[dkpdf-button]

What are vancomycin-resistant enterococci (VRE)?

Enterococci are a type of bacteria (germ) normally present in the gut and in the female genital tract. They are also found in the environment. Vancomycin is an antibiotic often used to treat infections caused by enterococci. Some enterococci have become resistant to vancomycin and these bacteria are called vancomycin-resistant enterococci (VRE).

Who gets VRE?

Healthy people usually do not get VRE infections. Most VRE infections occur in hospitals. People with the following conditions are at increased risk for getting infected with VRE:

- People with previous treatment with vancomycin or other antibiotics for long periods of time.
- People with a recent hospitalization(s), especially if long courses of antibiotic treatment are involved.
- People with weakened immune systems caused by certain diseases or conditions.
- People who are critically ill (e.g., patients in the intensive care unit).
- People with a history of surgical procedures, such as abdominal or chest surgery.
- People with invasive medical devices, such as urinary catheters and central intravenous (vein) catheters.
- People who are colonized with VRE.

How are VRE spread?

VRE are often spread indirectly from person to person on the hands of caregivers or contact with contaminated items (e.g., medical equipment) or surfaces (e.g., toilet seats, door knobs). VRE can also spread directly from person to person by contact with body fluids containing VRE (e.g., blood, feces, urine). VRE infection is not spread through the air by a cough or sneeze.

What are the symptoms of VRE?

People can carry enterococci or VRE in their bodies without developing any symptoms. This is called being “colonized”. A person might be colonized for a long time before getting sick or might never get sick. VRE can cause infections of the urinary tract, the bloodstream, wounds associated with catheters or surgical procedures, or other body sites. Symptoms will depend on the site of infection, but include fever and pain at the site. Wound infection symptoms might also include swelling, redness, and discharge (pus).

How soon after exposure do symptoms appear?

In most situations, exposure to VRE does not lead to illness. The person might carry the VRE in his or her body, but not get sick at all, or might get sick from the VRE days, weeks, or months later.

How are VRE diagnosed?

If VRE infection is suspected, a sample can be taken from the infection site (e.g., wound, blood, or urine) and sent to the laboratory for testing. If enterococci bacteria are isolated, more laboratory tests are needed to determine which antibiotics will be effective for treating them. If the bacteria are resistant to the antibiotic vancomycin, a diagnosis of VRE is made.

What is the treatment for VRE?

Treatment is usually not needed for people who are colonized with VRE (carry VRE but do not have any symptoms of infection). Most VRE infections can be treated with antibiotics other than vancomycin. Laboratory testing can help healthcare providers determine which antibiotics will work. For people who have VRE infection in the bladder and a urinary catheter, removing the catheter when it is no longer needed can help get rid of the infection.

How can the spread of VRE be prevented?

Use of good infection prevention practices (such as wearing a gown and gloves when caring for patients with VRE, and frequent hand hygiene by healthcare workers) can limit the spread of VRE in healthcare settings. Patients with VRE should follow all instructions given by their care providers and keep their hands clean, especially after touching the affected area or using the bathroom. Friends or family members visiting a hospitalized patient with VRE should follow the hospital's recommended precautions.

What if I have VRE or I am caring for someone with VRE at home?

If someone has VRE or lives in a house with someone with VRE, the following things can be done to prevent the spread of VRE:

- Tell any healthcare provider who provides care about your VRE status. Bring this paper if you need help remembering the name of the bacteria. Healthcare providers use special precautions to prevent the spread of VRE to others.
- Follow the healthcare provider's instructions. If your provider prescribes you antibiotics, take them exactly as instructed and finish the full course, even if you feel better. Follow any other medical or hygiene advice your provider gives you.
- Always wash your hands with soap and water, especially before eating or preparing food, before and after changing wound dressings or bandages, after using the bathroom, and after blowing your nose, coughing, or sneezing. Use alcohol-based hand sanitizer when soap and water are not available. This is good advice for everyone to prevent the spread of germs.
- Make sure your caregivers always wash their hands before they care for you. They should also wash their hands after contact with wounds, after helping you use the bathroom, after cleaning up stool, and before and after handling medical devices (e.g., urinary catheters). This is particularly important if the caregiver is caring for more than one ill person at home.

- Wear gloves if hands might come into contact with body fluids or blood that might contain VRE. Always wash your hands after removing gloves.
- Frequently clean areas of the home, such as bathrooms, that might become contaminated with VRE. A household disinfectant can be used.

How can I get more information about VRE?

- If you have concerns about VRE, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at the VDH Local Health Districts page.
- Visit the Centers for Disease Control and Prevention website at the CDC page on VRE.

September 2018

Opens pdf to download

Opens document to download

Opens in a new window

External link will open in new window. Click link to exit Virginia Department of Health Website.