



Frequently asked questions about Methicillin Resistant Staph Aureus (MRSA)

From the Branch-Hillsdale-St. Joseph Community Health Agency

Background: Methicillin-resistant Staphylococcus aureus (see why we call it MRSA!), is an infection caused by a bacteria — often called "staph." Decades ago, a strain of staph emerged in hospitals which were resistant to antibiotics commonly used to treat it. MRSA was one of the first germs to outwit all but the most powerful drugs. MRSA infection is often NOT, but can be fatal.

Causes

Leading causes of antibiotic resistance include:

- Unnecessary antibiotic use in humans. Like other superbugs, MRSA is the result of decades of excessive and sometimes unnecessary antibiotic use.
- Antibiotics in food and water. Prescription drugs aren't the only source of antibiotics. In the United States, antibiotics can be found in beef cattle, pigs and chickens. The same antibiotics then find their way into municipal water systems when the runoff from feedlots contaminates streams and groundwater.
- Germ mutation. Even when antibiotics are used correctly, they contribute to the rise of drug-resistant bacteria because they don't destroy every germ they target.

Risk factors

Because hospital and community strains of MRSA generally occur in different settings, the risk factors for the two strains differ. **Risk factors for hospital-acquired (HA) MRSA include:**

- A current or recent hospitalization. MRSA remains a concern in hospitals, where it can attack those most vulnerable — older adults and people with weakened immune systems, burns, surgical wounds or serious underlying health problems. A 2007 report estimates that 1.2 million hospital patients are infected with MRSA each year in the United States.
- Residing in a long-term care facility. MRSA is far more prevalent in these facilities than it is in hospitals. Carriers of MRSA have the ability to spread it, even if they're not sick themselves.
- People who are on dialysis, are catheterized, or have feeding tubes or other invasive devices are at higher risk.
- Recent antibiotic use. Treatment with some antibiotic drugs can increase the risk of HA-MRSA.

The main risk factors for community-acquired (CA) MRSA:

- Young age. CA-MRSA can be particularly dangerous in children. Often entering the body through a cut or scrape, MRSA can quickly cause a wide spread infection. Children may be susceptible because their immune systems aren't fully developed or they don't yet have antibodies to common germs.
- Participating in contact sports. CA-MRSA has crept into both amateur and professional sports teams. The bacteria spread easily through cuts and abrasions and skin-to-skin contact.
- Sharing towels or athletic equipment. Although few outbreaks have been reported in public gyms, CA-MRSA has spread among athletes sharing razors, towels, uniforms or equipment.
- Having a weakened immune system. People with weakened immune systems, including those living with HIV/AIDS, are more likely to have severe CA-MRSA infections.
- Living in crowded or unsanitary conditions.
- Association with health care workers. People who are in close contact with health care workers are at increased risk of serious staph infections.

How is MRSA diagnosed?

Doctors diagnose MRSA by checking a tissue sample or nasal secretions for signs of drug-resistant bacteria. Because it takes about 48 hours for the bacteria to grow, newer tests have been developed and are now widely available. In the hospital, you may be tested for MRSA if you show signs of infection or if you are transferred into a hospital from another healthcare setting where MRSA is known to be present. You may also be tested if you have had a previous history of MRSA.

Is this Super Bug Treatable? YES. Both hospital and community associated strains of MRSA still respond to certain medications. In hospitals and care facilities, doctors generally rely on the antibiotic vancomycin to treat resistant germs. CA-MRSA may be treated with vancomycin or other antibiotics that have proved effective against particular strains.

How do I prevent myself and/or my family from getting MRSA?

Hospitals are fighting back against MRSA infection by using surveillance systems that track bacterial outbreaks and by investing in products such as antibiotic-coated catheters and gloves that release disinfectants. Still, the best way to prevent the spread of germs is for health care workers to wash their hands frequently, to properly disinfect hospital surfaces and to take other precautions such as wearing a mask when working with people with weakened immune systems.

Here's what you can do to protect yourself, family members or friends from hospital-acquired infections.

- Ask all hospital staff to wash their hands before touching you — every time.
- Wash your own hands frequently.
- Make sure that intravenous tubes and catheters are inserted and removed under sterile conditions; some hospitals have dramatically reduced MRSA blood infections simply by sterilizing patients' skin before using catheters.

Preventing CA-MRSA Protecting yourself from CA-MRSA — which might be just about anywhere — may seem almost impossible, but these common-sense precautions can help reduce your risk:

- Keep personal items personal. Avoid sharing personal items such as towels, sheets, razors, clothing and athletic equipment. MRSA spreads on contaminated objects as well as through direct contact.
- Keep wounds covered. Keep cuts and abrasions clean and covered with sterile, dry bandages until they heal. Infected sores often contains MRSA, and keeping wounds covered will help keep the bacteria from spreading.
- Sanitize linens. If you have a cut or sore, wash towels and bed linens in hot water with added bleach and dry them in a hot dryer. Wash gym and athletic clothes after each wearing.
- Wash your hands. Careful hand washing remains your best defense against germs. Scrub hands briskly for at least 15 seconds, then dry them with a disposable towel and use another towel to turn off the faucet. Carry a small bottle of hand sanitizer containing at least 62 percent alcohol for times when you don't have access to soap and water.
- Get tested. If you have a skin infection that requires treatment, ask your doctor if you should be tested for MRSA. Many doctors prescribe drugs that aren't effective against antibiotic-resistant staph, which delays treatment and creates more resistant germs.

For More information about MRSA and other health issues, visit us on the web at:

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