

What is it?

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a bacterial infection caused by *Staphylococcus aureus* bacteria — often referred to simply as "staph." It is one of the first so-called "super bugs" that has developed a resistance to all but the most powerful anti-biotic drugs. Staph bacteria is typically harmless in healthy people, and at most can cause minor skin irritations. MRSA infection typically effects people with weakened immune systems the hardest (including people living with HIV/AIDS) and can be fatal or cause serious illness.

MRSA is typically spread through hand contact, which further emphasizes the importance of proper hand washing techniques. MRSA is most prevalent in hospitals and long-term care facilities. The young, elderly, and those with weakened immune systems are most at-risk. Infections are also increasingly common in shelters and among individuals who use injection drugs because of the increased possibility of open wounds, which aid in transmission of the bacteria.

Signs/symptoms

Staph infections, including MRSA, generally start as small red bumps that resemble pimples, boils or spider bites. These can quickly turn into deep, painful abscesses that require surgical draining. Sometimes the bacteria remain confined to the skin. But they can also burrow deep into the body, causing potentially life-threatening infections in bones, joints, surgical wounds, the bloodstream, heart valves and lungs.¹

Prevention

There are a number of precautions that can be taken to minimize the risk of infection. The single most effective action that can be taken is to ensure hands are washed properly, and often. This is most important for health care workers.

Other actions that can be taken¹:

- **Keep personal items personal.** Avoid sharing personal items such as towels, sheets, razors, clothing, athletic equipment and needles. 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. The pus from infected sores may contain MRSA, and keeping wounds covered will help keep the bacteria from spreading.
- **Shower after athletic games or practices.** Shower immediately after each game or practice. Use soap and water. Don't share towels.
- **Sit out athletic games or practices if you have a concerning infection.** If you have a wound that's draining or appears infected — for example is red, swollen, warm to the touch or tender — consider sitting out athletic games or practices until the wound has healed.
- **Get tested.** If you have a skin infection that requires treatment, ask your doctor if you should be tested for MRSA. Doctors may prescribe drugs that aren't effective against antibiotic-resistant staph, which delays treatment and creates more resistant germs. Testing specifically for MRSA may get you the specific antibiotic you need to effectively treat your infection.
- **Use antibiotics appropriately.** When you're prescribed an antibiotic, take all of the doses, even if the infection is getting better. Don't stop until your doctor tells you to stop. Don't share antibiotics with others or save unfinished antibiotics for another time. Inappropriate use of antibiotics, including not taking all of your prescription and overuse, contributes to resistance. If your infection isn't improving after a few days of taking an antibiotic, contact your doctor.

References

1. Infectious Disease – MRSA Infection. Mayo Clinic website. 2007. Available at <http://www.mayoclinic.com/health/mrsa/DS00735/DSECTION=1>. Accessed, Feb. 3, 2008.
2. Priest, L. Ottawa targets hospital superbugs: Health agency acts as infection rate soars. 2007. Available at <http://www.theglobeandmail.com/servlet/story/LAC.20080204.BUGS04/TPStory/?query=mrsa>. Accessed Feb. 3, 2008.