What is MRSA?

Methicillin-resistant Staphylococcus aureus (MRSA) infection is caused by Staphylococcus aureus bacteria — often called "staph." Decades ago, a strain of staph emerged in hospitals that were resistant to the broad-spectrum antibiotics commonly used to treat it. Dubbed methicillin-resistant Staphylococcus aureus (MRSA), it was one of the first germs to outwit all but the most powerful drugs. MRSA infection can be fatal.

Staph bacteria are normally found on the skin or in the nose of about one-third of the population. If you have staph on your skin or in your nose but aren't sick, you are said to be "colonized" but not infected with MRSA. Healthy people can be colonized with MRSA and have no ill effects, however, they can pass the germ to others.

Staph bacteria are generally harmless unless they enter the body through a cut or other wound, and even then they often cause only minor skin problems in healthy people. But in older adults and people who are ill or have weakened immune systems, ordinary staph infections can cause serious illness called methicillin-resistant Staphylococcus aureus or MRSA.

In the 1990s, a type of MRSA began showing up in the wider community. Today, that form of staph, known as community-associated MRSA, or CA-MRSA, is responsible for many serious skin and soft tissue infections and for a serious form of pneumonia.

Vancomycin is one of the few antibiotics still effective against hospital strains of MRSA infection, although the drug is no longer effective in every case. Several drugs continue to work against CA-MRSA, but CA-MRSA is a rapidly evolving bacterium, and it may be a matter of time before it, too, becomes resistant to most antibiotics.

What is staph infection?

It is a type of infection caused by a Staphylococcus (or "staph") bacteria. Actually, about 25% of people normally carry staph in the nose, mouth, genitals, and anal area. The foot is very prone to pick up bacteria from the floor. The infection often begins with a little cut, which gets infected with bacteria.

These staph infections range from a simple boil to antibiotic-resistant infections to flesh-eating infections. The difference between all these is how deep and how fast the infection spreads, and how treatable it is with antibiotics. The antibiotic-resistant infections are more common in North America, because of our overuse of antibiotics.

The type of staph infection that involves skin is called cellulitis and affects the skin's deeper layers. It is treatable with antibiotics.

This type of infection is very common in the general population -- and more common and more severe in people with weak immune systems. People who have diabetes or weakened immunity are particularly prone to developing cellulitis.

What is SARS?

Severe acute respiratory syndrome (SARS) is a viral respiratory illness that first emerged in China in November 2002, and later spread through international travel to 29 countries worldwide causing large outbreaks in Hong Kong; Taiwan; Singapore; Hanoi, Vietnam; and Toronto, Canada. According to the World Health Organization (WHO), from November 2002 to July 31, 2003, there were 8,098 cases of SARS; of these, 774 died.

On October 1, 2003, the Centers for Disease Control and Prevention (CDC), reported that there were 164 probable and suspect SARS cases in the United States, of which only eight had laboratory evidence of SARS. There were no deaths due to SARS in the US. Most of the U.S. SARS cases were among travelers returning from other parts of the world with SARS. There were 11 suspect and probable SARS cases investigated by the Minnesota Department of Health; many of these individuals had an alternative diagnosis that could explain their symptoms.

What causes SARS?

SARS is caused by a virus called the SARS-associated coronavirus (SARS-CoV). It was first identified in April 2003 and is a member of the Coronaviridae family, which also includes many of the viruses that cause the common cold. Coronaviruses have been found in many different animal species including birds and mammals. SARS-CoV is thought to have passed from animals to humans through close contact, butchering or eating undercooked meat in parts of Southern China.