

Methicillin-Resistant *Staphylococcus Aureus* (MRSA)

What is MRSA?

Some germs that commonly live on the skin and in the nose are called staphylococcus or “staph” bacteria. Approximately 25-30% of the population has these bacteria in their nose. Usually, staph bacteria don’t cause any harm. However, sometimes they get inside the body through a break in the skin and cause an infection. Staph bacteria are one of the most common causes of skin infections in the United States. Most of these skin infections are minor (such as pimples and boils) and can be treated without antibiotics. However, staph bacteria also can cause serious infections that require hospitalization. When common antibiotics don’t kill the staph bacteria, it means the bacteria have become resistant to those antibiotics. This type of staph is called MRSA (Methicillin-Resistant *Staphylococcus Aureus*). Of the 25-30% of people who have staph bacteria in the skin or nose, only 1% carry MRSA.



What is community-associated MRSA (CA-MRSA)?

Although most staph and MRSA infections occur in healthcare facilities, there are an increasing number of community associated infections. MRSA infections that are acquired by persons who have not been recently (within the past year) hospitalized or have had a medical procedure (such as dialysis, surgery, catheters) are known as community-associated (CA) MRSA infections.

What does a staph or MRSA infection look like?

Most often, MRSA causes infections on the skin. Symptoms of a staph infection include redness, warmth, swelling, pus, tenderness of the skin, pimples, boils, or blisters. These infections may look like any one of the following:

- Sores that look and feel like spider bites (MRSA is not caused by a spider bite).
- Boils – tender, red lumps that swell and get white heads like very big pimples. Boils form on oily or moist skin such as the neck, armpits, groin, and buttocks. They may break open and ooze pus or blood.
- Impetigo – blisters with fluid in them, which pop and get a yellow crust. Children often get it on the face. It can be spread by scratching.
- A cut that is swollen, hot and filled with pus.

Staph/MRSA infected skin lesions may progress quickly from a skin or surface irritation to an abscess or serious skin infection. If left untreated, staph/MRSA can infect the blood, lungs, eyes, and urine.

Staph infections of the skin may look like these photos of staph infections.



How is MRSA spread?

MRSA is most often spread from person to person by direct skin-to-skin contact with an infected person. Although less likely, MRSA can also be spread by touching contaminated surfaces. In up to 1/3 of cases, people become infected from the bacteria on their own skin entering their body.

Some ways that you could get MRSA:



- Touching the infected skin of someone who has MRSA
- Using personal items of someone who has MRSA, such as towels, wash cloths, clothes or athletic equipment
- Touching objects, such as public phones or doorknobs, that have MRSA bacteria on the surface
- Being in crowded places where germs are easily spread, such as hospitals, nursing homes, daycares, jails, or college dorms

Who is at increased risk for community-associated staph or MRSA infections?

Anyone can get MRSA. The “5 Cs” associated with the spread of community-associated MRSA skin infections include:

1. Skin-to-skin **C**ontact
2. **C**ompromised skin, such as cuts or abrasions
3. **C**ontaminated items and surfaces
4. **C**rowded living conditions
5. Lack of **C**leanliness



Outbreaks of CA-MRSA have occurred among prison inmates, participants in contact sports (i.e. football, wrestling), military recruits, and men who have sex with men.

You may increase your chances of getting MRSA if:



- You take antibiotics a lot
- You take antibiotics without a prescription
- You don't follow directions when taking antibiotics, such as stopping early or missing doses

You are at greater risk of getting MRSA if you are recovering from surgery or burns, have tubes in your body for medical treatment, or if you share needles.

How can I prevent staph or MRSA skin infections?

Practice good hygiene!

- Keep your hands clean by washing thoroughly with soap and warm water or using an alcohol-based hand sanitizer.
- Keep cuts and scrapes clean and covered with a bandage until healed.
- Avoid contact with other people's wounds or bandages.
- Avoid sharing personal items such as towels or razors.
- Clean shared items (i.e. towels, athletic equipment) before you use them.



What should I do if I think I have a staph or MRSA skin infection?

Keep the area clean and dry. See your doctor as soon as possible, especially if the infection is large, painful, warm to the touch, or does not heal by itself. Early treatment can help prevent the infection from getting worse. The symptoms of MRSA infection are similar to those of other skin infections. MRSA can only be diagnosed by culture and laboratory testing. **If you are prescribed antibiotics, be sure to take all of your pills, even if you feel better. Incomplete treatment of staph infections can lead to antibiotic-resistant bacteria, like MRSA.**

How are staph and MRSA infections treated?

Staph skin infections may heal by themselves if kept clean and dry. If you have an active MRSA infection, your physician may choose one or more of the following treatments:

1. [Drain the infection](#). Many staph skin infections may be treated by draining the abscess or boil and may not require antibiotics. Drainage of skin boils or abscesses should only be done by a healthcare provider.
2. [Prescribe antibiotics](#). Most staph and MRSA infections are treatable with antibiotics. If you are given an antibiotic, take all of the doses, even if the infection is getting better, unless your doctor tells you to stop taking it. Do not share antibiotics with other people or save unfinished antibiotics to use at another time.
3. [Reduce the amount of bacteria on the skin](#). This may prevent the spread of MRSA if you have an active infection or if you are a carrier. Your physician may, for a short period of time, recommend that you shower daily with antibacterial soap, prescribe antibiotic pills, or prescribe a nasal antibiotic ointment.

If after visiting your healthcare provider the infection is not getting better after a few days, contact them again. If other people you know or live with get the same infection tell them to go to their healthcare provider.

[If I have a staph, or MRSA skin infection, what can I do to prevent others from getting infected?](#)

You can avoid spreading staph or MRSA skin infections to others by following these steps:

- [Cover wounds](#). Keep infected areas covered with clean, dry bandages. Pus from infected wounds is very infectious. If you have a skin infection or wounds with drainage that cannot be contained by bandages or dressings, you should stay home from work, school, gyms, or daycare until the drainage can be contained.
- [Wash your hands](#). You, your family, and others in close contact should wash their hands frequently with soap and warm water or use an alcohol-based hand sanitizer, especially after changing bandages or touching infected skin. Throw used dressings away promptly.
- [Avoid sharing personal items](#). Avoid sharing personal items such as towels, washcloths, razors, clothing, or uniforms that may have had contact with an infected wound or bandage.
- [Clean your bathroom and personal items](#). MRSA bacteria can live on surfaces for days, weeks, and months. Clean surfaces frequently and apply disinfectant. Bleach solution is an easy-to-make, inexpensive disinfectant. Mix one tablespoon bleach to one quart of water. The solution



needs to be made fresh each day. Never mix bleach with any cleaners containing ammonia. Disinfectants are also widely available in stores. Be sure that the label reads disinfectant (that kills *Staphylococcus aureus*) and follow instructions for use. Wash sheets, towels, and clothes that become soiled with hot water and bleach when possible. Drying clothes in a hot dryer, rather than air-drying, also helps kill bacteria.

- [Talk to your doctors](#). Tell any healthcare providers who treat you that you have or had a staph or MRSA skin infection.

[How do I change my bandages? \(download Living with MRSA for more information\)](#)

1. Wash your hands well with soap and warm water
2. Put on disposable gloves.
3. Remove the old bandage.
4. Put the old bandage into a plastic bag. Take off the gloves and put them in the plastic bag, too.
5. Wash and dry your hands
6. Put on a new, clean pair of gloves.
7. Apply the new bandage. If you have a leaking sore, put extra dressings over it to keep the drainage from leaking through.
8. Take off the second pair of gloves and put them in the plastic bag. Seal or tie up the bag and throw it away in your regular trash.
9. Wash and dry your hands.



What does it mean to be “colonized”?

There are two ways you can have MRSA.

1. [You can have an active infection](#). An active infection means you have symptoms. The types of symptoms depend on where the bacteria are located. Usually an active infection is a skin infection, such as a boil, a sore, or an infected cut.
2. [You can be a carrier](#). If you are a carrier you do not have symptoms that you can see, but you still have MRSA bacteria living on your skin and in your nose. If you are a carrier, your doctor may say that you are colonized. These words — “carrier” and “colonized” — mean the same thing. You may not get sick or have any more skin infections, but you can spread MRSA to others.

Staph and MRSA infections are contagious as long as you have draining lesions or as long as you are a carrier.

Is MRSA the “flesh-eating” bacteria?

Many bacteria can cause severe illness, including a very severe skin and tissue infection called “necrotizing fasciitis.” This kind of life-threatening infection is rare and can be caused by staph, including MRSA, and other kinds of bacteria.

References and More information:

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