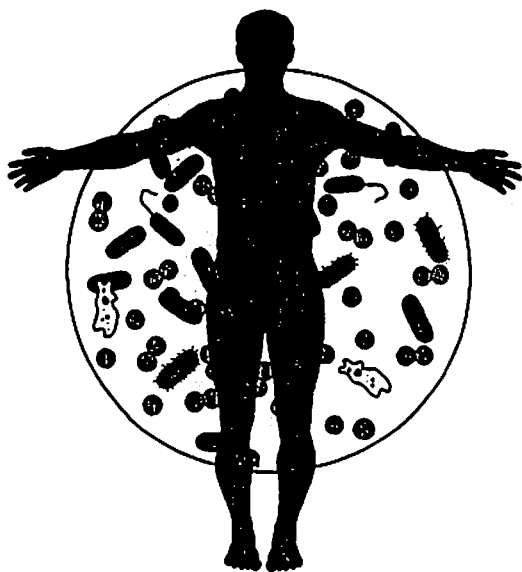


Living with MRSA

(Methicillin-Resistant *Staphylococcus aureus*)



What is MRSA

Protecting Yourself and Others from Infection

Preventing the Spread of MRSA In the Home

Preventing the Spread of MRSA In the Community

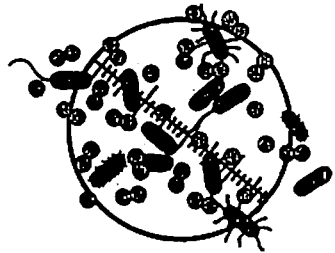
MRSA and your Health Care

What is MRSA?

Staphylococci or "staph" are bacteria that live on the skin and in the nose, usually without causing harm. Methicillin-resistant *Staphylococcus aureus* (MRSA) is a kind of staph bacteria that has become resistant to antibiotics. Bacteria develop resistance to antibiotics when antibiotics are used frequently.

Staph bacteria are becoming more resistant to penicillin and other antibiotics commonly used to treat infection. MRSA is a type of staph that is resistant to several types of antibiotics.

Staph infections are especially a problem when people have surgical wounds, burns, or tubes in their body for medical treatment. However, they are becoming more common among people who do not have medical problems, including children.



What do MRSA infections look like?

MRSA bacteria are found mainly on the skin, in the nose, in wounds, in blood and urine, but it can also be found in other body sites. It is most likely to cause infection when a person has a break in the skin or other openings where bacteria can get inside the body.

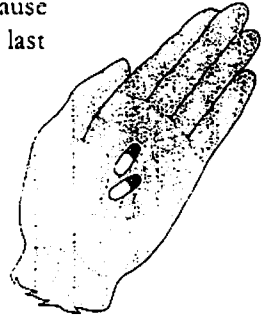
Common skin conditions caused by MRSA include infected cuts, boils, infected hair follicles, fluid filled blisters (impetigo), or skin sores that look like infected insect bites. Minor MRSA infections can sometimes develop serious complications, such as spread of infection to surrounding tissues, abscesses, or blood, bone, or heart infections.

How is MRSA treated?

Because MRSA is resistant to many antibiotics, it can be difficult to treat. However, some antibiotics can successfully cure MRSA infections. Some people can carry MRSA in their nose but don't have symptoms of infection. They usually do not need treatment, but they should be aware of how to protect themselves and others from becoming sick.

Most boils can be treated by "incision and drainage," a minor surgical procedure performed by your health care provider to open the boil and drain the infection. Oral antibiotics may not be needed or may not be effective for this kind of MRSA.

If you have a MRSA infection in any part of your body and your health care provider gives you a prescription, take the medication exactly as prescribed. Do not stop early because you feel better--finish the whole bottle. The last few pills kill the toughest germs. Tell your doctor if your infection does not get better in a few days or if you begin to feel worse.



How did I get MRSA?

You can get MRSA by touching the infected skin or wound of someone who has MRSA, or by sharing objects such as towels or athletic equipment with someone who has MRSA. Sometimes people get these infections in health care settings such as hospitals or nursing homes.

Protecting yourself and others from infection

How is MRSA spread?

MRSA bacteria can spread from an infected person to another person during prolonged skin to skin contact. MRSA can also be transferred by an infected person to commonly shared objects such as towels, which can then transfer to any person who touches that object. MRSA is almost always spread through physical contact, not through the air. If you have MRSA in your nose, you can spread the bacteria just by touching your nose and then someone else.

How contagious am I?

This depends on where MRSA bacteria are on your body. For example, if you have a MRSA-infected wound such as a boil or impetigo, any pus or fluid from the site contains MRSA bacteria and is infectious. If this substance gets onto someone else, they could get a MRSA infection. If this substance gets onto your hands and you touch another person, you could give it to them. Even things like towels or sheets that come in contact with your infection site can carry the bacteria to other people.

People who have MRSA in their lungs can expel tiny droplets of fluid when they cough. These droplets can spread the MRSA bacteria to others.

Even after your infection has cleared up and you no longer experience symptoms, you may still carry the bacteria in your nose or other warm, moist areas on your skin. This is called being "colonized." Although the risk is small, you could spread MRSA to others, especially if you touch your nose and then touch someone else.

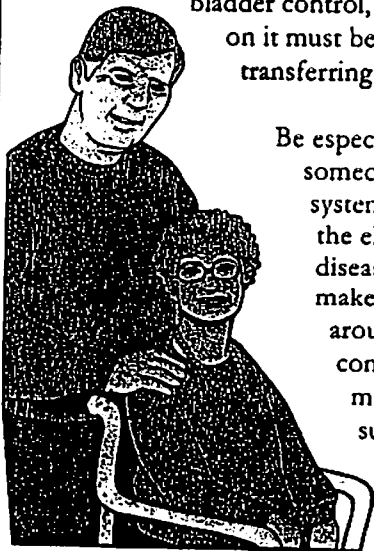


What can I do to prevent giving MRSA to other people?

The most important thing you can do is wash your hands frequently. If you don't have access to soap and water, you can kill the MRSA or staph germs by using an alcohol based hand sanitizer. See page 5 regarding when and how to wash.

You also must think about where MRSA bacteria are on your body. If you have a skin infection, you should keep the area covered with dry bandages and clothing, if possible. Change the bandage regularly, especially if the bandage gets wet (either from drainage from the wound or with water). See page 7 on how to safely change a bandage. Make sure that any drainage (pus or fluid) that comes out of your wound does not get onto other people or objects that others might touch. After you touch your infected site, wash your hands immediately.

If MRSA is in your lungs, cover your mouth with a tissue when you cough. Throw the tissue in a wastebasket and wash your hands. If MRSA is in your urine, be sure to clean your bathroom well. If other people handle your urine they should use gloves and wash their hands well afterwards. If you have problems with bladder control, clothing or bedding that has urine on it must be handled carefully to avoid transferring the bacteria to others (see page 7).



Be especially careful if you are around someone who has a weak immune system, such as newborn babies, the elderly, or anyone with a chronic disease. If they get MRSA, it can make them ill. Be careful if you are around someone who has skin conditions or surgical wounds that might make them more susceptible to an infection.

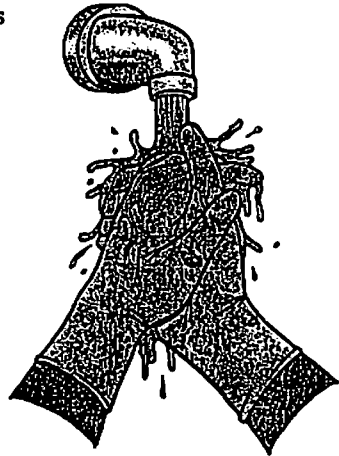
The following will give you detailed information about ways to protect yourself and others:

Wash your hands at the following times:

- ◆ Before and after touching wounds, genitals, the mucous membranes of your eyes, nose, or mouth, and non-intact skin like acne, boils, and skin rashes.
- ◆ After touching stool, body fluids, and items soiled with body fluids, such as dressings or bedding.
- ◆ After cleaning the bathroom, changing your bedding, and doing laundry.
- ◆ After blowing your nose or going to the bathroom.
- ◆ After coughing or sneezing.
- ◆ Before preparing food, eating, or drinking.

How to wash your hands:

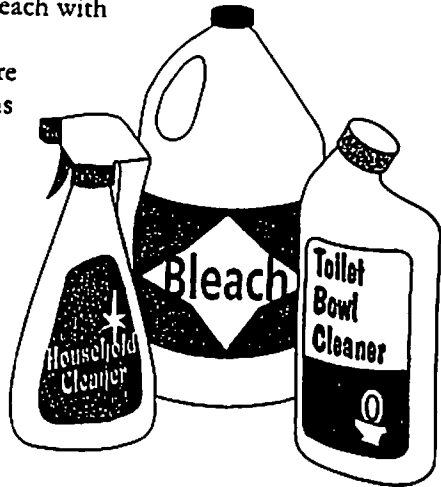
- ◆ Turn water on.
- ◆ Wet your hands.
- ◆ Apply soap to your hands.
- ◆ Rub your hands together for 10-15 seconds, rubbing between the fingers and around nails.
- ◆ Rinse with running water.
- ◆ Dry with a paper towel.
- ◆ Turn the faucet off using the paper towel (remember, your hands were dirty when you turned the faucet on).
- ◆ If you do not have access to soap and water, you can use a waterless, alcohol-based antiseptic hand gel instead.



Preventing the Spread of MRSA in the Home

Clean your house often and well

- ◆ Regularly clean surfaces and other commonly touched areas (doorknobs, light switches, etc.) with a disinfectant. Bleach solution is an easy-to-make, inexpensive disinfectant. Mix one tablespoon bleach to one quart of water. The solution should be made fresh every day because the chemicals become inactive when it sits. Never mix bleach with any cleaners containing ammonia. Disinfectants are widely available in stores as well. Be sure the label identifies it as a disinfectant and follow instructions for use.
- ◆ If body fluids such as wound drainage get onto surfaces, clean and disinfect these surfaces well.
- ◆ Cleaning involves removing the visible material (with a paper towel or other disposable wipe), and disinfecting involves applying a chemical product that kills the bacteria. Disinfectant should be applied liberally to the surface using a saturated cloth or paper towel. For bacteria to be killed, they must be in contact with wet disinfectant for an extended period of time. Allow the surface to air dry or you can wipe it dry after 10 minutes.
- ◆ Do not share towels, razors, toothbrushes, or other personal items with anyone else.
- ◆ Change your sheets regularly, especially if you have a draining wound.



Take extra care with your laundry

- ◆ When picking up dirty linen or clothing, hold it away from your body to prevent MRSA germs from getting onto your clothing. Caregivers should wear disposable gloves when touching soiled linen or clothing.
- ◆ Linens and clothing that are not soiled with body fluids can be washed with the rest of your family's laundry.
- ◆ If linens or clothing are contaminated with body fluids such as wound drainage, wash them separately from rest of the family's clothing.
- ◆ If dirty linens cannot be washed immediately, store them in a plastic bag until you can wash them.
- ◆ Use hot water and bleach for laundry. Using a hot dryer can also help kill bacteria.



When taking care of wounds

- ◆ Wash hands well with soap and water before changing the bandage.
- ◆ Wear gloves (you can get latex gloves at most pharmacies).
- ◆ Remove the old bandage. It can be disposed of in the regular trash, but be sure that it is in a plastic bag that is tied securely.
- ◆ Take off gloves, wash and dry hands.
- ◆ Put on a new, clean pair of gloves.
- ◆ Apply the new bandage.
- ◆ Take off gloves, wash and dry hands.

Handle waste and garbage with care

- ◆ Contaminated waste items, such as bandages and tissues, can be thrown out in your normal garbage.
- ◆ To prevent others from coming in contact with this garbage, make sure it is in a securely tied plastic bag.

Preventing spread of MRSA in your community

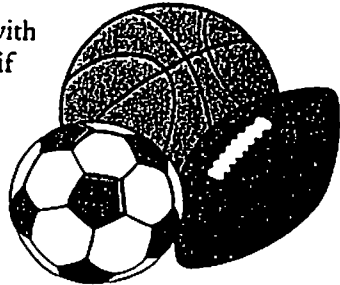
How to protect others when you are outside the home: *Wherever you go, your MRSA goes.*

Depending on the nature of your infection, there are certain things you can do to help prevent spreading MRSA to others when you are away from home. Be especially careful to keep any infectious material from a wound from coming in contact with other people or common surface areas.

People with active MRSA infections in a wound with uncontrollable drainage (either because there is so much drainage that it leaks out of the bandages or in a child or other person who cannot follow hygiene instructions) should stay home until they are able to completely contain the drainage with bandages.

IF you must leave your home, or if you have an active infection that can be completely contained:

- ◆ Cover all sores (wounds, boils, etc.) with clean, dry bandages. If possible, keep bandages covered with clothing.
- ◆ For children in school, develop a plan with the school nurse to protect the other children and the school environment.
- ◆ If you have sores that cannot be covered, such as impetigo on the face, do not touch the area! If you do touch it, wash your hands immediately.
- ◆ Carry alcohol-based hand cleaner with you so you can cleanse your hands if water is not available
- ◆ Do not work out at a public gym. School children and athletes should not participate in contact sports. Sweating can cause bandages to loosen and lead to skin-to-skin or skin-to-equipment contact allowing MRSA bacteria to spread.



MRSA and your Health Care

Will I always have MRSA?

When people develop symptoms that make them sick, their condition is referred to as an "acute infection." Many "acute" MRSA infections can be treated with medication. However, some people that are treated for an initial infection will continue to carry MRSA bacteria in their nose or on their skin for months or years, even though they have no symptoms. When you carry the bacteria but are not sick, you are referred to as being "colonized." People with chronic wounds, tubes, or chronic illnesses are more likely to be colonized with these bacteria. Doctors can also treat people who are colonized, but many times those bacteria will just go away over time.

- ◆ Do not use a public sauna, hot tub or pool.
 - ◆ Avoid personal care services where you could spread the infection to others until your sores have healed; i.e., haircut, manicure, massage.
 - ◆ If you work in a health care setting or place where people might have poor immune systems, you may need to take special precautions. Consult with your employer.
- For people who are colonized with MRSA in the nose:
- ◆ Conduct activities as normal, but wash your hands frequently, especially after touching your nose.
 - ◆ If you attend a gym, disinfect the equipment after using it (this is standard policy for all people who attend gyms and the gym should supply disinfectant).
 - ◆ Carry alcohol-based hand cleaner with you so you can cleanse your hands if water is not available.

Do I need to do anything special when the infection is gone?

After the infection has cleared up, remember that MRSA bacteria may still be living in your nose. You still need to take precautions to prevent spreading the MRSA bacteria from your nose to other people. Wash your hands frequently, especially after touching your nose. When you cough, cover your nose and mouth with a tissue, throw the tissue in a waste basket, and wash your hands.

If your infection comes back or if you have a similar new infection later, cover the area with a bandage (if it is a skin infection) and seek medical attention as soon as possible. Tell the health care provider that you have had MRSA in the past.

When should I seek medical care?

- ♦ If your infection does not clear up or if it comes back.
- ♦ If you develop signs of infection (fever, pain, spreading redness, local swelling or heat, or drainage that contains pus or blood).
Early treatment can prevent the infection from getting worse.
- ♦ If new symptoms develop during or after treatment for a skin infection.

What can I expect from my doctor and health care workers?

When seeing a health care provider, you should tell them you have MRSA. They should wash their hands or use an alcohol-based hand gel before and after caring for you. They will wear gloves when touching your wound or body fluids, and may wear gloves at all times when caring for you. They may also wear a gown to prevent getting the bacteria onto their clothing.

If you are admitted to a hospital, a "Special Precautions" card will be placed on your hospital room door so that staff will know that they need to use extra precautions while caring for you.

All of these precautions are to protect other patients that your health care provider will care for after you.

How can I keep myself healthy?

Hand washing and use of an alcohol-based hand sanitizer are the primary way to prevent acquiring or transmitting bacteria. If you get a cut or scrape, wash it well with soap and water, then cover it with a bandage to keep it very clean and dry until healed.

Antibiotic ointment may help prevent infection in cuts and scrapes. However, ointment will not penetrate below the skin into a boil or abscess. Seek medical care at the first sign of infection in a cut to find out if the MRSA infection may have come back; this includes redness, swelling, pain, and pus.

What should I do if my infection comes back?

If you have repeated MRSA infections, ask your health care provider about testing other people with whom you have frequent close skin-to-skin contact. It is possible they picked up the MRSA bacteria and are carrying it (even if they have never been sick with it) and then gave it back to you. We do not understand why some people carry MRSA and don't get sick. There may be some reason why you are more susceptible. You may also consider asking your vet about testing household pets (dogs or cats) with which you have close contact. If it is found that any of your close contacts are carrying MRSA, your doctor (or vet) may decide to treat them so they no longer carry the bacteria or pass it to you.

**Information provided by the
Fairfield Department of Health
1587 Granville Pike
Lancaster, Ohio 43130
(740) 653-4489**

Information designed by the
Tacoma Pierce County Health Department and
Spokane Regional Health District
Fall 2004