Methicillin-resistant Staphylococcus aureus (MRSA) is a serious public health problem, one that is getting progressively worse and actually exacts a greater death toll than "modern plagues" like AIDS.

In fact, a 2007 issue of the Journal of the American Medical Association (JAMA) found there were close to 100,000 cases of invasive MRSA infections in the United States in 2005 (one of the most recent years for which data is available), which lead to more than 18,600 deaths, compared to HIV/AIDS, which killed 17,000 people that same year.¹

Typically, staph bacteria is relatively harmless and up to 30 percent of people carry staph bacteria in their nose without it causing an infection.²

If the bacteria enter your body through a cut, it may cause an infection (staph bacteria is one of the most common causes of skin infections in the United States) but even these are typically mild and can be easily treated.

Unlike typical staph bacteria, MRSA is much more dangerous because it has become resistant to the broad-spectrum antibiotics commonly used to treat it, such as methicillin, oxacillin, penicillin and amoxicillin.

This "super bug" is constantly adapting, meaning it is capable of outsmarting even new antibiotics that come on the market.

Because MRSA can be so difficult to treat, it can easily progress from a superficial skin infection to a life-threatening infection in your bones, joints, bloodstream, heart valves, lungs, or surgical wounds.

Why is Bacteria Becoming Antibiotic-Resistant?

Before I delve into the details about MRSA, including how you can best avoid infection, it's important to realize that antibiotic-resistant disease is a man-made problem, caused by overuse of antibiotics.

It is not merely a lack of hygiene or proper disinfection techniques that have brought these super bugs to the point of being impervious to nearly all medications we have at our disposal.
Antibiotics are not only over-prescribed in modern medicine, they are also widely over-used in agriculture -- a fact that is grossly overlooked.

About 70 percent of antibiotic use in the United States is for agricultural purposes. Animals are often fed antibiotics at low doses for disease prevention and growth promotion, and those antibiotics are transferred to you via meat and even manure used for fertilizer.

So, the agriculture industry’s practice of using antibiotics, along with the overuse of antibiotics for medicine, is indeed a driving force behind the development of antibiotic resistance in a now wide variety of bacteria that cause human disease -- including MRSA.

How Can You Catch MRSA?

MRSA is spread through contact, which means you can get it by touching a person or object that has the bacteria on them.

Most commonly, MRSA is picked up in a hospital or other health care setting such as a nursing home or dialysis center. In this case, it's known as health care-associated MRSA (HA-MRSA).

Six out of seven people infected with MRSA contract it at a health-care facility, where the infection can show up in surgical wounds or around feeding tubes, catheters or other invasive devices.

Rates of MRSA in health care settings have been climbing steadily, and a recent study of UK nursing homes found 24 percent of residents and 7 percent of staff were colonized with MRSA, which means they were carrying the bacteria on their skin but not necessarily showing signs of infection.

In the general population, only about 1 percent are MRSA carriers.

Further, a 2007 report from the Association for Professionals in Infection Control and Epidemiology estimated that 46 out of every 1,000 people hospitalized are infected or colonized with MRSA.

In fact, simply spending time in a hospital, particularly if you have a weakened immune system, underlying health problem or surgical wound, is a risk factor for MRSA, as is living in a nursing home or having any type of invasive medical device, such as a catheter, feeding tube, or being on dialysis.

However, hospitals are no longer the only place where MRSA is spreading.
Community-associated MRSA, or CA-MRSA, accounts for about 14 percent of MRSA infections, according to the U.S. Centers for Disease Control and Prevention (CDC).7 Those with CA-MRSA have had no recent exposures to health care settings and are otherwise healthy. It’s not entirely known why some people can carry MRSA on their skin without even knowing while others come down with a serious infection … nor why some infections are mild while others are deadly.

However, certain factors above and beyond spending time in a health care setting may increase your risk of being infected, and these include:

- Age (the elderly and children are more at risk)
- Recent antibiotic use
- Living in crowded conditions, such as in the military or in prison
- Participation in contact sports (the bacteria can spread via skin-to-skin contact and through abrasions)
- Sharing towels or athletic equipment (MRSA can be spread on razors, uniforms, towels, etc.)
- Living with someone who works in a health care setting
- Having a weakened immune system

## Signs and Symptoms of MRSA

A MRSA skin infection typically starts out as small, red, pimple-like bumps or boils. These may progress into deep, painful abscesses, and your skin may be:

- Swollen
- Pus-filled
- Painful
- Red

If the bacteria penetrate deeper into your body, past your skin, they may infect your lungs, leading to:

- Shortness of breath
- Fever
- Cough
- Chills

Other serious symptoms may also develop if the bacteria enter your bloodstream, heart, bones or joints.

If you suspect you have a MRSA infection, tests are available to detect the drug-resistant bacteria. If you have a skin abscess, it may need to be drained, or in more
serious cases the antibiotic vancomycin may still be used successfully to treat resistant germs.

Natural Approaches to Preventing MRSA

First and foremost, everyone needs to take the issue of antibiotic use seriously. This is of course an issue that must be addressed on a large scale, both within modern medicine and agriculture, but you also need to evaluate your own use of antibiotics, and avoid taking them -- or giving them to your children -- unless absolutely necessary.

You can also reduce your exposure to antibiotics by choosing organic meat and dairy products for your family, as these will be antibiotic-free.

Aside from that, here are a few other sound methods that can greatly hinder the spread of infectious disease, including MRSA.

**1. Wash Your Hands ... and Make Sure Your Doctor Does Too**

Handwashing, which is one of the oldest and most powerful antibacterial treatments, may be the key to preventing MRSA.

According to a Johns Hopkins study, the best way for patients to avoid such infections is for doctors and nurses to simply wash their hands before touching a patient.\(^8\) This is the most common violation in hospitals!

Guidelines to proper hand-washing include:

- Wash your hands for 10 to 15 seconds with warm water
- Use plain soap
- Clean all the nooks and crannies of your hands, including under fingernails
- Rinse thoroughly under running water
- In public places use a paper towel to open the door as a protection from germs that harbor on handles

And remember to AVOID using antibacterial soaps. These soaps are completely unnecessary and could easily do more harm than good. As a matter of fact, the antibacterial compounds found in most of these soaps are another likely contributing factor to the spread of antibiotic-resistant bacteria.

Don't become obsessive about washing your hands, however; if you wash them too frequently you can actually extract many of the protective oils in your skin, which can cause your skin to crack and bleed.

It is important to realize that your skin is actually your primary defense against bacteria -- not the soap.
It is rare for a germ on your skin to cause a problem -- it is typically only an issue when you transfer that to your nose, mouth or an open wound like cracked skin. So obsessive-compulsive washing can actually increase your risk of getting sick by providing an entryway for potentially dangerous pathogens like MRSA.

2. Avoid Sharing Your Personal Items

Since MRSA can spread by contact with contaminated objects, keep personal items like towels, clothing, bed linens, athletic equipment, razors and more to yourself.

3. Use Natural Disinfectants

As with antibacterial hand soaps, antibacterial house cleaners are also best avoided. A natural all-purpose cleanser that works great for kitchen counters, cutting boards and bathrooms is 3% hydrogen peroxide and vinegar. Just put each liquid into a separate spray bottle, then spray the surface with one, followed by the other.

4. Eat Garlic

Researchers have found that allicin, the active compound in garlic, is an effective, natural “antibiotic” that can eradicate even antibiotic-resistant bugs like MRSA. An added boon is that the bacteria appear incapable of developing a resistance to the compound.9

However, it is important to note that the garlic must be fresh. The active ingredient is destroyed within one hour of smashing the garlic, so garlic pills are virtually worthless and should not be used.

Instead, compress the garlic with a spoon prior to swallowing it (if you are not going to juice it). If you swallow the clove intact you will not convert the allicin to its active ingredient.

On a larger scale, making door handles, taps and light switches from copper could also help defeat antibiotic-resistant super bugs, according to scientists. Researchers have discovered that copper fittings rapidly kill bugs in hospital wards, succeeding where other infection control measures fail.10

Lab tests show that the metal can effectively kill off MRSA along with other dangerous germs, including the flu virus and the E coli food poisoning bug.

In tests sponsored by the Copper Development Association Inc., a grouping of 100 million MSRA bacterium atrophied and
died in a mere 90 minutes when placed on a copper surface at room temperature. The same number of MSRA bacteria on steel and aluminum surfaces actually increased over time.

It is likely that by installing copper faucets, light switches, toilet seats and push plates in germ-infested areas, hospitals and nursing homes could quite literally save thousands of lives each year.

You could also consider taking the same measures in your own home, especially if you care for someone with chronically poor immune function.

Of course, another important way for you to avoid getting a serious MRSA infection is to keep your own immune system in top working order. As always, eating healthy, exercising and tending to your emotional health will be your “Three Musketeers” to keeping dangerous bacteria, even super bugs, away.

References: