

# TYPE 2 DIABETES

**IT'S PREVENTABLE**



# PRESENTATION OUTLINE

- **Statistics & impact**
- **Diabetes 101**
- **Risk factors**
- **Prediabetes Myths**
- **Prevention**
- **Resources**

# IMPACT OF DIABETES



2 in 5 Americans are expected to develop type 2 diabetes in their lifetime.



Approximately 1 in 3 adults with diabetes (and 1 in 5 adults with high blood pressure) may have chronic kidney disease.



37.3 million Americans have diabetes, and 1 in 5 don't know it.



# IMPACT OF DIABETES



More than **1** in **3**

96 million American adults (more than 1 in 3) have prediabetes — blood sugar levels that are higher than normal but not high enough yet to be classified as type 2 diabetes.



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- Diabetes is the seventh leading cause of death in the United States. Adults aged 50 years or older with diabetes die 4.6 years earlier, develop disability 6 to 7 years earlier, and spend about 1 to 2 more years in a disabled state than adults without diabetes.
- An estimated 1.4 million new cases of diabetes were diagnosed among people ages 18 and older in 2019.
- The percentage of adults with diabetes increases with age, reaching 29.2% among those aged 65 years or older
- The percentage of adults with diagnosed diabetes was highest among American Indian and Alaska Native persons (14.5%), non-Hispanic Black people (12.1%), and people of Hispanic origin (11.8%), followed by non-Hispanic Asian people (9.5%) and non-Hispanic White people (7.4%) in 2018-2019.
- Adults with a family income below the federal poverty level had the highest prevalence for both men (13.7%) and women (14.4%).
- Every **19** seconds someone in the U.S. is diagnosed with Diabetes

# IMPACT OF DIABETES

- **1 of \$4** health care dollars is spent caring for people with diabetes
- **1 in \$3** Medicare dollars is spent caring for people with Diabetes
- People with diagnosed diabetes have **health care costs 2.3 times higher** than if they don't have the disease
- Costs for a person with diabetes complications averages \$30,000 while a person with a pre-diabetes diagnosis averages \$510

Annual Total Costs Attributable to Diabetes, Minnesota, 2013 Dollars

Sex	Age Group (in years)	Direct Cost (\$ in Millions)	Indirect Cost (\$ in Millions)	Total Cost (\$ in Millions)	Total Cost per Person with Diabetes (\$)
Overall	19-64	1,557.3	2,106.7	3,664.1	21,655
	65+	1,254.9	407.4	1,662.3	11,367
	Total	2,812.2	2,514.1	5,326.4	16,886
Males	19-64	856.8	1,438.1	2,294.9	25,229
	65+	500.3	247.4	747.7	10,394
	Total	1,357.1	1,685.5	3,042.6	18,678
Females	19-64	700.5	668.6	1,369.2	17,500
	65+	754.6	160.0	914.6	12,310
	Total	1,455.1	828.6	2,283.7	14,972

Data Source: Multiple data sources; see individual cost screens for detailed lists of data sources.

**\$327 Billion**

In 2017, diabetes and its related complications accounted for \$327 billion in total (direct and indirect) medical costs and lost work and wages in the United States.



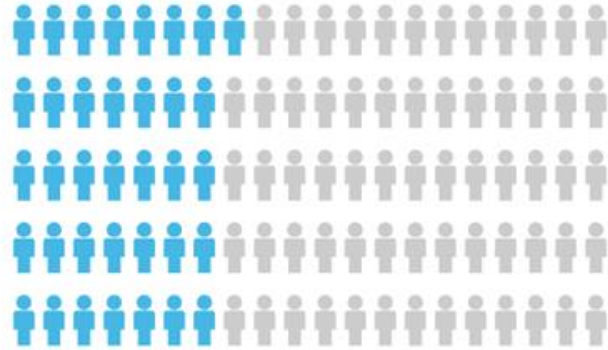
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# IMPACT OF DIABETES

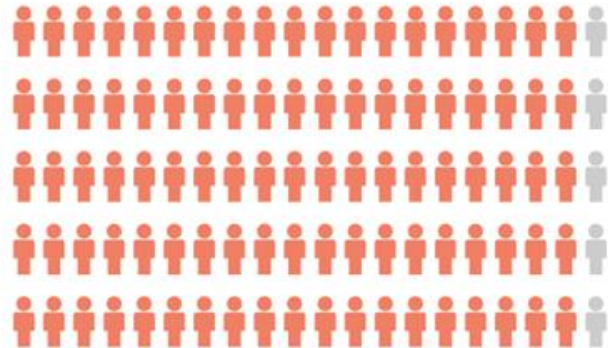
36%

of American adults have prediabetes



~90%

of them don't know that they have it.



UP TO

30% 5,082

will go on to develop full blown diabetes within 5 years.

NEW CASES OF DIABETES ARE DIAGNOSED EVERY DAY

# IMPACT OF DIABETES

**6** YRS



shorter life expectancy  
of an average 50-year  
old, due to diabetes

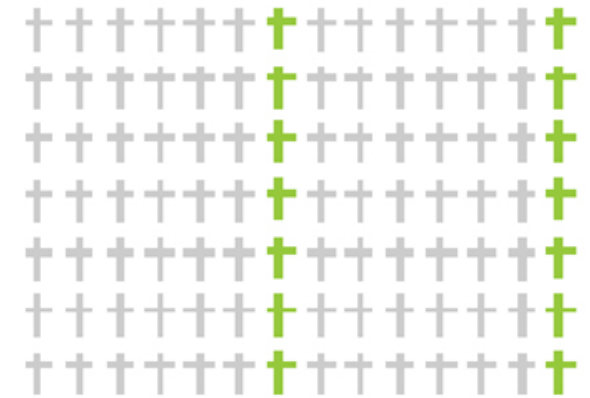
**\$13,700**



AVERAGE ANNUAL HEALTH CARE  
COSTS OF A PERSON WITH DIABETES

**7<sup>TH</sup>**

leading cause of death  
in the United States  
(diabetes)





# DIABETES 101

## What IS Diabetes?

- A disease in which blood glucose (sugar) levels are too high – higher than normal
- Not enough insulin to allow glucose to be used for energy
- Over time, these high glucose levels damage the small and large blood vessels, which can lead to diabetes-related blindness, kidney disease, amputation, stroke and heart disease



# DIABETES 101

## DIABETES TYPE 1

- **Type 1**, usually diagnosed in children and young adults, but can be diagnosed at any age (5-10% of all cases of diabetes)
- People with **type 1** make no insulin, and thus must take insulin into their bodies, either through injection or an insulin pump
- Insulin is necessary to move blood glucose (sugar) into the body's cells for energy

# DIABETES 101

## TYPE 1 WARNING SIGNS

Frequent  
urination

Unusual thirst

Extreme  
hunger

Losing weight  
without trying

Extreme  
fatigue

Irritability

# DIABETES 101

## TYPE 2 DIABETES

- **Type 2** is generally diagnosed in adults over the age of 45, but is also increasingly being diagnosed in children and adolescents (90-95% of all cases of diabetes)
- **Type 2** diabetes is characterized by insulin resistance, which keeps the body from using insulin effectively

# DIABETES 101

## TYPE 2 WARNING SIGNS

Any of the type 1 symptoms

Frequent infections

Blurred Vision

Cuts/bruises that are slow to heal

Reoccurring skin, gum or bladder infections

# DIABETES 101

## GESTATIONAL DIABETES

- **Gestational** diabetes is a type that occurs during pregnancy
- Happens in about 2 to 10 percent of all pregnancies
- Women who have had gestational diabetes have a 35%-65% chance of developing diabetes in the next 10-20 years

# DIABETES 101

- **BRAIN:** If your blood sugar is not under control you may be prone to moodiness and irritability, or feel anxious and more quick to snap at someone in anger. Glucose issues can also leave you feeling foggy, fuzzy, or spaced out, making it difficult to concentrate on important tasks and remember small details.
- **EYES:** Chronic high blood sugar can cause blood vessels in your retina to swell like little balloons, which may eventually block the vessels themselves and cause new, abnormal blood vessels to grow. Blurred vision, decreased depth perception, and blindness can all result from this damage.
- **EARS:** People with diabetes are more than twice as likely to have hearing impairment as people without diabetes.
- **HEART:** As blood vessels become narrowed or blocked by glucose damage, your heart will be working extra hard to pump enough fresh blood through your body.
- **BLOOD STREAM:** Without insulin to help lower the amount of glucose in the blood, your blood sugars rise and stay higher than normal for longer periods of time. Sustained high blood sugar leads to increased blood fats (also known as triglycerides) which can affect your cholesterol levels.
- **KIDNEYS:** Your kidneys are like miniature water treatment plants, filtering toxins and waste from your bloodstream. Consistently high levels of blood sugar makes it harder for the kidneys to do their job, and can lead to chronic kidney disease over time.
- **BLOOD VESSELS:** High blood sugar can also alter the structure of the blood vessels themselves, making them thicker and less elastic, and in turn making it harder to pump blood through your body.

# DIABETES 101

- **BONES:** Diabetes can lead to lower bone mineral density, which increases your risk of osteoporosis.
- **NERVOUS SYSTEM:** If increased glucose damages your blood vessels, it can affect your body's ability to bring oxygen and nutrients to your nerves. On top of that, the glucose can actually cause chemical changes in your nerves themselves, and impair their ability to transmit signals back and forth -- leading to tingling, pain, or decreased sensation, particularly in areas like your legs and feet.
- **FEET:** Blood vessel damage means not enough blood reaches your extremities, like your feet. Because nerve damage may cause you to no longer feel pain in your feet, you may not realize you have a wound or injury that needs treatment. Both are reasons that 60% of all leg and foot amputations are a result of diabetic complications.

## Unmanaged diabetes in any form can lead to:

- Blindness
- Kidney failure
- Heart disease
- Stroke
- Loss of toes, feet, or legs





# DIABETES 101

## PRE-DIABETES

- **Pre-diabetes** is a condition defined by higher than normal blood glucose levels, but not high enough for a diagnosis of diabetes
- 96 million American have pre-diabetes
- Recent studies have found that most people with pre-diabetes develop type 2 diabetes within 5-10 years

# RISK FACTORS

- People over the age 45
- People with a family history of diabetes
- People who are overweight (3 out of 5 in MN)
- People who do not exercise regularly (1 in 4 in MN)
- People who have a high blood pressure (above 140/90)
- People who have cholesterol readings of HDL below 35mg/dL or having triglyceride levels above 250mg/dL makes them more prone
- Untreated sleep problems, especially sleep apnea can increase the risk of insulin resistance
- Certain racial and ethnic groups
- Women who had gestational diabetes
- Having polycystic ovary syndrome

<https://www.diabetes.org/risk-test>



# MYTHS



**Prediabetes isn't serious.**

*Prediabetes is essentially "early stage" diabetes. Without lifestyle change, most people with prediabetes will develop full-blown type 2 diabetes within 10 years.*

**Only obese people get prediabetes.**

*A spare tire around the middle increases diabetes risk, no matter your overall body weight. But weight is not the only risk - thin people can develop prediabetes too.*



**Only older people get prediabetes.**

*Children, teenagers & young adults are all at risk for prediabetes.*



**I can't have prediabetes. I don't eat sugar.**

*Any carbohydrate can affect blood sugar levels – not just sweet foods.*

# MYTHS

I can just take medication for prediabetes.

*There are currently no FDA-approved drugs specifically for prediabetes. However, lifestyle change is considered the first-line of treatment for prediabetes to get your blood sugar levels under control. The sooner you begin living a healthier lifestyle, the less damage prediabetes or type 2 diabetes can do to you.*



I'm borderline, so I don't actually have to worry until I have full-blown diabetes.

*Damage to your heart and circulatory system can begin with just a small rise in blood sugar. And that's just the start.*



I have prediabetes. I'll develop diabetes no matter what I do.

*Lifestyle changes can cut your risk for type 2 diabetes by more than half - and the older you get, the more lifestyle change can cut your risk.*



# PREVENTION

58%   

Reduced risk of developing diabetes over three years if you follow a healthy food and exercise program.

30 MINUTES 

Amount of exercise, five days a week, that could reduce your risk of diabetes if you have prediabetes



7% WEIGHT LOSS

Amount of weight loss that could prevent diabetes if you have prediabetes (ie. 14 pounds if you weigh 200 pounds)



# RESOURCES

## FOR THOSE WITH PREDIABETES:

**OMADA® FOR PREVENTION** You'll take lessons online, gain the support of a coach and peer group, and learn how to build healthy habits that last a lifetime. It's a \$600 value, at no cost to you.

[omadahealth.com/duluthjpe](http://omadahealth.com/duluthjpe)

## DIABETES PREVENTION PROGRAM

### Goals of the Program:

- Reduce body weight by 5% to 7%
- Increase physical activity to 150 minutes each week
- Increase coping skills

### What the program offers:

- Proven curriculum
- Lifestyle coach
- Support group

Join ours or find a program [HERE](#)

## FOR THOSE WITH DIABETES:

- Know your A1C (average blood glucose) numbers
- Monitor your blood pressure
- Pay attention to your cholesterol
- Get your annual eye check up
- Take care of your feet , and wear shoes to avoid cuts and scrapes
- Implement exercise into your schedule
- Enjoy more cooking at home
- Do not let a set back ruin your progress

[www.diabetes.org](http://www.diabetes.org): My Food Advisor/Recipes for Healthy Living, Living with type 2 diabetes, Community Message Boards (ADA Connect), News and Research

**National Call Center:** Call 1-800-DIABETES (1-800-342-2383)



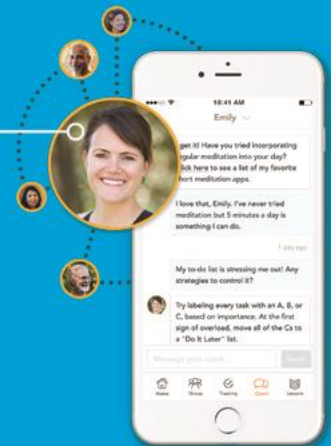




WIRELESS SCALE



HEALTH COACH



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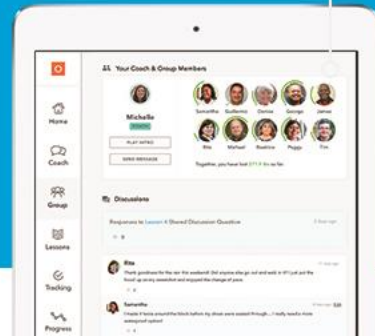
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[omadahealth.com/duluthjpe](http://omadahealth.com/duluthjpe)

INTERACTIVE GAMES



GROUP SUPPORT







QUESTIONS?

THANK YOU!