

How can I keep myself healthy?

If you get a cut or scrape, wash it well with soap and water and 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 this includes redness, swelling, pain, and pus because the MRSA infection may have come back.

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 that 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 while others do, but there may be some reason why you are more susceptible. You might also consider asking your vet about testing your household pets (such as 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, for the pets) may decide to treat them so that they no longer carry the bacteria or pass it to you.

Acknowledgements

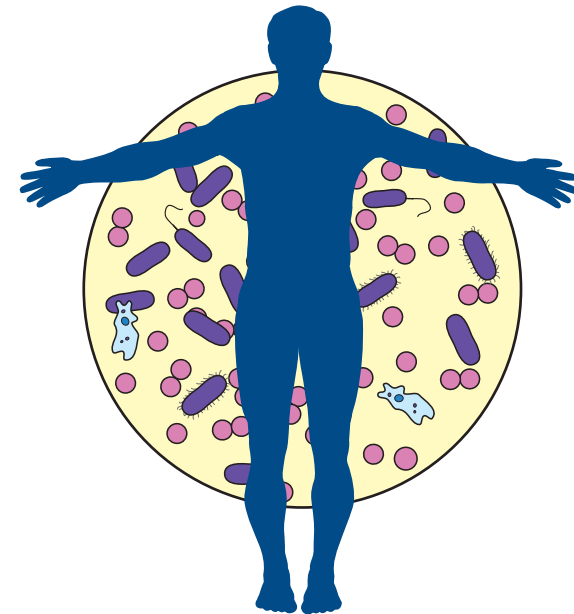
The information printed in this booklet was gathered from a variety of published sources by staff from Tacoma Pierce County Health Department.

Design and distribution of *Living with MRSA* is a cooperative effort between Tacoma Pierce County Health Department and Spokane Regional Health District.



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

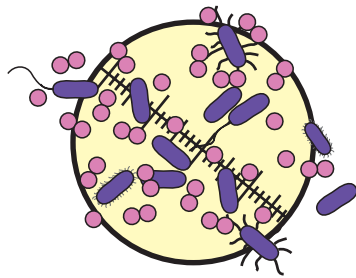
MRSA and your Health Care

What is MRSA?

MRSA is a kind of staph bacteria. Staphylococci or “staph” are bacteria that live on the skin and in the nose, usually without causing harm. When the skin is opened by cuts or scrapes these bacteria can enter the wound and cause infection. They can sometimes enter the skin through tiny hair shafts and cause “boils” or abscesses under the skin.

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

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



What do MRSA infections look like?

MRSA bacteria can be found on the skin, in the nose, in wounds, and in blood and urine or any other body site. They are most likely to cause infection when a person has a break in their skin or another opening 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 into more serious complications, such as spread of the infection to surrounding tissues, serious abscesses, blood, bone, or heart infections.

touching your nose, and when you cough cover your nose and mouth with a tissue, throw the tissue in a wastebasket and wash your hands.

If your infection comes back or if you have a similar 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, seek medical care.
- ◆ Consult your health care provider 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.
- ◆ Consult your health care provider 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 also 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.

- ◆ Do not attend a public sauna, hot tub or pool.
- ◆ Do not get personal care services where you could spread the infection to others; for example do not get a massage, haircut, manicure, etc. until your sores have healed.
- ◆ If you work in a health care setting or other 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:

- ◆ 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.

MRSA and your Health Care

Will I always have MRSA?

Many people can be treated with different antibiotics and get rid of the MRSA bacteria. Other people can be treated for the initial infection, but will continue to carry the bacteria in their nose or on their skin for months or years, even though it doesn't make them sick. 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. When people develop symptoms that make them sick, their condition is referred to as an "acute infection."

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

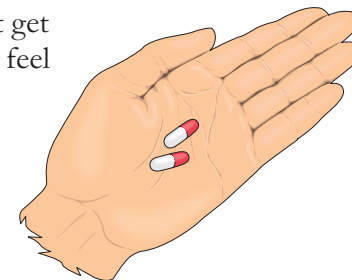
After the infection has cleared up, remember that the MRSA bacteria might still be living in your nose. So, you still need to take precautions to prevent spreading the MRSA bacteria from your nose to other people. Wash your hands frequently, especially after

How is MRSA treated?

MRSA is resistant to many antibiotics and can be difficult to treat. However, some antibiotics can successfully cure MRSA infections. Patients who only carry MRSA in their nose but don't have symptoms of infection usually do not need treatment, but they should be aware of how to protect themselves and others from becoming sick. (see below)

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 pus. Oral antibiotics may not be needed, and 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 from shared objects such as towels or athletic equipment. Sometimes people get these infections in health care settings such as hospitals or nursing homes. Bacteria develop resistance to antibiotics where antibiotic use is frequent, and then these resistant bacteria pass from person to person.

Protecting yourself and others from infection

How is MRSA spread?

MRSA bacteria can move from the skin of an infected person to the skin of another person during prolonged skin to skin contact between them. MRSA also can move from the skin of an infected person onto commonly shared objects (such as towels) or surfaces and then is transferred to the skin of the person who touches the item next. Basically, anything that can touch the skin of one person can carry the bacteria to the skin of another person. MRSA almost always is spread through physical contact, not through the air. If you have MRSA in your nose and you touch your nose and then touch someone else, you can spread it to that person.

How contagious am I?

This depends on where the MRSA bacteria are on your body. For example, if you have a skin or wound infection with MRSA such as a boil or impetigo, any pus or fluid from the site contains the MRSA bacteria and therefore is infectious. If this substance gets onto someone else, they could get a MRSA infection. Also, 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.

If you have MRSA in your lungs you could spread it to other people when you cough through the small droplets that are expelled when coughing.

Even after your infection has cleared up, you might still carry the bacteria in your nose or other warm, moist areas on your skin, even though you are not sick at all. 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.

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. You especially need to make sure that any infectious material from a wound does not get onto other people or onto things people touch.

For people with active MRSA infections in a sore that has pus or fluid coming out of it which cannot be contained (either because there is so much drainage that it leaks out of the bandages or it is a child or other person who cannot follow hygiene instructions):

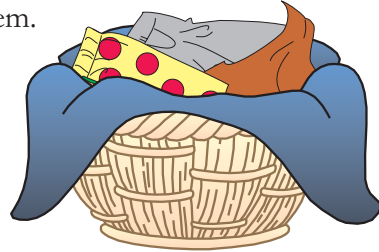
- ◆ Stay home if possible, until you are able to completely contain the drainage with bandages. If you must leave your home, follow the instructions under the next section (for sores when the drainage can be contained)

For people with an active infection that is possible to completely contain:

- ◆ Cover all sores (wounds, boils, etc) with clean and dry bandages. If possible, keep bandages covered with clothing as well, and change clothing if it becomes soiled.
- ◆ 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 by mistake, 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 also not participate in contact sports. Sweating can cause bandages to loosen, which can allow the MRSA bacteria to spread; also, the amount of skin-to-skin or skin-to-equipment contact allows for spread.

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 gloves when touching soiled linen or clothing.
- ◆ Linens and clothing that is not soiled with body fluids can be washed with the rest of your family's laundry
- ◆ If linen or clothing is contaminated with body fluids such as wound drainage, wash it separately from other family's clothing.
- ◆ If these dirty linens cannot be washed immediately, store them in a plastic bag until you can wash them.
- ◆ Use hot water and bleach for laundry, if possible. Using a hot dryer also can help kill bacteria.



When taking care of wounds

- ◆ Wash hands well with soap and water before changing the bandage.
- ◆ Put gloves on (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 and wash and dry hands.
- ◆ Put on a new, clean pair of gloves.
- ◆ Apply the new bandage.
- ◆ Take off gloves and wash and dry hands.

Handle waste and garbage with care

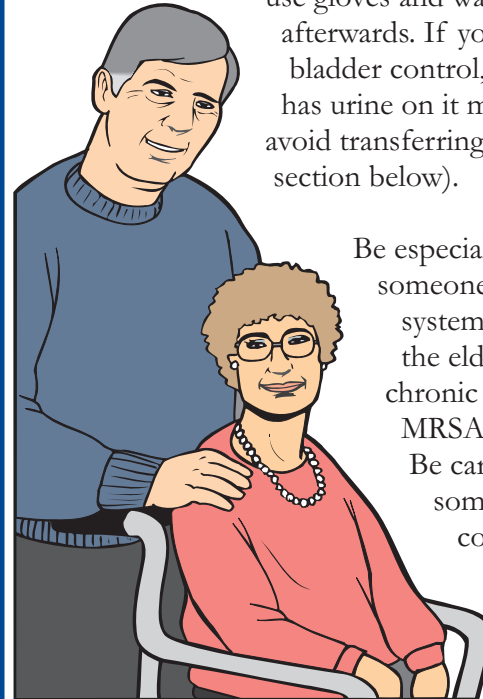
- ◆ Contaminated waste items that can be discarded, such as bandages and tissues, can be thrown out in your normal garbage.
- ◆ To prevent others from coming in contact with this garbage, make sure it is in a securely tied plastic bag.

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

The most important thing you can do is wash your hands frequently. See section below regarding when and how to wash.

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

If the 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 the MRSA is in your urine, be sure to clean your bathroom well and 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 section below).



Be especially careful if you are around someone who has a weak immune system, such as newborn babies, the elderly, and anyone with a chronic disease. If they pick up MRSA, it can make them very ill. Be careful if you are around someone who has skin conditions or surgical wounds who might be more susceptible to getting 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. It should be mixed fresh every day because when it sits the chemicals become inactive. Never mix bleach with any other cleaners containing ammonia. Disinfectants are widely available in stores as well. Be sure that the label identifies that it is 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 (such as with a paper towel) and disinfecting involves applying a chemical product that kills bacteria. The disinfectant should be applied liberally to the surface (such as by using a saturated cloth or paper towel. For bacteria to be killed, they must be in contact with wet disinfectant for a long enough time: the surface must be allowed 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.

