Methicillin-Resistant Staphylococcus Aureus



What is methicillin-resistant staphylococcus aureus (MRSA)?

Methicillin-resistant staphylococcus aureus is a bacterial infection resistant to antibiotic methicillin. Staphylococcus aureus, sometimes referred to simply as “staph,” or “staph A” is a common bacterium found on the skin of healthy people. If staph gets into the body it can cause a minor infection such as boils or pimples or serious infections such as pneumonia or blood infections.

One antibiotic commonly used to treat staph infections is methicillin. While methicillin is very effective in treating most staph infections, some staph bacteria have developed a resistance to methicillin and can no longer be killed by this antibiotic. The resistant bacteria are called methicillin-resistant staphylococcus aureus or MRSA.

Who is susceptible to MRSA infection?

MRSA usually infects hospital or other health care facility patients. Persons with long-term illnesses or who are immuno-suppressed are at higher risk.

The infection can develop in an open wound such as a bedsore or when there is a tube such as a urinary catheter that enters the body. MRSA rarely infects healthy people.

MRSA can be contacted in the community. The bacteria is spread by direct contact with an open wound or by sharing personal items such as a razor or towel. These conditions are a concern in crowded places such as athletic events or schools/day cares, or from people living in barracks or who have recently been in a hospital.

What are the symptoms of MRSA?

Methicillin-resistant staphylococcus aureus produces symptoms no different from any other type of Staphylococcus aureus bacteria. The skin will appear red, swollen, and inflamed around wound sites. The area may be painful to touch and be full of pus or other drainage. Symptoms in serious cases may include a fever. MRSA can cause urinary tract infections, pneumonia, toxic shock syndrome, and even death.

Can MRSA be treated?

Yes. While MRSA is resistant to many antibiotics and can be difficult to treat, there are a few antibiotics that can cure MRSA infections. What steps are taken to treat your infection will depend on how serious your infection is.

How long do MRSA infections last?

Healthy persons can carry the MRSA bacteria in their nose or on their skin for weeks or even years. Healthy people can sometimes effectively clear MRSA from their bodies without any kind of treatment, however, unless completely cleared the bacteria can return, especially if the individual is prescribed antibiotics.

Where is MRSA found and how is it spread?

MRSA can be present in the nose, on the skin, or in the blood or urine. MRSA can spread among other patients who are usually very ill with weakened immune systems that cannot fight off the infection.

MRSA is usually spread through physical contact – not through the air. It is usually spread by direct contact (e.g., skin-to-skin) or contact with a contaminated object. However, it can be spread in the air if the person has MRSA pneumonia and is coughing.

Healthcare workers hands may become contaminated by contact with patients, or indirect contact from surfaces in the workplace and medical devices that are contaminated with MRSA.

In the community, MRSA can occur when people have close contact with one another, such as a sports team. It often infects others who have scratches, cuts or wounds. The wound may look like an abscess or boil.

How is the transmission of MRSA prevented?

In the community, contact your doctor if you think you have an infection. Early treatment is very important.

- Wash your hands often, and always after changing the bandage or touching the infection. Use soap and water, or use an alcohol-based hand sanitizer.
- Do not treat the infection yourself, and do not pick or pop the sore.
- Cover the infection with dry bandages.
- Do not share personal items such as towels or razors.
- Wipe down non-washable equipment with an antibacterial solution, especially before being used by another person.
- Clean surfaces (counter tops, door knobs) with a standard disinfectant on a regular basis.
- Wash sheets, towels, and clothes with water and laundry detergent. Use a dryer to dry the items completely.
- If prescribed antibiotics, take all of the medicine as prescribed by your medical health professional. Finish your antibiotics as instructed, even if you feel better. If your healthcare professional tells you to stop taking antibiotics, return the unused medicine to your pharmacy.
- Do not share antibiotics with anyone, do not use leftover antibiotics, and do not use antibiotics that were prescribed to another person.

The prevention of MRSA infections in health care is based upon standard infection control precautions, which include routine practices, and contact precautions as

required for all antibiotic-resistant organisms. Steps include, but are not limited to:

SOURCE CONTROL

Contact precautions should be used with patients with known or suspected infections. It is not necessary to wait for testing to confirm a diagnosis. Use contact precautions (e.g., procedures to prevent droplet or aerosols). Post signs at the entrance to patient area. Single patient rooms may be used with designated toilets and sinks. Separating patients by 2 metres may also be used when a respiratory infection is present.

HAND HYGIENE

Hand hygiene can be performed with an alcohol-based hand rub or with soap and water. Alcohol-based hand rub is used at the point of care in healthcare settings when hands are not visibly soiled. If hands are visibly soiled, wash with soap and water.

GLOVING

Wear gloves when touching blood, body fluids and contaminated items. Remove gloves between patient contacts and clean hands immediately.

MASKING

Wear a mask and eye protection, or face shields, or masks with a visor attachment during procedures that are likely to generate splashes or droplets of respiratory secretions, blood, or body fluids.

GOWNING

Long-sleeved cuffed gowns are not routine, but may be needed in specific situations. Follow your organization’s policies.

PATIENT CARE EQUIPMENT

Appropriate cleaning, disinfection and sterilization of patient care equipment and rooms are important in limiting the transmission of organisms. Equipment may be dedicated to a single patient when possible. Surfaces that are likely to be touched or used should be cleaned and disinfected more frequently (e.g., bedrails, tables, call bells, door knobs, bathroom facilities, etc.).

EDUCATION OF PATIENT, FAMILIES AND VISITORS

All people involved should be educated about the importance of the precautions being used to help prevent the transmission of the disease. Hand hygiene is particularly important.

HANDLING OF LAUNDRY

In healthcare settings, while care should be taken when handling soiled linen, special handling of linen from patients with additional precautions is not required. When at home, linens, wash towels and bed linens in a washing machine set to the hottest water setting (with added bleach, if possible) and dry them in a hot dryer. Wash gym and athletic clothes after each wearing.

Is it safe for healthy people to be in contact with a person infected with MRSA? Can children contract MRSA from being around an infected person?

Healthy people, including children are at very low risk of contracting MRSA. Casual contact such as hugging is okay; however, hands should be washed before leaving the patient’s hospital room or home. Persons should use gloves, however, before handling any body fluids of infected persons, and remove the gloves and wash the hands before leaving the infected person’s room or home. Before an infected person leaves the hospital ask the nurse or doctor what precautions they recommend be taken at home. In general, follow good hygiene practice

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