



Staph Strains

People with HIV are more prone to drug-resistant staph, including recurring cases. Here's how to steer clear of it.

March 1, 2009 By Josh Sparber

Adam Beaulieu is all too familiar with methicillin-resistant *Staphylococcus aureus*, or MRSA, a tougher-to-treat form of the common bacterial staph infection that doesn't respond to the usual antibiotics. The 26-year-old from Evergreen, North Carolina, has experienced 15 separate infections, hitting various spots on his body. "After I quit IV drugs in 2005, I thought the infections would stop," he says. "But I didn't learn that I had HIV until a year later, so the MRSA kept going." Now, HIV meds seem to have quelled his staph, and Beaulieu considers himself lucky.

Over time, staph evolved resistant strains that now account for 60 percent of all staph infections in the general population. People with HIV have always seemed more susceptible to staph, and three new studies say community-associated MRSA, or CA-MRSA (MRSA acquired outside of hospitals), is more common and more likely to recur in HIV-positive people than in their negative counterparts.

Resistant staph itself has morphed into more virulent strains that can be picked up in warm, moist climates (such as gyms) and from skin-to-skin contact (such as sex). Researchers once blamed positive people's heightened risk for traditional staph on AIDS-related, IV-drug therapy and hospitalizations. Now, case reviews have shown that even healthy, non-hospitalized positive people have an elevated number of CA-MRSA cases, including some that are multi-drug resistant. In Chicago, Kyle Popovich, MD, and his colleagues found the risk of CA-MRSA to be six times higher among positive than negative people. In another study, which included 3,000 HIV-positive people (the Veterans Aging Cohort Study, or VACS), the CA-MRSA risk was three times higher for positive people, who tended to develop infections around the buttocks or genitals. (Negative folks were more likely to develop infections on their feet, though doctors don't know why.)

Some reasons for the higher rates among positive people seem clear. "Using lots of antibiotics other than Bactrim puts you at risk for MRSA," says Nancy Crum-Cianflone, MD, of the TriService AIDS Clinical Consortium in San Diego, "as do a poor immune system and maybe even having more sexual partners, lack of condom use and a recent history of sexually transmitted infection"—all linked to higher rates of HIV as well. "People with lower CD4 counts, higher viral loads and who are not on HIV meds seem more likely to have these infections," Crum-Cianflone says, citing a University of Cincinnati study showing that HIV meds lower MRSA risk by 84 percent. She is quick to point out, however, that this list is based solely on retrospective chart reviews. A

study is needed, she says, to see whether changing these behaviors would change staph rates.

Good point, because people with good immune control are getting staph too. “I’ve been seeing patients with healthy lab numbers coming in with MRSA,” says New York City HIV doctor Paul Bellman, MD. “The immune system involves more than CD4 cells,” Bellman says, “and the CD4 count does not necessarily measure how well a person will handle every infection.”

In Beaulieu’s case, staph was having a field day with an immune system suppressed by uncontrolled HIV. “My infections would usually start as a small, painful pimple-type sore,” he says, “which would turn into a golf ball-sized lump with a head.” Beaulieu would sometimes grit the pain of draining the sores himself, though this is strongly discouraged and can be dangerous. Instead, see a health care provider as soon as possible, because infection can spread—including into the bloodstream, which can be fatal—if sores are not entirely drained. Once he went to the doctor, Beaulieu had his sores surgically removed and began taking vancomycin to eradicate his MRSA. (For other effective treatments, see sidebar.)

“Fifty percent of MRSA patients seem to have a recurrence within one year,” Crum-Cianflone says, referring to another finding from VACS, “and we don’t really know how to prevent that.” Staph typically lives on many people’s skin and in nasal passages, becoming dangerous only when it penetrates the skin. So Crum-Cianflone says, “one idea is to remove MRSA from your environment with various soaps, ointments and oral antibiotics.” Treating and cleaning household contacts, pets included, may also help you avoid staph.

To stay MRSA-free, don’t take antibiotics unless necessary (and finish all prescriptions). Safe-sex practices and general hygiene are essential (see sidebar). Be on the lookout for bumps, pimples and boils or abscesses that resemble a skin infection. Most important: Get immediate treatment to stop bacteria from spreading and to have them cultured. Have your doc drain any abscesses, and keep skin covered when you’re in public places. Clearly, avoiding public exposure isn’t just for celebs.

BATTLING THE BACTERIA

How to beat staph—including MRSA

Where danger lurks

Staph thrives in gyms, schools, locker rooms, prisons, needles and in skin-to-skin contact with anyone, including sexual partners (especially in the presence of other STIs). It’s even found on pets. Staph becomes dangerous if it gets under the skin through routes such as cuts or abrasions.

How to recognize it

Staph begins as a red lesion or bump resembling a spider bite. It can be itchy or painful and grow quickly. It might come to a head like a pimple, but with more pain and pressure.

What to do

Head straight to a doc or the ER to have the sore or abscess drained completely. Since many staph

infections are now MRSA, the best course of treatment is an immediate prescription of antibacterial meds capable of overcoming resistant cases.

MRSA-fighting drugs

Bactrim (unless you are allergic to sulfa drugs); rifampin (should not be mixed with protease inhibitors); tetracyclines (they don't interact with any HIV meds and are generally well-tolerated); vancomycin in some cases (some staph is resistant to this one).

Know your MRSA

Get a staph screening test at your doctor's office to determine which meds will be effective. Nasal and infection site swabs can be sent off and cultured in one to two days, though a quicker molecular test also exists.

Treat 'til complete

Have a health care professional drain and remove all abscesses, and finish all prescribed meds. To avoid gastric distress from a course of antibiotics, you might try taking probiotics as well—especially those containing *Lactobacillus*. (For a list, search [“The Good Germs”](#) at [poz.com](#).)

Prevention

Wash your hands with soap frequently, and shower regularly. Moisturize to avoid dry and cracked skin—an easy entry for the bug. Cover all open wounds. At the gym, wipe down equipment and benches and wear protective footwear. Don't share towels and razors. Don't try to drain your own abscesses. Avoid general antibiotics unless necessary. Use condoms.