January is the beginning of a new year. It is a time for resolutions, fresh starts and the Super Bowl. Many positive and exciting events are associated with January, but for me, this past January was an anniversary of a sort. This January marked one year since I was infected with an illness caused by methicillin resistant Staphylococcus aureus (MRSA). My experience as an MRSA patient helped me realize the importance of educating both patients and healthcare teams about MRSA and how to halt MRSA transmission. Members of the IG community need to be aware of what MRSA is, how it can be transmitted, and what the symptoms are so that they can seek appropriate medical intervention at the first sign of infection.

What Is MRSA?

People living with a chronic illness may have heard of the common bacteria Staphylococcus aureus (S. aureus). Many people have S. aureus in their nose, ears or on their skin without having any adverse effects. This accumulation of bacteria is called colonization, and as many as 30 percent of the population carry S. aureus. Most people are unaware they harbor it, and S. aureus becomes a health concern for the individual only when the body becomes infected with the bacteria through a cut or wound. S. aureus can be the culprit for local skin infections or more complicated illnesses. The good news regarding S. aureus is that, in most cases, S. aureus responds well to antibiotic therapy.

The bad news regarding S. aureus is that over time and with years of treatment with antibiotic therapy, S. aureus has developed strains that do not respond to the treatments that had previously been effective. As a result, MRSA has become a multi-drug-resistant organism. MRSA is spread through contact with an infected person, object or surface. Because MRSA may be carried in a person’s nose or ears, in the trach tube or on the skin, without creating symptoms of illness, it’s possible for a person colonized with MRSA to transmit the bacteria to another individual.

The frequency of MRSA infections is on the rise, which creates a health concern for everyone. This is especially concerning for those with chronic illness because they have increased exposure to both healthcare workers and other patients, thus increasing exposure to MRSA.

MRSA infections have been broken down into two categories: hospital acquired (HA-MRSA) and community acquired MRSA (CA-MRSA). CA-MRSA is estimated to account for 8 percent to 20 percent of new cases, and the incidence is expected to increase. CA-MRSA is defined by the Centers for Disease Control and Prevention (CDC) as occurring in a person in the outpatient area who does not have a history of MRSA and who does not have a central line or long-term catheter.
When Should I Be Concerned?

The most valuable tool in combating an infection with MRSA is early detection and adequate treatment. Contact your healthcare team at the earliest signs of concern and apprise them of any history of chronic illness. The symptoms of MRSA infections will vary with each system affected, specific to each organ and individual patient. Many MRSA infections can be mild, superficial infections of the skin, which respond well to appropriate oral antibiotics. These mild skin sores are often misdiagnosed as spider bites, as MRSA may look like a red and swollen bump that might have yellow-green drainage (pus). If the wound is not treated with an antibiotic that works against MRSA, it may expand and progress.

Again, it is important to contact your healthcare team if you have any concerns.

Who Is at Risk for MRSA Infection?

Now that MRSA is on your radar, you need to be aware of the risk factors for infection with MRSA. An unavoidable risk factor for those with chronic illness is their increased frequency of exposure to hospitals, healthcare staff and other patients. Other risk factors include having an open cut or wound, a central line or catheter, prosthetics, chronic sinusitis, respiratory illness, dermatitis, artificial airways and compromised immune system.

How to Prevent MRSA Transmission

Education is the key to stopping the spread of MRSA. Certain risk factors are unavoidable such as chronic illness or the need for surgery, but even individuals with risk factors can be active participants in protecting themselves and others from colonization or infection with MRSA.

It may seem obvious, but good old-fashioned hand washing is one of the most effective preventions of the transmission of MRSA. Frequent hand washing with warm water and soap is still the tried-and-true best method in infection control. If you frequent a healthcare setting or another venue where there is a lot of contact between skin and equipment, such as a gym, wash your hands frequently and for as long as it takes to sing “Happy Birthday” (singing out loud is optional).

Alcohol-based sanitizers are a great way to prevent colonization with MRSA. Send some to school with your kids and take some to work too! Do not share any personal items such as towels, razors, clothing, linens and sports uniforms. Wash all sports uniforms in hot water and detergent, and use a hot dryer, not a clothesline, to kill the bacteria. Cover cuts, scrapes and open wounds, including surgical sites or other injuries, unless otherwise directed by your healthcare provider. Discard wound dressings in a covered trash receptacle and dispose of them promptly. Remember to always wash hands after handling any such materials.

A word for those who have indwelling catheters or central lines: Do not feel shy about asking healthcare providers to wash their hands or change gloves. It is up to patients or parents to protect themselves or their children from any potential adverse outcome in the healthcare setting, and good hand washing protects everyone from transmission of bacteria, including MRSA.

If you have been colonized or infected with MRSA in the past, discuss this fact with your healthcare team prior to any scheduled surgeries. Some orthopedic, prosthetic and other surgeries require pre-operative treatment for eradication of MRSA, confirmed by negative culture results, to prevent a recurrence or new infection at the surgical site.

Healthcare Providers’ Role in Prevention

Healthcare providers must wash their hands before and after all patient contact, and should remind others to do the same. Investigate your institution’s policies and work with infectious disease teams to create MRSA screening and eradication plans. It’s important to educate those in your workplace.
What If I Have MRSA?

If despite efforts to prevent infection you contract MRSA, first and foremost, do not panic! Many MRSA infections are treated with outpatient oral antibiotics and the result is a full recovery. Remember, early detection is very important, so always discuss any concerns with your healthcare team. The challenge in combating MRSA infections is that the bacteria are resistant to the treatment that S. aureus responds to, so the correct diagnosis is crucial. Treatment will depend upon the severity and location of the infection along with any history of chronic illness or immune deficiency. Therapy can last just 10 days for a minor skin infection or as long as eight to 10 weeks for a bone or prosthetic infection, and usually requires oral or intravenous antibiotics.

If intravenous therapy is necessary, and you do not have a central line, discuss the placement of a PICC (peripherally inserted central catheter) line with your healthcare team. A PICC line is longer lasting than a peripheral IV, and may expedite your transition to home IV therapy if it is deemed acceptable. If you are treated in an outpatient setting, follow up with your healthcare provider in the first 24 to 48 hours to ensure that the prescribed therapy is working effectively. If any symptoms progress or do not improve, alert your healthcare team immediately. As with all antibiotic therapy, do not stop the medication until directed by your healthcare provider and do not share antibiotics with friends or family members.

Spread the Word

Now that you are informed about how to help stop the transmission of MRSA colonization and infections, share the information with friends, family, teachers and even your healthcare providers. Become an advocate for washing hands. Working together, we can help stop the transmission of contact infections such as MRSA.

Prevent the Transmission of MRSA

1. Wash your hands
2. Cover your open skin or wound
3. Do not share personal items
4. Inform your healthcare team if you have ever been colonized or infected with MRSA
5. Immediately alert your healthcare team if you suspect a skin infection
6. Stay home from work or school if you suspect you have an infection. Do not return to work or school until you have consulted your healthcare provider

CDC Information on MRSA

The Centers for Disease Control and Prevention (CDC) is exploring a policy that would require healthcare workers to have a documented negative nasal culture for MRSA in the same way they are currently required to provide results of an annual skin test for tuberculosis. For more information about MRSA from the CDC, visit: http://www.cdc.gov/ncidod/dhqp/ar_mrsa.html.

In 2002, the CDC launched a website campaign to combat antibiotic resistance in the healthcare setting. For more information, visit www.cdc.gov/drugresistance.

References: