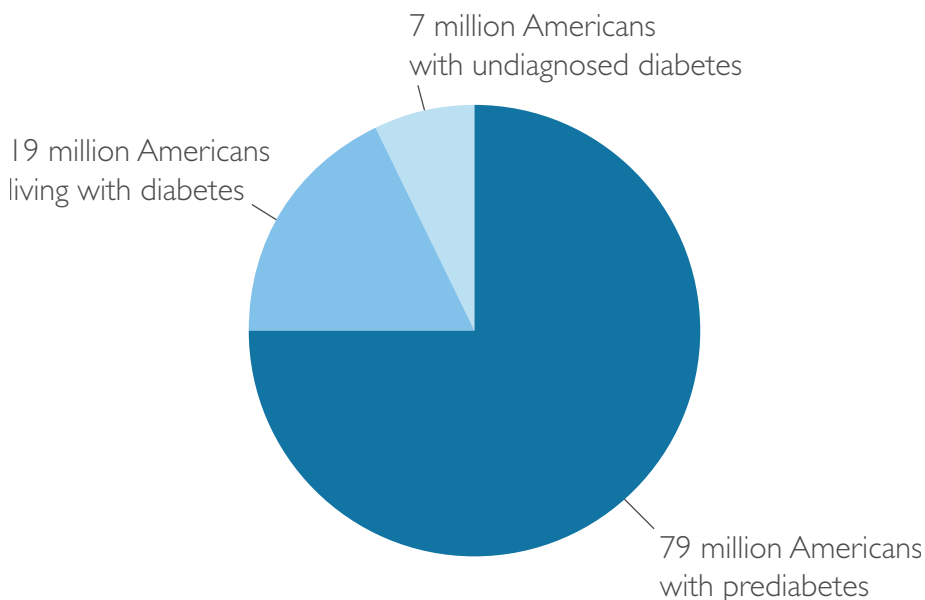


## Who is affected and What can be done?

With nearly 26 million people diagnosed within the US, 2 million new cases each year, and a total cost for 2012 at \$245 billion, diabetes is a major threat to the health of the nation.<sup>1,2</sup> Screening adults at risk for type 2 diabetes, which represents about 90-95% of all diabetes cases, is the entry point for prevention and could alter the course of the US diabetes epidemic.<sup>3</sup>

- First, screening at-risk adults can identify people with prediabetes, who can take personal responsibility for their health and make modest lifestyle changes that in many cases can prevent or delay the onset of type 2 diabetes.
- Second, screening can also identify adults who have diabetes but don't know it, to allow for earlier intervention that can help prevent or delay the devastating and very costly complications of diabetes.

## Americans Affected by Diabetes



## A Gateway

Diabetes is a gateway disease and is the leading cause of kidney failure, lower limb amputations and new cases of blindness among adults in the US! In addition, patients with diabetes are also at an increased risk of cardiovascular complications, including heart attack, stroke, and chronic angina.<sup>1,4</sup>

### Background

Diabetes affects nearly 26 million Americans, 7 million of which are undiagnosed.<sup>1</sup> Another 79 million individuals are believed to have prediabetes.<sup>2</sup> In 2010, 1.9 million people aged 20 years or older were newly diagnosed with diabetes.<sup>1</sup>

Should current trends continue the CDC estimates that more than 1 in 3 adults will have diabetes by 2050.<sup>1</sup>

## 1.9 Million

People aged 20 or older were newly diagnosed with diabetes in 2010.<sup>1</sup>

## \$245 Billion

The total healthcare cost of diabetes treatment in 2012.<sup>2</sup>

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## Type 2 Diabetes Risk Factors



### Prediabetes:

Prediabetes occurs when a person has elevated blood sugar levels that are not high enough for a diagnosis of diabetes.<sup>4</sup> Without treatment, people with prediabetes often develop type 2 diabetes within 7–10 years.<sup>1</sup> In a survey by the CDC between 2005–2008, 35% of US adults aged 20 years or older and 50% of those aged 65 years or older had prediabetes (based on fasting glucose levels).<sup>4</sup>



### Obesity and Physical Inactivity:

Two out of three Americans are now overweight or obese. Obesity is strongly associated with insulin resistance and risk for type 2 diabetes. In addition, individuals who engage in physical activity less than three times a week are at a higher risk for type 2 diabetes.



### Family History:

The diagnosis of a parent or sibling increases chances of developing type 2 diabetes.<sup>5</sup> For example those with a family history of diabetes are two to six times more likely to develop type 2 diabetes. Family history is also related to risk for prediabetes, especially for people who are not obese.<sup>6</sup>



### Age:

The risk of becoming diagnosed with diabetes increases greatly with age. Of all US residents aged 65 years and older, 10.9 million or 26.9% had diabetes in 2010.<sup>1</sup> In addition, 50% of Americans aged 65 or older have prediabetes.



### Race/Ethnicity:

African Americans, Hispanic/Latino Americans, American Indians and some Asian Americans and Pacific Islanders are at particularly high risk for type 2 diabetes. Compared to whites, risks for diabetes in African Americans, Hispanics, and Native Americans are approximately 2, 2.5, and 5x greater respectively.<sup>1</sup>



### High Blood Pressure:

Having blood pressure over 140/90mm Hg is linked to an increased risk of type 2 diabetes.<sup>1</sup>



### Gestational Diabetes:

Women who develop diabetes during pregnancy have a 35% to 60% chance of developing type 2 diabetes within 10–20 years.<sup>1</sup> Rates of gestational diabetes are estimated to range from 7% to as high as 18% of pregnancies.<sup>7</sup> In addition, children who are born to mothers with gestational diabetes are at a higher risk of developing type 2 diabetes.<sup>7</sup>

# Diabetes: Risk Factors and Prevention



## Prevention is Key

**D**iabetes risk factors can be reduced through preventive measures, such as making lifestyle changes to improve health. For individuals with prediabetes, research indicates that losing 5 to 7% of body weight and getting at least 150 minutes of physical activity each week can delay or prevent the onset of type 2 diabetes within 5 years.<sup>5</sup>

Lifestyle change programs such as the CDC's National Diabetes Prevention Program (National DPP) are becoming increasingly popular. Lifestyle coaches trained in the National DPP protocol help participants improve their food choices, increase their physical activity, and learn coping skills for weight management.

## What Can Congress Do?

Congress can help by supporting diabetes prevention programs as well as legislation that would help improve health outcomes for people with diabetes:

- Cosponsor National Diabetes Clinical Care Commission Act of 2013 (H.R. 1074/S.539). Legislation that helps 39 federal agencies and the diabetes community better communicate.
- Cosponsor the Medicare Diabetes Prevention Act (H.R. 962/S. 452), which would make the National DPP a covered benefit for Medicare beneficiaries.
  - Commit \$20 million to expand the National DPP, which operates in 32 states.
  - Funds would provide access to thousands of new participants through CDC, YMCA, and various public-private partnerships.
- Cosponsor the Gestational Diabetes Act (GEDI), H.R. 1915/ S. 907, which would help fight the alarming trend of rising rates of gestational diabetes through improved detection, prevention, research and coordination.

**For more information on the solutions to diabetes, please see the Diabetes Advocacy Alliance Solutions Fact Sheet at [diabetesadvocacyalliance.org](http://diabetesadvocacyalliance.org)**

### Citations

1. Centers for Disease Control and Prevention, National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011, at [http://www.cdc.gov/diabetes/pubs/pdf/ndfs\\_2011.pdf](http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf)
2. American Diabetes Association. Economic costs of diabetes in the US in 2012. *Diabetes Care*. 2012;36(4): 1033-1046.
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6. Wagner R, Thorand B, Osterhoff M, et al. Family history of diabetes is associated with higher risk for prediabetes: a multicentre analysis from the German Center for Diabetes Research. *Diabetologia*. DOI 10.1007/s00125-013-3002-1.
7. National Diabetes Education Program. Diabetes risk after gestational diabetes. Available at [http://ndep.nih.gov/media/fs\\_post-gdm.pdf](http://ndep.nih.gov/media/fs_post-gdm.pdf).

The **vision** of the DAA is:

To influence change in the US health care system to improve diabetes prevention, detection and care and to speed the development of pathways to cures for diabetes.

The **mission** of the DAA is:

To unite and align key diabetes stakeholders and the larger diabetes community around key diabetes-related policy and legislative efforts in order to elevate diabetes on the national agenda.