

Edema

Edema occurs when fluid builds up in your tissues, often in your feet, legs and ankles. Edema can affect anyone, especially people who are pregnant and adults age 65 and older. Treatment involves lifestyle changes, including diet and exercise.

What is edema?

Edema is the medical term for swelling caused by fluid trapped in your body’s tissues. Edema happens most often in your feet, ankles and legs, but can affect other parts of your body, such as your face, hands and abdomen.

Who does edema affect?

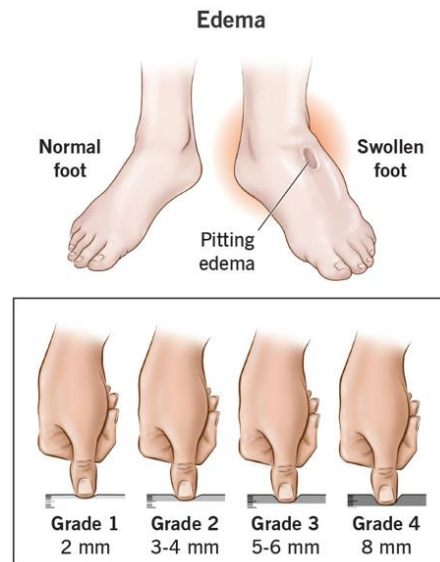
Edema can affect anyone, but the condition most often affects people who are pregnant and adults who are 65 years or older.

How common is edema?

Edema is common because there are many causes associated with the condition. Mild cases of edema go away on their own, so the exact rate of occurrence is unknown.

How does edema affect my body?

Edema will cause parts of your body to increase in size (swell), which might prevent you from completing your daily tasks. Simple lifestyle changes like elevating the swollen part of your body or moving around if you were sitting or standing for a long period of time can reduce swelling and help you feel better. Sometimes edema is a symptom of an underlying health condition, so contact your healthcare provider if you experience symptoms of edema.



Symptoms and Causes

What are the symptoms of edema?

A symptom of edema is swelling in your body. Swelling occurs when a part of your body gets bigger because there is a buildup of fluid in your tissues. Swelling can happen anywhere on your body but most often affects your feet, ankles and legs.

Symptoms of swelling include:

- An area of your body is larger than it was a day ago.
- The skin over the swollen area looks stretched and shiny.
- Difficulty walking if your legs, ankles or feet swell.
- You may be coughing or have trouble breathing.
- You feel full or tightness in your swollen body part.
- Mild pain or a sore feeling in the affected area.

Types

There are many types of edema. Each one can indicate a range of further health conditions.

Types include:

- **Peripheral edema:** This affects the feet, ankles, legs, hands, and arms. Symptoms include swelling, puffiness, and difficulty moving certain body parts.
- **Pulmonary edema:** This occurs when excess fluid collects in the lungs, making breathing difficult.
- **Cerebral edema:** This occurs in the brain. It can happen for a range of reasons, many of which are potentially life threatening. Symptoms include:
 - headache
 - neck pain or stiffness
 - whole or partial vision loss
 - changes in consciousness or mental state
 - nausea
 - vomiting
 - dizziness

- **Macular edema:** This is a serious complication of diabetic retinopathy. Swelling occurs in the macula, which is the part of the eye that enables detailed, central vision. The person may notice changes to their central vision and how they see colors.
- **Pitting edema:** With this type, which can occur in peripheral edema, pressure applied to the skin leaves an indent or pit in the skin.
- **Periorbital edema:** This refers to inflammation and puffiness around the eye or eyes. The puffiness is due to fluid buildup and is usually temporary.

Edema can occur in other locations as well, but those mentioned above are the most common.

What causes edema?

After your healthcare provider makes an edema diagnosis, their next step is to identify what caused fluid to build up in your tissues. There are several possible causes for an edema diagnosis including:

Gravity: If you spend a lot of time sitting or standing in one place for too long, water naturally pulls down into your arms, legs and feet (dependent edema).

Weakened valves of your veins (venous insufficiency): When the valves in your veins are weak, it is hard for your veins to push blood back up to your heart, and leads to varicose veins and a buildup of fluid in the legs.

Underlying medical conditions: Conditions like heart failure and lung, liver, kidney and thyroid diseases have edema as a symptom.

Side effects from medication: Some drugs, like blood pressure or pain management medications, have edema as a side effect.

Poor nutrition: If you aren't eating a well-balanced diet or if you eat a lot of foods high in salt (sodium), fluid could build up in different parts of your body.

Pregnancy: Swelling in your legs during pregnancy occurs as the uterus puts pressure on your blood vessels in the lower trunk of your body.

Compromised immune system: An allergic reaction, infection, burns, trauma or clots can lead to edema.

Diagnosis and Tests

How is edema diagnosed?

Your healthcare provider will give a physical examination to diagnose edema, followed by diagnostic tests to find the cause. They will look for swelling, especially on parts of your body where your skin has a shiny or stretched appearance.

What is edema grading?

Edema grading is a scale used to identify the severity of your edema diagnosis and estimate how much fluid built up in your tissues.

Your healthcare provider will test an area of your body for edema by gently pressing their finger on a swollen area of your skin for five to 15 seconds (pitting test). After they release pressure, a dimple (pit) will appear in your skin. The pit indicates that there is fluid built up in your tissues.

The edema grading scale measures how quickly the dimple goes back to normal (rebound) after a pitting test. The scale includes:

Grade 1: Immediate rebound with 2 millimeter (mm) pit.

Grade 2: Less than 15-second rebound with 3 to 4 mm pit.

Grade 3: Rebound greater than 15 seconds but less than 60 seconds with 5 to 6 mm pit.

Grade 4: Rebound between 2 to 3 minutes with an 8 mm pit.

Management and Treatment

How is edema treated?

Treatment for edema varies based on the cause, especially if the cause relates to an underlying health condition. For example:

If lung disease causes edema, such as emphysema or chronic bronchitis, your healthcare provider will recommend quitting smoking if you smoke.

If edema occurs with chronic heart failure, your provider will recommend lifestyle changes to treat your diagnosis by monitoring your weight, fluid intake and salt intake. Your provider might recommend cutting back on the amount of alcohol you drink.

If edema is a side effect of a medication you are taking, your provider might stop or lower the dosage of your medication to resolve the swelling. Do not stop taking your medication unless your provider tells you to do so.

Treatment to reduce swelling

In addition to treating the underlying cause of edema, there are a few steps you can take to keep fluid from building up in your body:

When you are sitting or lying down, put a pillow under your legs to keep them elevated above the level of your heart.

Do not sit or stand for long periods without moving or go on short walks.

Wear support socks, stockings or sleeves, which put pressure on parts of your body to keep fluids from collecting there. Edema shoes are available for people who experience chronic edema and need adjustable footwear for swelling.

Reduce the amount of salt in your diet.

Follow your doctor's directions for taking medications. Your doctor might want you to take a diuretic (commonly called a "water pill"), which helps your body get rid of excess fluid.

What can't I eat with edema?

In some cases, the cause of edema could be too much salt in your diet. Salt causes your body to retain water, which could leak into your tissues and cause swelling. Making lifestyle changes to reduce the amount of salt in your diet could improve your edema diagnosis.

How soon after treatment will I feel better?

Depending on the cause of your diagnosis, edema could be temporary or permanent. Swelling normally lasts for a few days. In the first two days, you will experience the most swelling, and it should start to reduce by the third day. Following treatment from your healthcare provider reduces the amount of swelling you might experience. If your swelling doesn't go away after a few days of treatment, talk to your healthcare provider.

Prevention

How can I prevent edema?

Sometimes, you can't prevent what caused edema if it is the result of an underlying health condition like heart failure, liver or kidney disease, but you can work with your healthcare provider to manage symptoms.

If the cause of edema is too much salt intake, adjusting your diet to reduce the amount of salt in the foods you eat will prevent edema.

You can also prevent edema by moving around more frequently. Sitting or standing without moving could cause fluid to build up in your tissues. If you notice you've been sitting for a long period of time and you're able to, get up or move your body around; it will reduce the likelihood of swelling.

What can I expect if I have edema?

It's very important to see your healthcare provider if you experience edema or swelling in your body. Edema can stretch your skin and if not treated, swelling could increase and cause serious health problems.

Edema can be a short-term or long-term condition, depending on its cause. Treatment is available to help you manage any underlying conditions that might cause edema or you can make simple lifestyle changes to reduce swelling and fluid buildup in your body.

Living With

How do I take care of myself?

If you have edema, take steps to reduce swelling by:

Making lifestyle changes to stop smoking or changing your diet.

Moving around more often.

Elevating your legs when lying down or sitting.

Wearing compression socks, sleeves or stockings.

It is important to protect any swollen areas of your body from additional pressure, injury and extreme temperatures. Injury to the skin over swollen areas takes longer to heal and is more likely to become infected.

When should I see my healthcare provider?

Call your healthcare provider immediately if you experience:

Pain or discolored skin in a swollen area.

An open sore on a swollen area.

Shortness of breath.

Swelling of only one limb.

Difficulty walking or you have trouble moving.