

VRSA (Vancomycin-Resistant Staphylococcus)

Staphylococcus aureus, often referred to as "staph," is a common bacterium that can be found on the skin, in the nose, and in moist body areas. The acronym, VRSA, stands for vancomycin-resistant Staphylococcus aureus. VRSA is a strain of Staphylococcus aureus that is resistant to the antibiotic called vancomycin. VRSA can cause skin infections and/or severe invasive disease such as pneumonia, septicemia (bacteria gets in the blood), or even death.

Transmission

A small percentage of people carry VRSA bacteria and don't even know they have it. These people are colonized because they carry the bacteria around and usually never get sick. However, people colonized with VRSA can transmit the bacteria to others who can then become infected. The main mode of transmission of VRSA is:

- Person-to-person through hands or direct contact with a person who has a draining skin lesion or wound.
- **Environment to person** from an infected or colonized patient to the environment, medical equipment, or to the hands of a health care provider (doctor, nurse, etc.) or visitor.

Most susceptible are persons with

- Chronic health conditions
- Previous methicillin-resistant Staphylococcus aureus (MRSA) infections
- Open wounds
- Long-term treatment and/or improper use of antibiotics
- Invasive devices such as catheters or surgical drains
- Prolonged or repeated hospital stays.

Symptoms

Symptoms can vary depending on the type of infection. If the VRSA is causing a skin infection, people may develop:

- Redness
- Swelling
- Drainage

However, if the organism invades the bloodstream or lungs, it can become very serious and even life-threatening. A person can have a VRSA infection more than once.

Diagnosis

Diagnosis is made by testing a draining lesion, blood, nasal swab, or other tissue sample.

Treatment

VRSA can be treated with antibiotics, just not vancomycin. Skin infections should be washed with soap and water twice a day and covered with an antibiotic ointment and dressing if they are draining.





Prevention

If you or someone in your household has VRSA, the following are some measures to prevent spreading it to others:

- **Cover your wounds with clean, dry bandages until healed.** Follow your healthcare provider's instructions about proper care of the wound. Pus from infected wounds can contain VRSA.
- Do not pick at or pop the sore.
- Throw away bandages and tape with the regular trash.
- Clean your hands often. Those in close contact should wash their hands often with soap and water or use an alcohol-based hand rub, especially after, changing the bandage, touching an infected wound, or after touching dirty clothes.
- Do not share personal items such as towels, washcloths, razors, and clothing, including uniforms.
- Wash laundry before use by others and clean your hands after touching dirty clothes.
- People should be educated on the proper precautions to not spread the infection to others and follow good hygiene/hand-washing principles.

If you have further questions about MRSA, contact your healthcare provider.

Exclusion Guidance

Individuals with VRSA should not be excluded from work, school, or child care unless the general exclusions apply.

For additional information about VRSA, contact the North Dakota Department of Health and Human Services', Public Health Division, at 800.472.2180.

Resources:

- 1. *Red Book: 2021-2024 Report of the Committee on Infectious Diseases.* 32nd ed. [Management and Prevention of Infectious Diseases]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2021: 122-133.
- 2. *Red Book: 2021-2024 Report of the Committee on Infectious Diseases.* 32nd ed. [Staphylococcus aureus] Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2021: 678-692
- 3. VISA/VRSA in Healthcare Settings | HAI | CDC. (2010, November 24). VISA/VRSA in Healthcare Settings | HAI | CDC. https://www.cdc.gov/staphylococcus-aureus/about/vancomycin-resistant-staph.html?CDC AAref Val=https://www.cdc.gov/hai/organisms/visa vrsa/visa vrsa.html