**Overview**

Cellulitis (sel-u-LIE-tis) is a common, potentially serious bacterial skin infection. The affected skin is swollen and inflamed and is typically painful and warm to the touch.

**Cellulitis**

Cellulitis is usually a superficial infection of the skin (left). But if severe (right) or if left untreated, it can spread into the lymph nodes and bloodstream.

Cellulitis usually affects the lower legs, but it can occur on the face, arms and other areas. The infection happens when a break in the skin allows bacteria to enter.

Left untreated, the infection can spread to the lymph nodes and bloodstream and rapidly become life-threatening. It isn't usually spread from person to person.

**Symptoms**

Cellulitis usually occurs on one side of the body. Its signs and symptoms may include:

* An irritated area of skin that tends to expand
* Swelling
* Tenderness
* Pain
* Warmth
* Fever
* Chills
* Spots
* Blisters
* Skin dimpling

**When to see a doctor**

It's important to identify and treat cellulitis early because the condition can spread rapidly throughout your body.

Seek emergency care if:

* You have a swollen, tender rash or a rash that's changing rapidly
* You have a fever

See your health care provider, preferably within the same day, if:

* You have a rash that's swollen, tender and warm — and it's expanding — but you don't have a fever

**Causes**

Cellulitis is caused when bacteria, most commonly streptococcus and staphylococcus, enter through a crack or break in the skin. The incidence of a more serious staphylococcus infection called methicillin-resistant Staphylococcus aureus (MRSA) is increasing.

Cellulitis can occur anywhere on the body, but the most common location is the lower leg. Bacteria are most likely to enter broken, dry, flaky or swollen skin, such as through a recent surgical site, cuts, puncture wounds, ulcers, athlete's foot or dermatitis.

**Risk factors**

Several factors increase the risk of cellulitis:

* **Injury.** Any cut, fracture, burn or scrape gives bacteria an entry point.
* **Weakened immune system.** Conditions that weaken the immune system — such as diabetes, leukemia and HIV/AIDS — increase the risk of infection. Certain medications also can weaken the immune system.
* **Skin conditions.** Conditions such as atopic dermatitis (eczema), athlete's foot and shingles can cause breaks in the skin, which give bacteria an entry point.
* **Long-term (chronic) swelling of the arms or legs (lymphedema).** This condition sometimes happens after surgery.
* **History of cellulitis.** Having had cellulitis before increases the risk of getting it again.
* **Being overweight.** Excess weight increases the risk of developing cellulitis.

**Complications**

Untreated cellulitis might lead to bacteremia, endocarditis, osteomyelitis, toxic shock syndrome or sepsis. Rarely, the infection can spread to the deep layer of tissue called the fascial lining. Necrotizing fasciitis is an example of a deep-layer infection. It's an extreme emergency.

Recurrent episodes of cellulitis may damage the lymphatic drainage system and cause chronic swelling of the affected limb.

**Prevention**

If your cellulitis recurs, your health care provider may recommend preventive antibiotics. To help prevent cellulitis and other infections, take these precautions when you have a skin wound:

* **Wash the wound daily with soap and water.** Do this gently as part of your normal bathing.
* **Ask your health care provider whether it would help to apply a protective cream or ointment.** For most surface wounds, a nonprescription ointment (Vaseline, Polysporin, others) provides adequate protection.
* **Cover the wound with a bandage.** Change bandages at least daily.
* **Watch for signs of infection.** Irritation, pain and pus all signal possible infection and the need for medical care.

People with diabetes or poor circulation need to take extra precautions to prevent skin injury. Good skin care includes the following:

* **Inspecting your feet daily.** Regularly check your feet for signs of injury so that you can catch infections early.
* **Moisturizing your skin regularly.** Lubricating the skin helps prevent cracking and peeling. Don't apply moisturizer to open sores.
* **Trimming your fingernails and toenails carefully.** Take care not to injure the surrounding skin.
* **Protecting your hands and feet.** Wear footwear and gloves suitable to your activities.
* **Promptly treating infections on the skin's surface, such as athlete's foot.** Minor skin infections can easily spread from person to person. Treat fungal infections as soon as they occur.

## Diagnosis

Your health care provider will likely be able to diagnose cellulitis by looking at your skin. You might need to undergo a blood test or other tests to help rule out other conditions.

## Treatment

Cellulitis treatment usually includes a prescription oral antibiotic. Within three days of starting an antibiotic, let your health care provider know whether the infection is responding to treatment. You'll need to take the antibiotic for the full course, usually 5 to 10 days, even if you start to feel better.

Symptoms typically disappear a few days after you start treatment. You may need to be hospitalized and receive antibiotics through your veins (intravenously) if:

* Signs and symptoms don't respond to oral antibiotics
* Signs and symptoms are extensive
* You have a high fever

## Self care

Try these steps to help ease any pain and swelling:

* Place a cool, damp cloth on the affected area as often as needed for your comfort.
* Ask your health care provider to suggest a nonprescription pain medication.
* Elevate the affected part of the body.
* Ask your health care provider whether it might help to wear compression wraps or stockings.

## Preparing for your appointment

You're likely to start by seeing your primary care provider, who may refer you to a doctor who specializes in skin disorders (dermatologist). If you have a severe infection, an emergency room doctor may examine you first. You may also be referred to an infectious disease specialist.

Here's some information to help you get ready for your appointment.

### What you can do

* **List your symptoms,** including any that may seem unrelated to the reason for which you scheduled the appointment.
* **List key personal information,** such as if you've had any recent surgeries, injuries, animal bites or insect bites.
* **List medications,** vitamins and supplements you're taking and the dosage.
* **List questions to ask** your health care provider.

Preparing a list of questions can help you make sure that you cover the points that are important to you. For cellulitis, some basic questions to ask your health care provider include:

* How might I have gotten this infection?
* What tests do I need? Do these tests require special preparation?
* How is cellulitis treated?
* How long before the treatment starts working?
* What side effects are possible with this medication?
* I have other medical conditions. How do I manage them together?
* Are there alternatives to antibiotics?
* Is there a generic alternative to the medicine you're prescribing?
* How can I prevent this type of infection in the future?
* Do you have any brochures or other printed material that I can have? What websites do you recommend?

Don't hesitate to ask other questions you have.

### What to expect from your doctor

Your health care provider is likely to ask you questions such as:

* When did your symptoms start?
* Do you remember injuries or insect bites to that area?
* How severe is the pain?
* Does anything seem to improve your symptoms?
* Are you allergic to or intolerant of any antibiotics?
* Have you had this type of infection before?

### What you can do in the meantime

You may need a prescription antibiotic to clear your infection. However, until you see your health care provider, you can wash the injured area with soap and water and place a cool, damp cloth over it.