

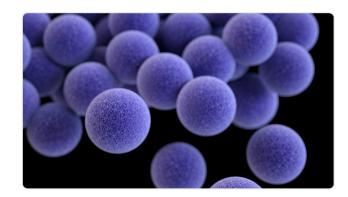
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# Staphylococcus aureus Basics

#### **KEY POINTS**

- Staphylococcus aureus (staph) is a type of germ that about 30% of people carry in their noses
- Most of the time, staph does not cause any harm, but it can sometimes cause infections.
- Some types of Staphylococcus aureus are resistant to common antibiotic treatments.



### Overview

Staphylococcus aureus (staph) is a bacterium commonly found on the skin and in the nose of about 30% of individuals. Most of the time staph does not cause any harm, but it can sometimes cause infections. In healthcare settings, infections can lead to serious or fatal outcomes.

## Signs and symptoms

Staph infections can look like pimples, boils or other skin conditions.

In healthcare settings, staph infections can be serious or fatal, leading to:

- Bloodstream infections or <u>sepsis</u> when bacteria get in the bloodstream.
- Pneumonia, which most often affects people with underlying lung disease, including those on mechanical ventilators.
- Endocarditis (infection of the heart valves), which can lead to heart failure or stroke.
- Osteomyelitis (bone infection), caused by staph bacteria traveling in the bloodstream or put there by direct contact such as trauma (puncture wound of the foot).

### Risk factors

In the community, people are at greater risk of staph infections if they have chronic conditions (e.g., diabetes, cancer, vascular disease, etc.) or inject drugs.

In health care, the risk of more serious staph infection is higher for patients:

- In intensive care units (ICUs).
- Who have undergone certain types of surgeries.
- With medical devices inserted in their bodies.
- With weakened immune symptoms.

#### Causes

Several different types of staph can cause infections, including:

- Methicillin-resistant Staphylococcus aureus (MRSA)
- Methicillin-susceptible Staphylococcus aureus (MSSA)

- Vancomycin-intermediate Staphylococcus aureus (VISA)
- Vancomycin-resistant Staphylococcus aureus (VRSA)

Although MRSA is often better known, any staph infection can be dangerous, even if it is not resistant to antibiotics.

## Reducing risk

Patients can avoid sharing items that contact skin, such as towels, razors and needles, and can also follow <u>safety tips</u> to reduce their risk of staph infection.

## Treatment and recovery

Healthcare providers can treat most staph infections with antibiotics.

## What CDC is doing

- Providing testing to identify antimicrobial resistance cases, measure resistance and track transmission in a healthcare setting through the Antimicrobial Resistance Laboratory Network.
- Tracking staph infections through the Emerging Infections Program and National Healthcare Safety Network.
  - Data is also available on the AR & Patient Safety Portal.
- Working closely with <u>health departments</u>, other federal agencies, healthcare providers and patients to prevent infections caused by staph and <u>slow the spread of resistant germs</u>.

### Resources

- Laboratory resources
- Reference Antimicrobial Susceptibility Testing (AST) Data

SOURCES

#### CONTENT SOURCE:

National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)