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## **Patient information: Diabetes and infections (The Basics)**

Written by the doctors and editors at UpToDate

**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 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, he or she 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.

It’s important that people with diabetes let their doctor or nurse know right away if they think they have an infection. That’s because people with diabetes who get an infection are more likely to get a serious condition called “diabetic ketoacidosis.”

**What kinds of infections do people with diabetes commonly get?** — People with diabetes commonly get:

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

**When should I call my doctor or nurse?** — Certain symptoms might mean you have an infection. Call your doctor or nurse if you have diabetes and get any of the following symptoms:

- Fever, aches, or chills
- Nausea, vomiting, or diarrhea
- A rash
- Redness, swelling, warmth, or increased pain around a cut or scrape, or pus draining from a cut or scrape
- Feeling the need to urinate a lot, having pain when you urinate, or having cloudy or bad-smelling urine
- Vaginal itching or discharge
- A cough
- 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 you can do is 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 the time.
- Trim your toe nails 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. Make sure to check all over your feet, including the bottoms of your feet 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, but are not too tight.
- Check inside your shoes before you put them on. Make sure 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 pneumonia vaccine (once), 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, be sure to take them exactly as prescribed. If you don't take all of your antibiotics, your infection could come back.

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

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

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

[Patient information: Vaginal yeast infection \(The Basics\)](#)

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

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[Patient information: Keeping your child's blood sugar under control \(The Basics\)](#)

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[Patient information: Adult vaccines \(Beyond the Basics\)](#)

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[Patient information: Foot care in diabetes mellitus \(Beyond the Basics\)](#)

[Patient information: Pneumonia in adults \(Beyond the Basics\)](#)

[Patient information: Kidney infection \(pyelonephritis\) \(Beyond the Basics\)](#)

[Patient information: Self-blood glucose monitoring in diabetes mellitus \(Beyond the Basics\)](#)

[Patient information: Diabetes mellitus type 1: Overview \(Beyond the Basics\)](#)

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## GRAPHICS

### Trim your toenails

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## Foot check for people with diabetes

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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