

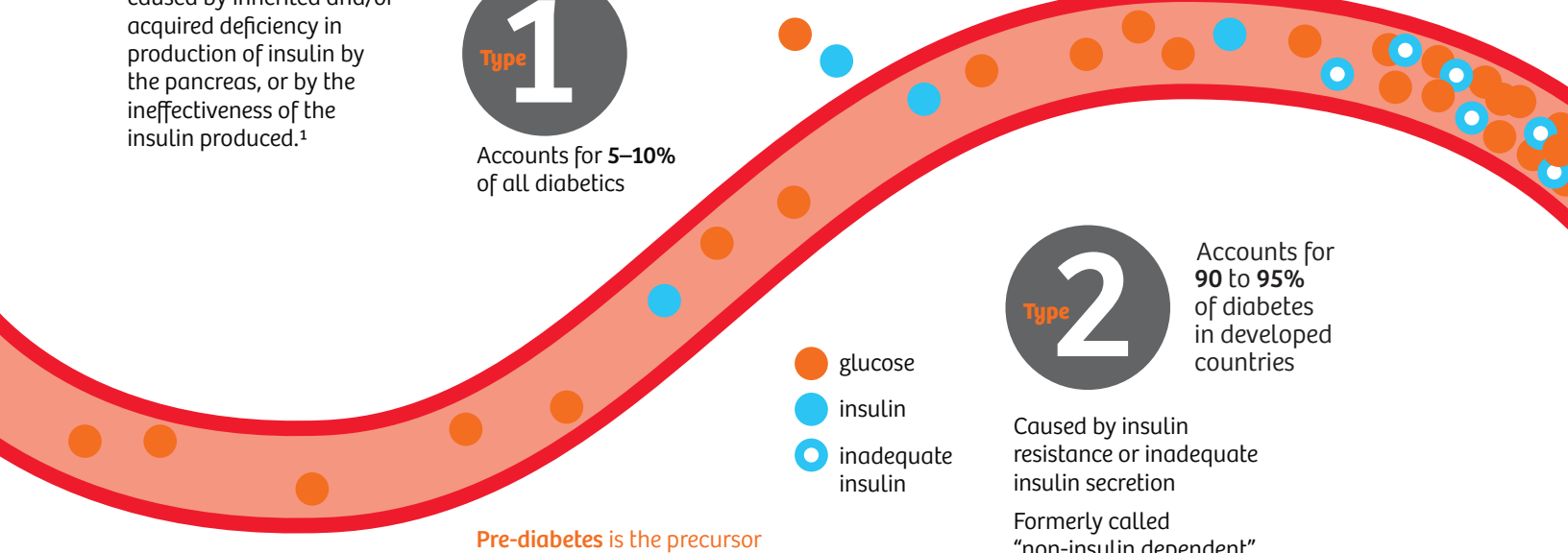
# What is diabetes?

Diabetes is a chronic disease caused by inherited and/or acquired deficiency in production of insulin by the pancreas, or by the ineffectiveness of the insulin produced.<sup>1</sup>

**1**  
Type  
Accounts for 5–10% of all diabetics

Insulin normally pairs with glucose as it gets absorbed by your cells.

Inadequate insulin leads to elevated glucose levels in the bloodstream.



**2**  
Type  
Accounts for 90 to 95% of diabetes in developed countries

Caused by insulin resistance or inadequate insulin secretion

Formerly called "non-insulin dependent" or "adult-onset" diabetes

Pre-diabetes is the precursor stage before diabetes mellitus in which not all of the symptoms required to diagnose diabetes are present, but blood sugar is abnormally high.<sup>2</sup>

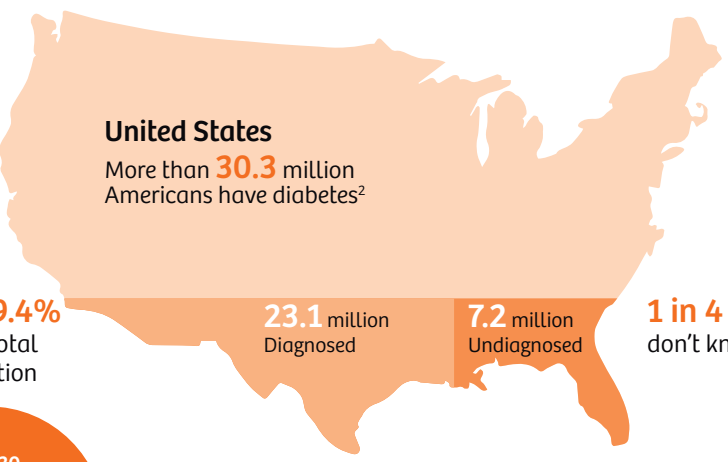
Sources:  
1. World Health Organization, <http://www.who.int/mediacentre/factsheets/fs138/en/>  
2. <https://en.wikipedia.org/wiki/Prediabetes>

## Prevalence of diabetes

More than **415 million** people around the world have diabetes.<sup>1</sup>



**46.5%** don't know it.<sup>1</sup>  
By **2040**, it's projected that **1 in 10** people will have diabetes.<sup>1</sup>



**Top 10 Countries with the Greatest Prevalence of Diabetes, by percentage of population ages 20-79 (2015)<sup>1</sup>**

Nauru	24.1%
Marshall Islands	24.1%
Mauritius	22.3%
Palau	20.9%
Saudi Arabia	20.0%
Qatar	20.0%
Kuwait	20.0%
New Caledonia	19.6%
Bahrain	19.6%
French Polynesia	19.4%

That's **9.4%** of the total population

By 2030, it is projected that **54.9 million** Americans will have diabetes<sup>2</sup>

Sources:  
1. IDF Diabetes Atlas – 7th Edition <http://www.diabetesatlas.org/>  
2. 2017, Center for Disease Control and Prevention <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>  
3. 2017, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5278808/>

## Risk factors and symptoms of diabetes

- Family history
- 45+ years old
- Not physically active
- Overweight
- High blood pressure

### Risk Factors

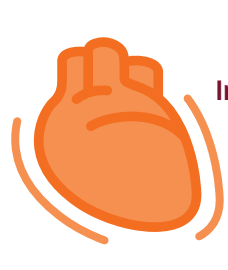
Talk to your doctor about your personal risk factors.

### Symptoms

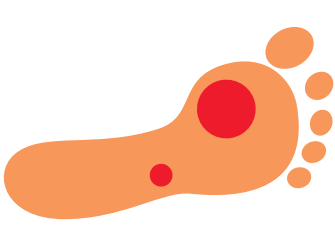
- Excessive urination
- Excessive thirst
- Fatigue
- Slow-healing sores
- Leg/foot pain
- Extreme hunger
- Dry skin
- Unexplained weight loss



## Long-term risks of diabetes



**Increased blood pressure**  
Could lead to heart attack or stroke



**Sores and infections on feet and skin**  
Left untreated, could lead to amputation



**Eye problems**  
Could lead to blindness



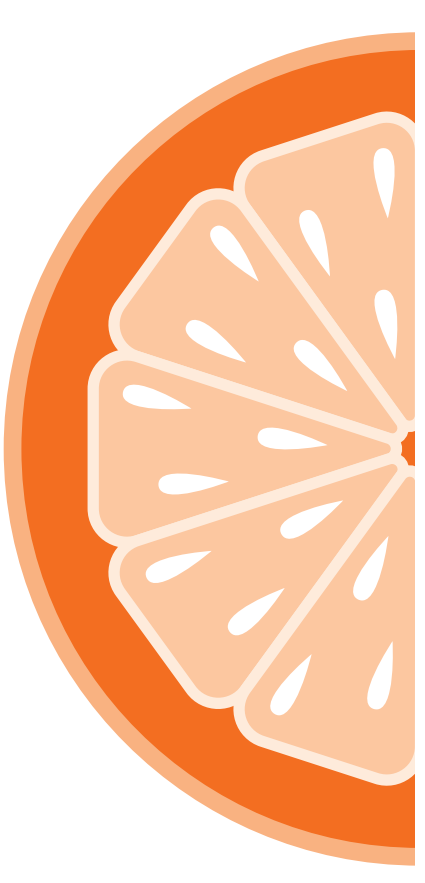
**Nerve damage**  
Nerve problems can develop at any time, but risk rises with age and longer duration of diabetes.



**Kidney Disease**  
Diabetes is a leading cause of kidney disease. About 1 out of 4 adults with diabetes has kidney disease.<sup>1</sup>

Source:  
1. Afkarian M, Zelnick LR, Hall YN, et al. Clinical manifestations of kidney disease among US adults with diabetes. *Journal of the American Medical Association*. 2016;316(6):602-610

## How to have a healthier lifestyle with diabetes



- Exercise and engage in physical activity.
- Maintain a healthy diet.
- Eat more fruits and vegetables.
- Consume less sugar.
- Take medications as prescribed.
- Check blood sugar regularly.
- Visit your doctor regularly and consult them with questions.



## Know your A1c

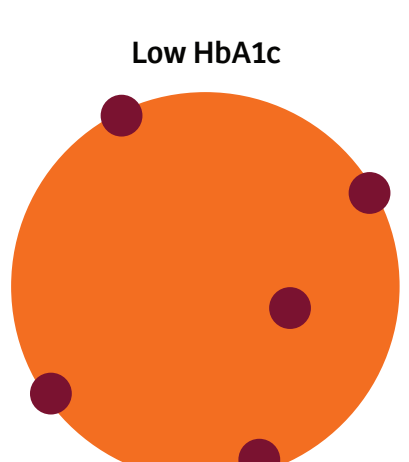
### What is HbA1c (A1c)?

Hemoglobin (Hb) is a protein found inside red blood cells that carries oxygen from the lungs to the rest of the body. Glucose in the blood can bond with hemoglobin to form glycated hemoglobin, or HbA1c. If there is excess glucose in the blood, the level of HbA1c will be higher.

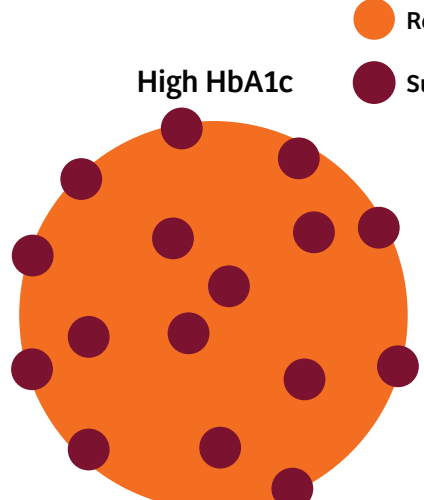
By measuring HbA1c, doctors can gauge your average blood sugar levels from the last 2-3 months and thereby provide a more tailored treatment plan. HbA1c measurement can also show whether treatment plans and lifestyle choices have been effective.<sup>1</sup>

### Where can I get tested?

Ask your doctor about getting an HbA1c test done in the office during your next visit.



Low HbA1c



High HbA1c

● Red blood cell  
● Sugar

Source:  
1. <http://www.diabetes.org/living-with-diabetes/treatment-and-care/blood-glucose-control/a1c/>

DCA systems HbA1c test kit 10698915 (an aid to diagnose diabetes and identify patients at risk for developing diabetes) is not available for sale in the U.S. Product availability varies by country.