

## What Is Pancreatitis?



Pancreatitis is a disease in which your pancreas becomes inflamed.

The pancreas is a large gland behind your stomach and next to your small intestine. Your pancreas does two main things:

- It releases powerful digestive enzymes into your small intestine.
- It releases insulin and glucagon into your bloodstream. These hormones help your body control how it uses food for energy.

Your pancreas can be damaged when digestive enzymes begin working before your pancreas releases them.

## What Are the Types of Pancreatitis?

The two forms of pancreatitis are acute and chronic.

In pancreatitis, the pancreas becomes inflamed and damaged by its own digestive chemicals. Swelling and death of tissue of the pancreas can result.

- **Acute pancreatitis** is sudden inflammation that lasts a short time. It can range from mild discomfort to a severe, life-threatening illness. Most people who have it recover completely after getting the right treatment. In severe cases, acute pancreatitis can cause bleeding, serious tissue damage, infection, and cysts. Severe pancreatitis can also harm other vital organs such as the heart, lungs, and kidneys.
- **Chronic pancreatitis** is long-lasting inflammation. It most often happens after an episode of acute pancreatitis. Another top cause is drinking lots of

alcohol for a long period of time. Damage to your pancreas from heavy alcohol use may not cause symptoms for many years, but then you may suddenly have severe pancreatitis symptoms.

## What Are the Symptoms of Pancreatitis?

### Symptoms of acute pancreatitis

- Moderate to severe pain in the upper part of your belly that goes into your back. Eating may make it worse, especially foods high in fat.
- Fever
- Higher heart rate
- Nausea and vomiting
- Swelling and tenderness in the belly

### Symptoms of chronic pancreatitis

These are similar to those of the acute form. But you may also have:

- Constant pain in your upper belly that radiates to your back. This pain may be disabling.
- Diarrhoea and weight loss because your pancreas isn't releasing enough enzymes to break down food
- Upset stomach and vomiting
- Fatty, oily stools that smell especially bad and leave a film in the toilet

## Pancreatitis Pain Location

Pancreatitis pain usually starts in the upper middle or left part of your belly, and it may spread across your back or up your left shoulder blade. It can feel like it's going deep into your body. It usually comes on suddenly and then steadily gets worse, and it can last for days.

Certain body positions or activities can also affect the pain. You may feel worse if you:

- Lie flat on your back
- Cough
- Exercise

It may help to:

- Sit up straight
- Lean forward
- Curl into a ball

## Pancreatitis Causes

### **Acute pancreatitis causes include:**

- Drinking lots of alcohol
- Gallstones
- Autoimmune diseases
- Infections
- Medications
- Metabolic disorders
- Surgery
- Trauma to the belly area

In up to 15% of people with this type, the cause is unknown.

### **Chronic pancreatitis causes include:**

- Cystic fibrosis
- Family history of pancreas disorders
- Gallstones
- High triglycerides
- Long-time alcohol use
- Medications

In about 20% to 30% of cases, the cause of chronic pancreatitis is unknown. People with this type are usually men between ages 30 and 40. African American people are more likely to have pancreatitis than other racial groups in the U.S.

## Pancreatitis Risk Factors

Several things can cause you to have a greater chance of having this condition, including:

- Heavy drinking (four or more alcoholic drinks per day)
- Smoking and vaping

- Obesity (having a BMI of 30 or higher), especially if your weight is mostly around your belly
- Diabetes
- High levels of triglycerides
- Having a family history of pancreatitis

## Can Pancreatitis Cause Complications?

This condition can have severe complications, including:

- Diabetes if there's damage to the cells that make insulin
- Infection of your pancreas
- Kidney failure
- Weight loss
- Malnutrition if your body can't get enough nutrients from the food you eat because of a lack of digestive enzymes
- Blockage of the bile ducts
- Pancreatic necrosis, when tissues die because your pancreas isn't getting enough blood
- Problems with your breathing when chemical changes in your body affect your lungs
- Pseudocysts, when fluid collects in pockets on your pancreas. They can burst and become infected.
- Pancreatic cancer

## How Is Pancreatitis Diagnosed?

To check for acute pancreatitis, the doctor will probably press on your belly to see if it is tender and check for low blood pressure, low fever, and a rapid pulse.

To make a diagnosis, your doctor will test your blood to measure two digestive enzymes: amylase and lipase. High levels of these two enzymes mean you probably have acute pancreatitis. They'll also test your blood for white blood cells, blood sugar, calcium, and liver function.

To diagnose chronic pancreatitis, X-rays or imaging tests such as a CT scan or MRI may show whether the pancreas is calcified. Your doctor will take blood samples and check your stool for excess fat, a sign that the pancreas is no longer making enough enzymes to process fat. You may be given a pancreatic function test to see how well the pancreas releases digestive enzymes. You may also be checked for diabetes.

Other tests can include:

- Ultrasound, CT scan, and MRI, which make images of your pancreas to show the extent of inflammation, causes such as bile duct problems and gallstones, for complications like cysts
- ERCP, in which your doctor uses a long tube with a camera on the end to look at your pancreatic and bile ducts
- A biopsy, in which your doctor uses a needle to remove a small piece of tissue from your pancreas to be studied

In some cases, your doctor may test your blood and poop to confirm the diagnosis. They may also do a glucose tolerance test to measure damage to the cells in your pancreas that make insulin.

## How Is Pancreatitis Treated?

### Treatment for acute pancreatitis

If you have an attack of acute pancreatitis, you may receive strong drugs for pain. You may have to have your stomach drained through a tube placed through your nose. If the attack is prolonged, you may be fed and hydrated intravenously (through a vein).

You'll probably need to stay in the hospital, where your treatment may include:

- Antibiotics if your pancreas is infected
- Intravenous (IV) fluids, given through a needle
- Low-fat diet or fasting. You might need to stop eating so your pancreas can recover. In this case, you'll get nutrition through a feeding tube.
- Pain medicine

If your case is more severe, your treatment might include:

- Endoscopic retrograde cholangiopancreatography (ERCP), a procedure that involves the insertion of a tube down your throat into the stomach and upper intestines to take out gallstones if they're blocking your bile or pancreatic ducts. A small cut is made to remove stones in the bile duct, or a plastic tube called a stent is inserted into the ducts to relieve the obstruction.
- Gallbladder surgery if gallstones caused your pancreatitis
- Pancreas surgery to clean out fluid or dead or diseased tissue

## Treatment for chronic pancreatitis

If you have this type, your doctor will focus on treating pain while guarding against possible addiction to prescription painkillers. They'll also watch for complications that affect digestion. You may be placed on a pancreatic enzyme replacement therapy to restore the digestive tract's ability to digest nutrients; this will also likely reduce the frequency of new attacks.

You might need:

- Insulin to treat diabetes
- Pain medicine
- Pancreatic enzymes to help your body get enough nutrients from your food
- Surgery or procedures to relieve pain, help with drainage, or treat blockages

Injection of anaesthetics into the nerves near the spine may give pain relief. If the pain does not respond to medication or nerve blocks, your doctor may use surgery to remove the damaged pancreatic tissue, but only as a last resort.

## How Do You Prevent Pancreatitis?

Because many cases of pancreatitis are caused by alcohol abuse, prevention often focuses on limiting how much you drink or not drinking at all. If your drinking is a concern, talk to your doctor or health care professional about an alcohol treatment centre. A support group such as Alcoholics Anonymous could also help.

Other things you can do to reduce your chances of having the condition include stopping smoking, following your doctor's and dietitian's advice about your diet, and taking any medications your doctor prescribes.

## Takeaways

Pancreatitis is a painful condition that happens when your pancreas becomes inflamed. The two main types are acute, which comes on suddenly, and chronic, which is long-lasting. The main risk factors are ongoing overuse of alcohol and gallstones, although other things can play a part, such as family history, trauma to the pancreas area, and infections, among others. The disease is highly treatable, but complications can be life-threatening, so early diagnosis and treatment are critical for recovery. Alcohol use is one of the main risk factors, so limiting how much you drink, or not drinking at all, is key to preventing it.

# Pancreatitis FAQs

## What are the warning signs of pancreatitis?

The main early sign is pain in the upper belly that comes on suddenly and lingers, along with nausea and vomiting. The pain may spread to your back, and you may have yellowing (jaundice) of your skin and the whites of your eyes.

## What can trigger pancreatitis?

The main triggers of pancreatitis are:

- Longtime heavy alcohol use
- Gallstones

Other causes include:

- Autoimmune diseases
- Infections
- Medications
- Metabolic disorders such as diabetes
- Trauma or surgery in the belly area
- Cystic fibrosis
- Family history of pancreas disorders
- High triglycerides

## How serious is pancreatitis?

Most -- about 80% -- of cases get better with treatment. But if not treated, the disease can cause life-threatening complications, including failure of one or more organs. When there are complications, the chances are high that pancreatitis will be fatal.