



# What You Should Know About Methicillin Resistant *Staphylococcus Aureus* (MRSA)

COMMUNICABLE DISEASE CONTROL

## What is *Staphylococcus aureus* (*S. Aureus*)?

*Staphylococcus aureus* (*S. aureus*) is a member of the *Staphylococcus* family of bacteria. It is normal for people to carry the germ on their skin or in their noses. People who carry this germ are generally not aware of it and are usually completely healthy.

If the germ gets inside the body, for example under the skin, in the lungs or intestines, it can cause mild skin infections, pneumonia or food poisoning. When it does cause infection, it is usually easily treated with antibiotics.

## What is methicillin resistant *Staphylococcus Aureus* (MRSA)?

Methicillin refers to a group of antibiotics that includes cloxacillin, which is the usual treatment for *S. aureus*. Some *S. aureus* are no longer killed by these antibiotics and are called methicillin resistant.

Over the past 30 years, more strains of *S. aureus* have become resistant to commonly used antibiotics. This makes infections caused by these organisms more difficult and expensive to treat. MRSA may cause illness, but no more often than other kinds of the germ.

*S. aureus* germs, whether or not they are methicillin resistant, are often carried by people without causing any illness. These people are called "carriers."

## How do bacteria become resistant?

When antibiotics are used often or for a long time, germs can develop a resistance to certain drugs. This can also occur when people stop taking prescribed antibiotics once they begin to feel better.

## Who gets MRSA?

Patients in health care facilities who have open wounds, catheters or tubes, and those who are very ill, are most likely to get MRSA.

The general public living in the community who have normal, healthy immune systems are not at increased risk of getting this organism so there is generally no need for special precautions.

## How is MRSA diagnosed?

A doctor or nurse can take swabs from different areas of the body (e.g., nose, wound or rectum) for MRSA testing.

## How is MRSA spread?

The germs can be passed from a person who is either ill with MRSA or a carrier. They are passed to another person directly by touching, or indirectly through something that has the germs on it. MRSA is not transmitted by breathing near a person with the germ. It is also not usually passed on from the surrounding environment except in special circumstances (e.g., areas of high infections like those found in hospitals.)

## How is its spread prevented in hospitals?

When patients with MRSA are identified in a hospital, the hospital will try to prevent the organism from spreading to other patients. This is known as infection control. Hospitals adopt extremely strict infection control practices to prevent the spread of MRSA because hospital patients are often particularly vulnerable to infection. For example, it is standard procedure for all patients in a hospital who are MRSA positive to be separated from other patients and the general public. Meanwhile, antibiotics may be given to them to try to kill the germs.

## How is its spread prevented in the community?

Most people living in the community are not at increased risk of illness from this germ.

The best way to prevent bacterial infections of all kinds is good personal hygiene:

- wash hands frequently and thoroughly with soap and water for 10-15 seconds;
- avoid sharing personal articles such as cups, towels and toothbrushes;
- clean and protect wounds promptly; and
- cover your mouth when coughing or sneezing.

## Where can I get more information?

For further information, call your local public health unit (municipal and provincial listings in the grey pages at the back of the telephone book).

