

Understanding MRSA Infection -- the Basics

What Is MRSA?

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a bacterium that causes infections in different parts of the body. It's tougher to treat than most strains of *staphylococcus aureus* -- or staph -- because it's resistant to some commonly used antibiotics.

The symptoms of MRSA depend on where you're infected. Most often, it causes mild infections on the skin, like sores or boils. But it can also cause more serious skin infections or infect surgical wounds, the bloodstream, the lungs, or the urinary tract.

Though most MRSA infections aren't serious, some can be life-threatening. Many public health experts are alarmed by the spread of tough strains of MRSA. Because it's hard to treat, MRSA is sometimes called a "super bug."

What Causes MRSA?

Garden-variety staph are common bacteria that can live in our bodies. Plenty of healthy people carry staph without being infected by it. In fact, 25%-30% of us have staph bacteria in our noses.

But staph can be a problem if it manages to get into the body, often through a cut. Once there, it can cause an infection. Staph is one of the most common causes of skin infections in the U.S. Usually, these are minor and don't need special treatment. Less often, staph can cause serious problems like infected wounds or pneumonia.

Staph can usually be treated with antibiotics. But over the decades, some strains of staph -- like MRSA -- have become resistant to antibiotics that once destroyed it. MRSA was first discovered in 1961. It's now resistant to methicillin, amoxicillin, penicillin, oxacillin, and many other antibiotics.

While some antibiotics still work, MRSA is constantly adapting. Researchers developing new antibiotics are having a tough time keeping up.

Who Gets MRSA?

MRSA is spread by contact. So, you could get MRSA by touching another person who has

it on the skin. Or you could get it by touching objects that have the bacteria on them. MRSA is carried by about 1% of the population, although most of them aren't infected.

MRSA infections are common among people who have weak immune systems and are in hospitals, nursing homes, and other health care centers. Infections can appear around surgical wounds or invasive devices, like catheters or implanted feeding tubes. Rates of infection in hospitals, especially intensive care units, are rising throughout the world. In U.S. hospitals, MRSA causes more than 60% of staph infections.

Community-Associated MRSA (CA-MRSA)

Alarming, MRSA is also showing up in healthy people who have not been hospitalized. This type of MRSA is called community-associated MRSA, or CA-MRSA. The CDC reports that in 2007, 14% of people with MRSA infections contracted them outside of a health care setting.

Studies have shown that rates of CA-MRSA infection are growing fast. One study of children in south Texas found that cases of CA-MRSA had a 14-fold increase between 1999 and 2001.

CA-MRSA skin infections have been identified among certain populations that share close quarters or experience more skin-to-skin contact. Examples are team athletes, military recruits, and prison inmates. However, more and more CA-MRSA infections are being seen in the general community, especially in certain geographic regions.

CA-MRSA is also infecting much younger people. In a study of Minnesotans published in *The Journal of the American Medical Association*, the average age of people with MRSA in a hospital or health care facility was 68. But the average age of a person with CA-MRSA was only 23.