

**What is methicillin-resistant *Staphylococcus aureus* (MRSA) disease?**

MRSA stands for methicillin-resistant *Staphylococcus aureus*. *Staphylococcus aureus*, often referred to as “staph,” is a common bacteria that can be found on the skin, in the nose and in moist body areas. MRSA is a type of *Staphylococcus aureus* that is not able to be treated with the most common types of antibiotics such as penicillins and cephalosporins. These two types of antibiotics are the most widely used antibiotics to treat both clinic and hospital patients. MRSA can cause a number of infections from skin infections and food poisoning, to severe disease which can result in pneumonia and/or septicemia (bacteria gets in the blood) or even death.

Not everyone with MRSA has an infection. Some people may have MRSA just living on their skin, they are considered to be colonized with MRSA. These people have no symptoms and might not know they have it.

Who is at risk for MRSA?

Anyone can get MRSA infection. Most susceptible are newborns, the elderly and people with chronic health conditions. In addition, people who may be at increased risk are those who:

- Have open wounds.
- Receive long-term treatment.
- Use antibiotics improperly.
- Have invasive devices such as catheters or surgical drains.
- Have had prolonged or repeated hospital stays.

MRSA infections usually are introduced into an institution by an infected or colonized patient or health-care worker.

It can be acquired from other infected patients, health-care workers or people in the community.

What are the symptoms of MRSA?

The most common infections are of the skin: impetigo, wounds and infected cuts. However, if the organism invades the bloodstream or lungs, it can become very serious and even life-threatening to the patient. Symptoms are extremely variable.

How soon do symptoms appear?

The period between being infected and developing symptoms is variable.

How is MRSA spread?

MRSA bacteria are very common organisms that often live in the human nose. The main mode of transmission of MRSA is via unwashed hands. Transmission is also by direct contact with draining skin lesions or other sources of infection. People who are colonized can infect others without having any symptoms themselves.

When and for how long is a person able to spread the disease?

An individual is able to spread MRSA as long as he or she has an active infection. In addition, individuals with colonized infections may be a carrier for later transmission.

How is a person diagnosed?

Diagnosis is made by laboratory testing.

What is the treatment?

MRSA is difficult to treat because it does not respond to certain antibiotics are no longer effective in treating it. The treatment of MRSA is determined by laboratory testing to determine which antibiotics are effective. Your doctor may have additional advice, such as covering draining sores and washing infected area with soap and water.

Does past infection make a person immune?

No. People are able to become re-infected or re-colonized.

Should children or others be excluded from day care, school, work or other activities if they have MRSA?

If not seriously ill, infected people can work or attend schools. Infected people should be educated on the proper precautions to not spread the infection to others and follow good hygiene/hand-washing principles.

Children should be excluded from a child-care setting if the illness prevents the child from participating or if the child has a fever, lethargy, irritability, persistent crying or shortness of breath. If the staff feels that they are jeopardizing the health and/or safety of other children in the group by having to care for the child, the child also may be excluded.

What can be done to prevent the spread of MRSA disease?

Practicing proper hand-washing is essential in preventing the spread of MRSA. People who have open/draining lesions are contagious and should avoid close physical contact. *Note:* This should include entering a "sweat ceremony" with draining lesions, because of the close physical contact and possibility of spreading the infection to other people in the sweat.

Additional Information:

Additional information is available at www.ndhealth.gov/disease or by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resource: American Academy of Pediatrics. In: Pickering LK, ed. *Red Book: 2006 Report of the Committee on Infectious Diseases*. 27th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:[599-609; 133-135]

