

VANCOMYCIN RESISTANT ENTEROCOCCUS

Frequently Asked Questions and Answers for Employees*

What is VRE?

VRE stands for Vancomycin Resistant Enterococcus. VRE are strains of enterococcus bacteria that have developed resistance to the antibiotic vancomycin and, often times, to other antibiotics including aminoglycosides and ampicillin. An individual can be “colonized” with VRE (i.e., the bacteria are present [usually in stool or urine], but do not cause disease) or “infected” with VRE (i.e., the bacteria causes signs and symptoms of disease). The most common VRE infections are urinary tract infections, wound infections, and bacteremia.

How is VRE transmitted?

Because enterococci are found normally in the gastrointestinal and female genital tracts, most enterococcal infections have been attributed to sources from within the individual patient. However, outbreaks and endemic infections caused by enterococci, including VRE, can occur through patient-to-patient transmission (most likely via the hands of health care workers or contaminated patient-care equipment/environmental surfaces).

How is VRE treated?

Only VRE infection, not colonization, is treated. VRE infections are difficult to treat, because the organisms often are resistant to most antibiotics. Therapy is based on the antibiotics to which an individual isolate is sensitive. Often, however, treatment is limited to unproved combinations of antibiotics or experimental therapies.

How can I prevent the spread of VRE?

Hand disinfection, using an antiseptic soap and warm running water for at least 15 seconds (and preferably 30 seconds), is the **single most important measure** necessary to control the spread of VRE.

Preventing and controlling the spread of VRE requires coordinated efforts from all individuals directly or indirectly involved in patient care (e.g., nursing, medical, and infection control staff; laboratory, pharmacy, and housekeeping personnel, and administration). All of the following should be addressed:

- a. Prudent vancomycin use by clinicians;
- b. Ongoing staff education regarding the problem of vancomycin resistance;
- c. Early detection and prompt reporting by the microbiology laboratory of vancomycin resistance in enterococci and other gram-positive microorganisms;
- d. Immediate implementation of appropriate infection-control measures to prevent person-to-person transmission of VRE when identified (i.e., gloves and gowns for substantial contact with the patient or the patient's environment, use of supplies dedicated to VRE-positive patients, and thorough environmental cleaning);
- e. Clear communication regarding VRE status prior to patient transfers.

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Do I need to wear a mask?

No, unless splashing of blood and body fluids are anticipated (i.e., follow “Standard Precautions”).

Can I wear a patient gown as protective equipment?

No. An impervious/fluid resistant gown should be utilized when a gown is needed. It does not need to be a sterile gown.

Can the patient room with another patient?

Yes, preferably with another VRE-positive patient. While placement in a private room or with another VRE-positive patient is strongly preferred, if this is not possible, then consideration can be given to placement with a VRE-negative roommate if certain criteria are met for both the VRE-positive and VRE-negative patient. Such placement decisions need to be made by infection control staff.

Do I need to do anything special when handling linens, trash and dishes?

No. Usual facility protocols following “Standard Precautions” are adequate for these items.

What precautions should be taken when transporting and utilizing ancillary departments?

Hand disinfection of employees and VRE-positive patients is key. Employees in ancillary departments should follow the same precautions (e.g., gloves and gowns for substantial physical contact with the patient). Patients should be scheduled for procedures during low volume times or at the end of the day so adequate cleaning measures of equipment or environmental surfaces can be performed.

What precautions should the family or other visitors take?

Visitors should be encouraged to wash their hands with an antiseptic soap and water upon leaving the room of a VRE-positive patient.

Can I catch VRE?

Healthy people are usually not at risk of serious, invasive VRE disease. Those at increased risk for VRE infection include those with severe underlying disease, immunosuppression, indwelling urinary or central venous catheters, and prior recent use of vancomycin and other broad-spectrum antibiotics.

- Adapted from the West Virginia Department of Health and Human Resources

VANCOMYCIN RESISTANT ENTEROCOCCUS

Questions and Answers for Patients and Families*

What is VRE?

VRE stands for Vancomycin Resistant Enterococcus. VRE is a type of bacterium that has developed resistance to the antibiotic vancomycin and to most other antibiotics. An individual can be “colonized” with VRE (i.e., bacteria are present [usually in stool or urine], but do not cause disease) or “infected” with VRE (i.e., the bacteria cause signs and symptoms of disease). The most common VRE infections are urinary tract infections, wound infections, and bloodstream infections.

How do individuals get VRE?

Enterococci are bacteria found normally in the intestines and female genital tract of many persons. VRE infection can result from bacteria that patients already carry. Additionally, person-to-person transmission of these bacteria can occur either through direct contact (such as unwashed hands) or by indirect contact (such as from contact with contaminated equipment or surfaces). Patients who get VRE infections are usually very ill from other medical conditions.

How do you treat VRE?

VRE infections are difficult to treat because the bacteria no longer respond to many antibiotics. At times treatment is limited to antibiotic combinations or experimental therapy. Only disease caused by VRE should be treated; VRE colonization should not be treated.

How will VRE impact recovery?

This depends on the condition of the individual patient and type of VRE infection involved. Treatment of illness caused by VRE is often difficult and may result in longer hospitalization. Health care workers also need to take special precautions (such as use of gloves and gowns) to prevent spread of VRE to other patients. This is true both for patients that are colonized with VRE and patients who are actually ill as a result of a VRE infection.

How long will VRE last?

The length of illness caused by VRE infection depends upon the severity of the infection, the response to antibiotic therapy, and the individual's overall health. After infection has resolved, the individual often remains colonized with VRE. Others are colonized with the bacteria and never develop infection. Colonization can last indefinitely.

Can I give my family members VRE infection?

Healthy people are not usually at risk for serious VRE disease. Those at increased risk include people with chronic illnesses, recent surgery, poor immune systems, and recent use of certain antibiotics.

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Questions and Answers for Patients and Families*

What precautions should be followed when I go home?

Hand washing is the most important measure. Always wash hands carefully after using the toilet, employing an antibacterial soap for at least 15 seconds. If you require continued care at home, then you, or whoever is caring for you, should wear gloves when handling body fluids (urine, wound drainage, feces, etc.) And wash hands with an antibacterial soap after providing care, handling body fluids, or contacting surfaces contaminated with body fluids. Disposable items soiled with body fluids (dressings, diapers, used gloves, etc.) should be tied in a plastic bag before being placed in the trash. Good cleaning with a household disinfectant is adequate. Laundry can be done according to manufacturer's directions using standard detergent (add bleach for items heavily soiled with body fluids.) Dishes and utensils can be washed as usual.