MRSA – Methicillin Resistant *Staphylococcus aureus*
Information for Patients

What is MRSA?

*Staphylococcus aureus*, often referred to simply as “staph”, is a bacteria commonly found on the skin of healthy people. Occasionally, staph can get into the body and cause an infection. This infection can be minor (such as pimples, boils, and other skin conditions) or serious (such as blood infections or pneumonia). Methicillin is an antibiotic commonly previously used to treat staph infections. Although methicillin is very effective in treating most staph infections, some staph bacteria have developed resistance to methicillin, penicillin, amoxicillin, and ocacillin and can no longer be killed by these antibiotics. These resistant bacteria are called methicillin–resistant *Staphylococcus aureus*, or MRSA.

What is the difference between colonization and infection?

Colonization means that MRSA is present on or in the body without causing illness. Infection means that MRSA is making the person sick.

Who gets MRSA?

Staph infections, including MRSA, occur most frequently among persons in hospitals and health care facilities such as nursing homes and dialysis centers who are elderly or very sick, or who have an open wound (such as a bedsore) or a tube (such as a urinary catheter) going into their body. MRSA infections that are acquired by persons who have not been hospitalized or had a medical procedure in the past year are known as community–acquired MRSA infections. Staph or MRSA infections in the community are manifested as skin infections such as pimples or boils.

Where is MRSA found?

MRSA can be found on the skin, in the nose, and in blood and urine.

How common is MRSA?

MRSA is becoming more prevalent in health care settings. According to CDC data, the proportion of infections that are antimicrobial resistant has been growing. In 1974, MRSA infections accounted for two (2%) percent of the total number of staph infections; in 1995 it was 22%; in 2004 it was 63%. The number who become colonized is unknown.

Is MRSA treatable?

Yes. Although MRSA is resistant to many antibiotics and often difficult to treat, a few antibiotics can still successfully cure MRSA infections. Patients who are only colonized with MRSA may or may not receive treatment.

Can MRSA spread?

MRSA can spread among other patients, who are often very sick with weak immune systems that may not be able to fight off infections. MRSA is almost always spread by physical contact, and not through the air. Hospitals usually take special steps to prevent the spread of MRSA from patient to patient. One of these steps may be to separate, or isolate, a patient with MRSA from other patients.

The main mode of transmission to other patients is through human hands, especially health care worker’s hands. Hands may become contaminated with MRSA bacteria by contact with infected or colonized patients. It is important that health care providers – including doctors and nurses – either wash their hands with soap and water or use an alcohol–based hand sanitizer every time both before and after they touch you.

Health care providers know to practice hand hygiene, but sometimes they forget. You and your loved ones can play a role in asking and reminding health care providers to wash their hands, especially while they are caring for you.
MRSA is also spread by:
- Having direct contact with another person’s infection
- Sharing personal items, such as towels or razors that have touched infected skin
- Touching surfaces or items, such as used bandages contaminated with MRSA

What happens when a patient with MRSA is isolated?

Procedures may vary from one hospital to another, but the following often occurs:
- The patient is placed in a private room or in a room with one or more patients who also have MRSA.
- The patient’s movement from the room is limited to essential purposed only, such as for medical procedures or emergencies.
- Health care workers usually put on gloves (and sometimes hospital gowns) before entering the patient’s room, remove their gloves (and gowns) before leaving the room, and then immediately wash their hands.
- Visitors also may be asked to put on gloves (and sometimes gowns), especially if they are helping to take care of the patient and likely to come in contact with the patient’s skin, blood, urine, wound, or other body substances. Visitors should always wash their hands before leaving the patient’s room to make sure they don’t take MRSA out of the room with them.

How long does a patient with MRSA have to be isolated?

The hospital staff will determine when it is safe for a person with MRSA to come out of isolation. Because MRSA is difficult to treat, this may be a few days to a few weeks or longer.

When a person with MRSA is being cared for at home, should the same precautions be followed?

Before the patient leaves the hospital, be sure to ask the nurse or doctor about what precautions should be taken at home. In general, the following precautions are recommended for the care of a person with MRSA at home:
- Cover your infections! Covering infections with bandages or dressing is the best way to keep surfaces from becoming contaminated with staph and MRSA.
- Clean your hands often! Wash your hands often with soap and water or use an alcohol-based hand rub when a sink is not available. Always clean your hands after changing bandages or touching infected skin.
- Give special attention to skin care. Your doctor will advise you if a special soap to bathe with is needed. Liquid soap is preferable to bar soap.
- Keep the environment clean. Regularly clean frequently touched surfaces and other items that come into direct contact with infected skin.
- Wear gloves if you handle body substances (blood, urine, wound drainage) and wash your hands after removing the gloves.

Will routine laundry process, detergents, and laundry additive remove staph and MRSA from towels, clothes and linens?

Yes. Routine laundry procedures, detergents, and laundry additives will all help to make clothes, towels, and linens safe to wear or touch. If items have been contaminated by infectious material, these may by laundered separately, but this is not absolutely necessary.

Read and follow the clothing and soap or detergent label instructions. Water temperatures for household laundry depend on the type of fiber or fabric of the clothing. In general, wash and dry in the warmest temperatures recommended on the clothing label. Also some modern laundry detergents are made to clean best at certain temperatures. Not following instructions could damage the clothing items or decrease the effectiveness of the detergent.

It is not necessary to add bleach as a disinfectant in laundering.
What is the role of the environment in the spread of staph and MRSA?

The role of environment is the spread of staph and MRSA in community settings is unclear. They are found on people and not naturally found in the environment. Staph and MRSA could get into the environment if your hands can pick them up by touching infected skin or certain areas of the body where these bacteria can live (like the nose). Then, if you touch a surface or item like a towel, your hands can pass the bacteria on to these items you have touched.

Another way that items can be contaminated with staph and MRSA is if they have direct contact with a person’s skin infection. Keeping skin infections covered with bandages is the best way to reduce the chance that surfaces will be contaminated with staph and MRSA.

Which disinfectants should I use against staph and MRSA?

Disinfectants effective against *Staphylococcus aureus* or staph are most likely also effective against MRSA. These products are readily available from grocery stores and other retail stores. Check the disinfectant product’s label on the back of the container. Most, if not all, disinfectant manufacturers will provide a list of germs on their label that their product can destroy. Use disinfectants that are registered by the EPA (check for an EPA registration number on the product’s label to confirm that it is registered).

In general, EPA–registered products are preferred for disinfection, but if these aren’t available, household chlorine bleach can be used. Chlorine bleach is a broad spectrum disinfectant that can inactivate or kill germs, including staph and MRSA. It should never be used at full strength for disinfecting. If you are using household chlorine bleach, read the label to see if the product has specific instructions for disinfection. Some bleach products are EPA–registered for this purpose. If no disinfection instructions exist, then use 1/4 cup of regular household bleach in 1 gallon of water (a 1:100 dilution equivalent to 500–615 parts per million [ppm] of available chlorine) to disinfect pre–cleaned surfaces. As with other cleaners and disinfectants, household chlorine bleach might damage some surfaces and items—for instance, some metals, plastics, and non–colorfast clothing.

Is it safe to be in the same room as a person with MRSA?

Again, healthy people are at very little risk of getting infected with MRSA. So as long as family member or other visitors are healthy, it’s okay for them to be in the same room with a person with MRSA. Casual contact, such as touching or hugging, is also okay. However, be sure to WASH YOUR HANDS before you leave the hospital room (or the patient’s home).

Persons who are very ill or who have weak immune systems should avoid handling the body substances of a person with MRSA and should limit their physical contact to no more than casual touching. They should also wash their hands after physical contact with a person with MRSA.

Can my children get MRSA by being around a person with MRSA?

Healthy people, including children, are at very little risk of becoming infected with MRSA.

I have MRSA and I’ll be going home soon. What should I do to prevent my family from getting MRSA?

If you are infected or colonized with MRSA, you should take the following precautions to prevent spreading MRSA to your family and others:

- Follow good hygiene practices, as described above.
- Tell any nurses or doctors who treat you that you have MRSA.

*Adapted from: www.cdc.gov/ncidod/hip/aresist/mrsahcw.htm*