



Patient education: Diabetes and infections (The Basics)

Written by the doctors and editors at UpToDate

Please read the [Disclaimer](#) at the end of this page.

Do people with diabetes have a higher chance of getting infections?

Yes. People with diabetes have a higher chance of getting certain infections. Doctors think that this is likely due to:

- High blood sugar – Blood sugar levels that are too high can keep a person's infection-fighting system (called the "immune system") from working as well as it should.
- Nerve damage – Over time, diabetes can cause nerve damage. This can lead to problems. For example, nerve damage can make people unable to feel pain in their feet. So if a person gets a cut on the foot or steps on a nail or other sharp object that pierces the skin, they might not know it. If a wound isn't treated right away, it can become an open sore and get infected.
- Blood vessel problems – Over time, diabetes can damage the blood vessels. Then, blood can't flow as well to help heal an infection.

If you have diabetes, let your doctor or nurse know right away if you think that you have an infection.

What kinds of infections do people with diabetes commonly get?

People with diabetes commonly get:

- Skin infections
- Vaginal yeast infections
- Bladder or kidney infections
- Infections on the feet
- Yeast infections in the mouth (called "thrush")
- Lung infections
- Infections after surgery, around the cut from the surgery

When should I call my doctor or nurse?

Certain symptoms might mean that you have an infection. Call your doctor or nurse if you have diabetes and get any of the following symptoms:

- Fever, aches, or chills
- Redness, swelling, warmth, or increased pain around a cut, scrape, or ulcer
- Pus draining from a cut, scrape, or ulcer
- Feeling the need to urinate a lot, pain when you urinate, or cloudy or bad-smelling urine
- Vaginal itching or discharge
- White patches in your mouth or on your tongue

Is there anything I can do to help prevent infections?

Yes. People with diabetes can do different things to help prevent infections. One of the most important things you can do is keep your blood sugar level under control. Controlling your blood sugar can help reduce nerve and blood vessel damage from diabetes.

Another important thing is to take good care of your feet. This can help prevent foot infections. To protect and take care of your feet, you can:

- Wear shoes or slippers all of the time.
- Trim your toenails carefully. Cut straight across, and file the nail ([figure 1](#)). Do not cut cuticles or pop blisters.
- Wash your feet with warm water and soap every day, and pat them dry. Put a moisturizing cream or lotion on your feet.
- Check both feet every day ([figure 2](#)). Look for cuts, blisters, swelling, or redness. Check all over your feet, including the bottoms and in between your toes. If you can't see well or if you have trouble seeing the bottoms of your feet, ask a family member or friend to check your feet.
- Wear socks that are not too tight, and change them every day.
- Wear shoes that fit well and are not too tight.

- Check inside your shoes before you put them on. Make sure that there is nothing sharp inside.
- Have your doctor check your feet at each visit.

To help prevent infections in other parts of your body, you can:

- Take care of your skin by keeping it clean and dry. Wear gloves when you use harsh cleaning chemicals or other products that could harm your skin. If you get a cut or scrape, wash it right away with soap and water. If it doesn't heal or gets worse, see your doctor or nurse.
- Take care of your gums and teeth. Brush your teeth twice a day, floss your teeth every day, and see your dentist for regular check-ups.
- Eat a healthy diet that includes protein, vegetables, and fruits. Drink plenty of fluids.
- Get the coronavirus disease 2019 ("COVID-19") vaccine, the pneumonia vaccine, the flu vaccine (every year), and any other vaccines your doctor recommends.
- Wash your hands often, especially if you are around people who are sick.
- Avoid holding in your urine for very long periods of time.
- Stop smoking. Smoking makes blood vessel problems worse.

If you do get an infection and your doctor prescribes antibiotic medicines, take them exactly as prescribed. If you don't take all of your antibiotics, your infection could come back.

More on this topic

[Patient education: Type 1 diabetes \(The Basics\)](#)

[Patient education: Type 2 diabetes \(The Basics\)](#)

[Patient education: Diabetic ketoacidosis \(The Basics\)](#)

[Patient education: Vaccines for adults \(The Basics\)](#)

[Patient education: Vulvovaginal yeast infection \(The Basics\)](#)

[Patient education: Urinary tract infections in adults \(The Basics\)](#)

[Patient education: Pneumonia in adults \(The Basics\)](#)

[Patient education: Managing blood sugar in children with diabetes \(The Basics\)](#)

[Patient education: Checking your child's blood sugar level \(The Basics\)](#)

[Patient education: Nerve damage caused by diabetes \(The Basics\)](#)

[Patient education: Thrush in adults \(The Basics\)](#)

[Patient education: Quitting smoking for adults \(The Basics\)](#)

Patient education: Taking care of cuts, scrapes, and puncture wounds (The Basics)

Patient education: Foot care for people with diabetes (The Basics)

Patient education: Diabetic foot ulcer (The Basics)

Patient education: Vaginal yeast infection (Beyond the Basics)

Patient education: Diabetic neuropathy (Beyond the Basics)

Patient education: Vaccines for adults (Beyond the Basics)

Patient education: Urinary tract infections in adults (Beyond the Basics)

Patient education: Foot care for people with diabetes (Beyond the Basics)

Patient education: Pneumonia in adults (Beyond the Basics)

Patient education: Glucose monitoring in diabetes (Beyond the Basics)

Patient education: Type 1 diabetes: Overview (Beyond the Basics)

Patient education: Type 2 diabetes: Overview (Beyond the Basics)

All topics are updated as new evidence becomes available and our [peer review process](#) is complete.

This topic retrieved from UpToDate on: Dec 20, 2024.

Disclaimer: This generalized information is a limited summary of diagnosis, treatment, and/or medication information. It is not meant to be comprehensive and should be used as a tool to help the user understand and/or assess potential diagnostic and treatment options. It does NOT include all information about conditions, treatments, medications, side effects, or risks that may apply to a specific patient. It is not intended to be medical advice or a substitute for the medical advice, diagnosis, or treatment of a health care provider based on the health care provider's examination and assessment of a patient's specific and unique circumstances. Patients must speak with a health care provider for complete information about their health, medical questions, and treatment options, including any risks or benefits regarding use of medications. This information does not endorse any treatments or medications as safe, effective, or approved for treating a specific patient. UpToDate, Inc. and its affiliates disclaim any warranty or liability relating to this information or the use thereof. The use of this information is governed by the Terms of Use, available at <https://www.wolterskluwer.com/en/know/clinical-effectiveness-terms>. 2024© UpToDate, Inc. and its affiliates and/or licensors. All rights reserved.

Topic 83961 Version 13.0

GRAPHICS

Trim your toenails



Trim your toenails straight across and smooth them with a nail file.

Graphic 80053 Version 2.0

Foot check for people with diabetes



People with diabetes should check both of their feet every day. It is important to check your feet all over, including in between your toes. If you can't see the bottom of your foot, use a mirror or ask another person to check for you. Let your doctor or nurse know if you find any:

- Redness
- Cuts or cracks in the skin
- Blisters
- Swelling

Graphic 77032 Version 3.0

