

UPDATE ON MRSA RESISTANT STAPH IN MEN WHO HAVE SEX WITH MEN FEBRUARY 2008

What is MRSA?

MRSA stands for methicillin-resistant Staphylococcus aureus ("Staph"). MRSA is a type of bacteria that causes a variety of infections. Most often, it causes skin infections. Infections caused by MRSA can be more difficult to treat because the bacteria do not respond to many of the antibiotics typically used to treat Staph infections.

What are the signs that I may have it?

Infections can cause sores that look and feel like spider bites; red painful bumps under the skin, called boils or abscesses; a cut that is swollen, hot and filled with pus; blisters filled with fluid (often on the face), or a red, warm firm skin area that is painful and getting larger, usually on the legs.

How serious is MRSA?

Most infections are limited to a small area of the skin. However, MRSA can also cause more serious infections of the lungs, bones, or other parts of the body. In rare cases, MRSA may enter the bloodstream, causing a serious infection. While some recent stories in the media have referred to "flesh eating bacteria," MRSA is not typically the cause of these infections.

How is MRSA spread?

MRSA, like other staph infections, can be spread through skin-to-skin contact. These bacteria can enter the body through breaks in the skin, caused by cuts, scrapes, cracks, or shaving, as well as contact with contaminated surfaces or objects. MRSA can cause skin wounds that drain pus, such as infected hair shafts, boils, or abscesses, all of which can spread the disease. Such wounds should be covered with bandages (and an antibiotic ointment such as bacitracin) to prevent others from becoming infected.

The relationship between MRSA and specific sexual activities remains unclear. MRSA infection has not been shown to be linked directly with anal, vaginal, or oral sex. However, these activities may allow MRSA to spread through close contact with the affected skin of a sex partner. Although condoms provide protection from most sexually transmitted diseases (STD s), including HIV, they can only protect the skin they cover, and do not offer adequate protection against MRSA.

In one recent study of gay men, MRSA abscesses were often found on or near genitals, buttocks, and thighs, suggesting that close contact with those affected areas, such as during sex, could lead to infection. However, these are common sites of infection in everyone as well. More research is needed to understand the risk factors that may lead to MRSA infection during sexual contact.

Who gets MRSA?

Everyone is at risk for MRSA, but certain individuals appear to be at greater risk. These include those in crowded living conditions, such as in jails or military barracks. Injection drug use, chronic skin diseases, and close contact with an infected person also increase risk. Some athletes who share sports equipment or locker rooms may be at higher risk. People with chronic diseases (including HIV infection), or who frequently use antibiotics, may be at greater risk of developing Staph infections that are resistant to many antibiotics.

Am I at greater risk of getting MRSA as a gay man?

Although MRSA outbreaks have been identified among gay and other men who have sex with men (MSM), it is unknown if there is an increased risk of infection. Studies have identified links between methamphetamine use, higher numbers of sex partners, and prior MRSA infection. These factors could also increase the risk of MRSA infection in everyone, including among MSM. Also, MRSA is a growing concern among persons with HIV infection, regardless of stage of disease or CD4 (T-cell) count.

Are HIV -positive individuals at higher risk of infection, or more serious infection?

People with weakened immune systems, including many persons with HIV, may be at greater risk for more severe illness if they become infected with MRSA. Long-term use of antibiotics may lead to Staph infections that respond to fewer of these drugs. People with HIV should follow the same prevention measures as others to prevent infection, and they should seek medical care early if they think they may have an infection.

HOW CAN I LOWER MY RISK OF STAPH OR MRSA?

1) PRACTICE GOOD SKIN CARE:

- Thorough and frequent hand cleaning with soap and water or an alcohol-based hand sanitizer.
- Keep skin clean and bathe with soap; it is unknown if antibacterial soaps offer additional benefit.
- Keep skin moisturized with lotion to avoid damaged skin that may become dry and cracked.
- Avoid shaving in moist body areas such as the armpits or groin or areas that have been previously infected, and/or ensure that any shaved skin remains clean and dry.
- Keep cuts and scrapes clean and covered with a bandage until healed; use of topical ointments with bacitracin or neomycin-bacitracin may be useful to limit infection in superficial wounds.
- Avoid contact with other people's wounds or bandages.
- Avoid sharing personal hygiene items such as towels or razors.
- In a gym, steam room, or locker room use a clean towel when sitting on benches. There is no evidence linking toilet seats to MRSA infection.
- Use a disinfectant spray on gym equipment before and after use.

2) WITH SEXUAL CONTACT: Avoid contact with an area of another person's skin you know is infected. Shower and/or clean your skin after sex. Research shows reducing the number of sex partners helps lower risk of getting other STD's, including HIV. It may help reduce the risk of contracting MRSA by decreasing the amount of your exposure to others who might be infected.

3) RECOGNIZE COMMON SYMPTOMS OF SKIN INFECTIONS: If you are concerned about a possible infection, keep the area clean and see your health care provider. What appears to be a "spider bite" may be a staph infection, so see your health care provider if symptoms do not improve quickly.

How is MRSA treated?

Skin infections should be examined by a health care provider for appropriate treatment. Use soap and water and keep pimples – small areas of skin with redness – clean. Cover them with bandage and bacitracin-containing ointment that can be bought over-the-counter. If pus develops beneath the skin, or redness and tenderness spread, do not squeeze or drain pus on your own. A health care provider can do this by making a small incision. He or she then will decide whether oral antibiotics are needed.

If you are given an oral antibiotic, you should finish all of the doses, even if the infection has gotten better. Do not share antibiotics with other people. If your infection does not improve, or if you develop fever, chills, or other serious symptoms such as difficulty breathing during treatment, contact your health care provider immediately, or visit an emergency room.

Can a Staph infection come back?

It is possible to have a Staph or MRSA skin infection recur in the same or a different location. This may be due to re-infection with Staph carried in the nose or on other parts of your body or by acquiring Staph from contact with other people who carry it without any symptoms. Either way, taking care of the skin, including washing with soap and water, is important to decreasing your risk of a Staph infection coming back.

Where can I go for more information?

Numerous Web sites provide further information on Staph and MRSA , as well as recent reports of infections in MSM:

- Centers for Disease Control and Prevention http://www.cdc.gov/ncidod/dhqp/ar_mrsa_ca.html
- Los Angeles County Department of Public Health http://www.lapublichealth.org/acd/MRSA.htm
- San Francisco Department of Public Health http://www.mrsasf.org

Center for Infectious Diseases - Office of AIDS - STD Control Branch, California Department of Public Health, February 2008

Prepared by Chris Hall, MD, MS₁ and Dan Wohlfeiler, MPH 1. Thank you to the following reviewers: Alice Gandelman, MPH 1: Tom Gray_{1,5}; Kathleen Harriman PhD, MPH , RN₂, Karen Holbrook, MD, MPH 3; Kenneth Katz, MD,

MSc, MSCEs; Michael McElroy, MPH 1; Greg Mehlhaff1; J. Gabriel Rendón, MA1; Mateo Rutherford, MATI 1; Jon Rosenberg, MD4; Michelle Roland, MD5; Duc Vugia, MD, MPH 4.

- 1 STD Control Branch, California Department of Public Health
- ² Immunization Branch, California Department of Public Health
- 3 San Francisco Department of Public Health

4 Infectious Diseases Branch, California Department of Public Health

5 Office of AIDS , California Department of Public Health

