

# Diabetes and Older Adults

More than 25% of Canadians aged 65 and older have diabetes. Older adults with diabetes face significant risks for both acute and chronic complications related to the disease.

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## What is diabetes?

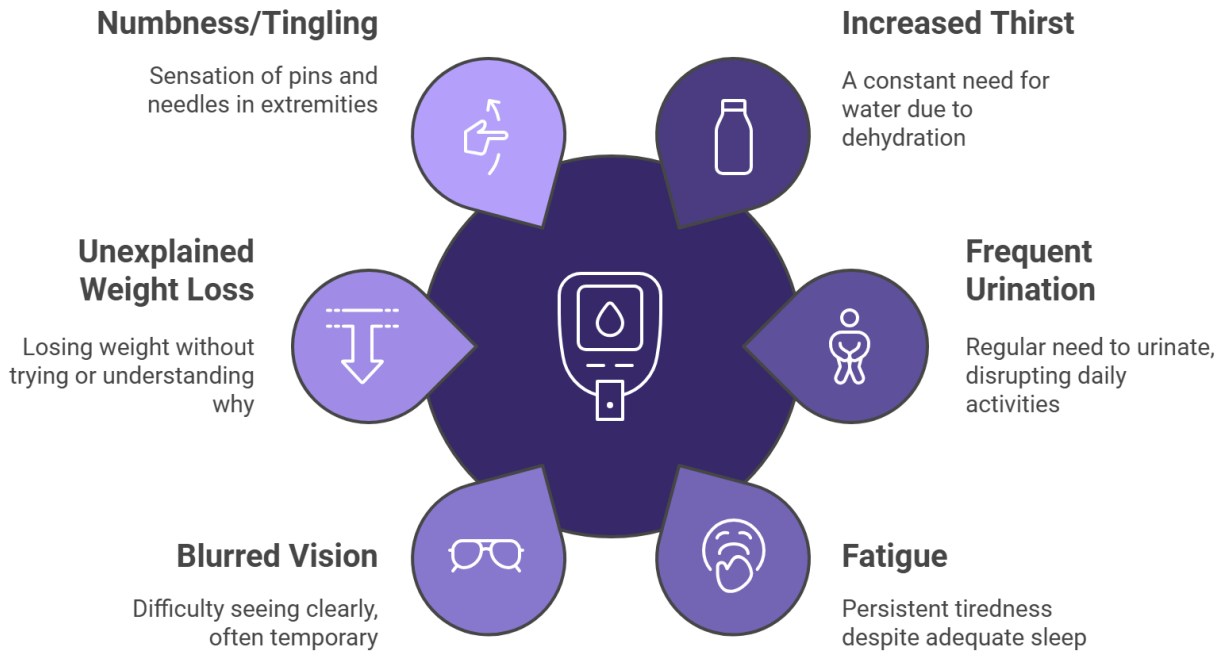
Diabetes is a chronic condition that arises when the body either doesn't produce enough insulin or cannot use it effectively, leading to elevated blood glucose levels.

# Types of diabetes

There are several types of diabetes. The most common forms include:

- **Type 1 Diabetes** is a non-preventable auto-immune condition that requires insulin therapy for life (5-10% of cases)
- **Type 2 Diabetes** is potentially preventable or delayable, treated with health behavior modifications and medications such as insulin. (90-95% of cases)
- In simple terms, Type 1 diabetes happens when your body doesn't make insulin, while Type 2 occurs when your body can't use insulin properly.
- **Prediabetes** is when blood sugar levels are higher than normal, but not yet diabetic. Almost all people who get diabetes (high blood sugar) had prediabetes first. But, having prediabetes does not mean you will develop high blood sugar.
- **Gestational diabetes:** This type develops in some people during pregnancy. Gestational diabetes usually goes away after pregnancy. However, if you have gestational diabetes, you're at a higher risk of developing Type 2 diabetes later in life.

## Symptoms of Diabetes



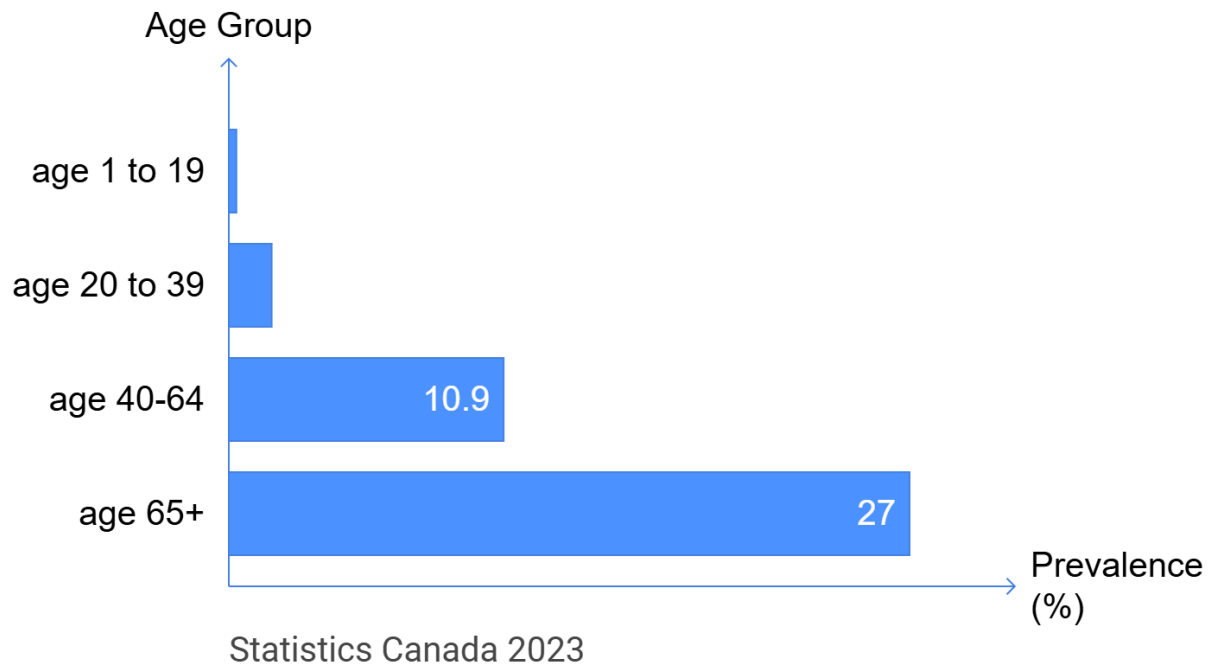
Symptoms of diabetes can include increased thirst, dry mouth, frequent urination, fatigue, blurred vision, unexplained weight loss, numbness or tingling in the hands or feet, slow-healing sores or cuts, and frequent skin or vaginal yeast infections.

## Risk Factors

- Males have a higher risk of developing type 2 diabetes.
- As you age, your risk of developing diabetes goes up.
- Being overweight increases your risk.
- Fat stored around the abdomen increases your risk of developing type 2 diabetes.
- Lack of physical activity increases the likelihood of developing type 2 diabetes.
- An unusually high blood sugar can increase your risk.
- Certain ethnocultural groups are at higher risk of developing diabetes.

## The prevalence of diabetes increases with age

More than 25% of Canadians aged 65 and older have diabetes. This condition is associated with higher mortality rates, decreased functionality, and a greater risk of institutionalization. Older adults with diabetes face significant risks for both acute and chronic complications related to the disease.



## What causes diabetes?

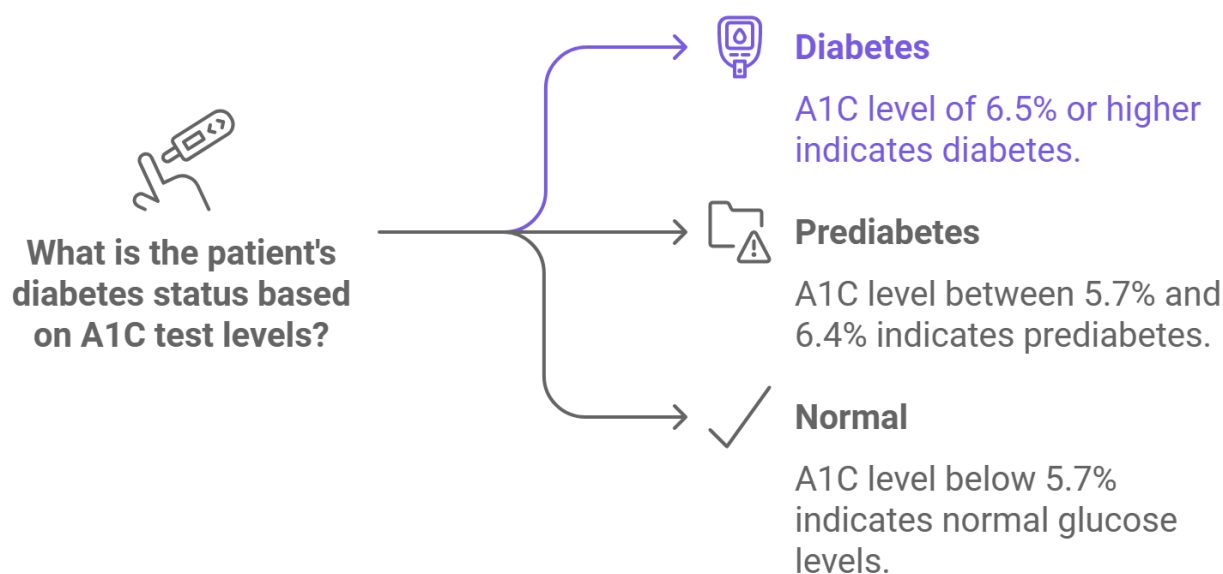
Type 1 diabetes is an auto-immune disorder. That means it's caused by an overactive immune system that attacks your insulin-making cells, destroying your natural ability to produce insulin.

People with Type 2 diabetes do make insulin, but their bodies don't use it properly. It's called insulin resistance. It happens when your muscles, liver, and fat cells stop responding to insulin.

## How is diabetes diagnosed?

Several tests measure your blood glucose level:

1. **Fasting blood glucose test:** For this test, you fast for at least eight hours before the test. As food can affect blood sugar, this test allows your provider to see your baseline blood sugar.
2. **Random blood glucose test:** You can get this test at any time; no fasting is required.
3. **A1c test:** provides your average blood glucose level over the past two to three months.
4. **Glucose tolerance test:** Your blood sugar level is measured after fasting overnight. You then drink a sugary liquid, and your blood sugar is tested at regular intervals over the next two hours.



## What are the complications of diabetes?

Diabetes can lead to acute, long-term complications, mainly due to extreme or prolonged high blood sugar levels. Acute diabetes complications that can be life-threatening include:

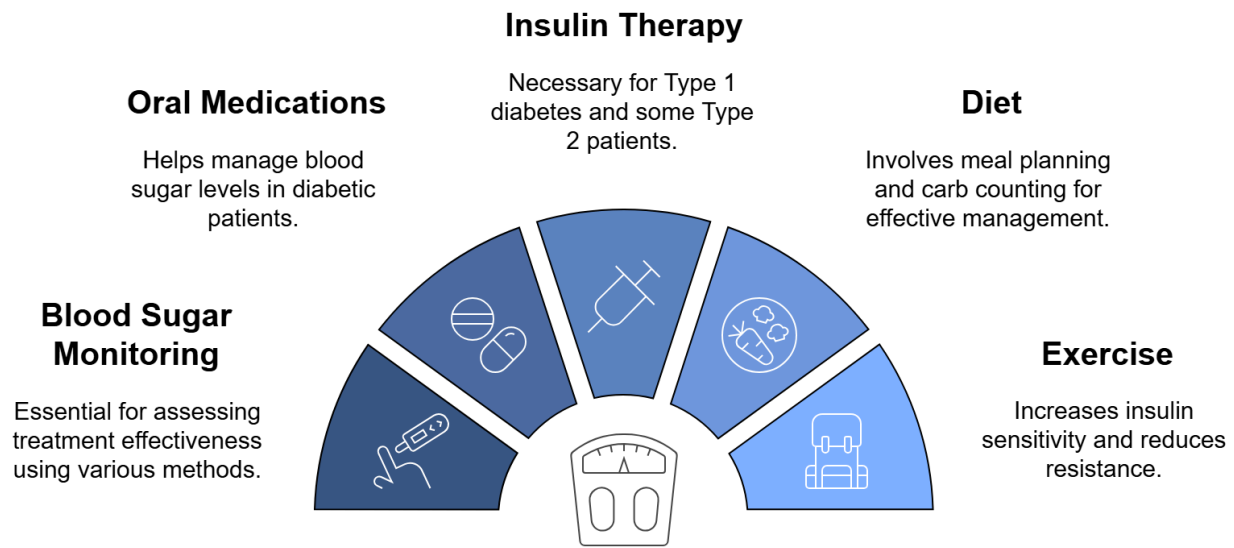
1. **Hyperosmolar hyperglycemic state:** This complication mainly affects people with Type 2 diabetes. It happens when your blood sugar levels are very high for an extended period, leading to severe dehydration and confusion.
2. **Diabetes-related ketoacidosis:** This complication mainly affects people with Type 1 diabetes. Without insulin, the body cannot use glucose for energy, so it starts breaking down fat. This produces ketones, which make the blood acidic and can lead to difficulty breathing, vomiting, and loss of consciousness.
3. **Hypoglycemia:** This complication happens when your blood sugar level drops below the range that's healthy for you. It mainly affects people with diabetes who use insulin. Signs include blurred or double vision, clumsiness, disorientation, and seizures.

Long-term diabetes complications can include:

- Cardiovascular issues such as Heart Attack & Stroke
- Atherosclerosis
- Neuropathy (nerve damage)
- Nephropathy (kidney failure)
- Retinopathy (which can lead to blindness)
- Diabetes-related foot conditions.
- Skin infections
- Hearing loss.
- Oral health issues

Living with diabetes can also affect your mental health. People with diabetes are two to three times more likely to have depression than people without diabetes.

## Managing diabetes



Diabetes is a complex condition, so its management involves several strategies. The main aspects of managing diabetes include:

1. **Monitoring your blood sugar** is essential for assessing the effectiveness of your current treatment plan. You can monitor your levels with a glucose meter, finger stick, or continuous glucose monitor.
2. **Oral diabetes medications:** Oral diabetes medications help manage blood sugar levels in people with diabetes but still produce some insulin.
3. **Insulin:** People with Type 1 diabetes need to inject synthetic insulin to live and manage diabetes. Some people with Type 2 diabetes also require insulin. The four main ways to take insulin include injectable insulin with a syringe, insulin pens, insulin pumps, and rapid-acting inhaled insulin.
4. **Diet:** Meal planning and choosing a healthy diet are vital for diabetes management. If you take insulin, counting carbs in your food and drinks is a large part of management.
5. **Exercise:** Physical activity increases insulin sensitivity and helps reduce insulin resistance, so regular exercise is an integral part of management for all people with diabetes.

## What is the prognosis for diabetes?

In Canada, diabetes is the seventh leading cause of death. A large number of people with diabetes will die from a heart attack or stroke.

However, it's important to know that you can lead a full life with diabetes by monitoring your blood sugar levels, taking the prescribed medication, exercising regularly, and maintaining a healthy diet.

### **Sources:**

Snapshot of Diabetes in Canada, 2023

<https://www.canada.ca/en/public-health/services/publications/diseases-conditions/snapshot-diabetes-canada-2023.html>

Diabetes

<https://my.clevelandclinic.org/health/diseases/7104-diabetes>

Type 1 and 2 Diabetes

<https://health.clevelandclinic.org/type-1-vs-type-2-diabetes>

Prediabetes

<https://www.hpsj.com/prediabetes/>

Top 10 leading causes of death (2019 to 2022)

<https://www150.statcan.gc.ca/n1/daily-quotidien/231127/t001b-eng.htm>

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