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## MRSA METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS

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### What is *Staphylococcus aureus*?

*Staphylococcus aureus* is a bacteria that is commonly found on people's skin as well as in the nose, armpits and groin. It is estimated that 25-30% of the general population carry staphylococci in their nose without causing an infection or disease. This is known as the carrier or colonization state. *Staphylococcus aureus* is the most common cause of pus or infections in boils, pimples, wounds, impetigo, and conjunctivitis (eye infections). It can also be the cause of bacterial pneumonia and urinary tract infections.

### What is MRSA?

Methicillin, an antibiotic related to penicillin was effective against *Staph aureus* and became the antibiotic of choice in treating infections. Now, 3-40% of all *Staph aureus* is resistant to methicillin, thus the name Methicillin-resistant *Staphylococcus aureus* (MRSA). Antibiotic-resistance means the bacteria is no longer killed by the antibiotic. It is of great concern in surgical wards, neonatal units and burn units in hospitals.

### What are the symptoms of it?

The symptoms of MRSA are no different than the symptoms of any infection due to *Staph aureus*. The symptoms will depend on where the infection is occurring. For instance, with wounds it will cause redness of the surrounding skin and a discharge from the wound. If the infection is serious, fever, malaise and headache may also be present. If it is in the urine, it may cause a burning sensation during urination or having to urinate frequently.

### Who is at risk of a MRSA infection?

The main people at risk of catching MRSA are those with wounds, tubes or lines, the elderly or debilitated, and those who have received previous and extensive antibiotic therapy. Healthy people may become colonized with MRSA but are very unlikely to develop any disease or infection with it. Your chance of catching MRSA depends on the number of bacteria that you are exposed to. A health care provider working all day in a room with a patient/resident who has MRSA oozing from an infected wound comes into contact with a much higher number of bacteria than if working with a second patient who just has a few bacteria colonizing in the nose. Someone who is in and out of the room of the first patient is exposed to a smaller number of germs than someone who is in the room all day.

# **— Health & Environment Facts —**

## **How can I protect myself?**

Ensure healthy skin through diet and practice good personal hygiene, especially hand washing.

## **Is MRSA treatable?**

Yes. An MRSA infection can still be treated with other types of antibiotics. In a hospital, the patient may be treated with an antibiotic given through the IV (intravenous) line. When someone has MRSA on the skin or in the nose (ie. carrier state), a combination of ointment, special antiseptic soap and oral antibiotic may be used. Some institutions may use "isolation" to make sure that the bacteria do not spread to other patients, staff, friends, and family. In the home, no special precautions for laundry or waste disposal are necessary.

## **How do I know I have it?**

You have to be tested for it. If you have an infection your doctor will take a specimen (swab of infected area or urine sample) and send it to the laboratory for analysis. To know what germ is causing any illness, it has to be confirmed by testing.

**REMEMBER: Hand washing is the most effective way to prevent the spread of a MRSA infection from person to person.**