

Vancomycin Resistant Enterococci (VRE)

What is VRE?

Enterococci are common bacteria that are found in the intestine of most people. Normally they do not cause illness. Vancomycin is a powerful antibiotic used to treat infections caused by these bacteria. Over time, some strains of enterococci have become resistant to Vancomycin and these resistant strains are referred to as Vancomycin Resistant Enterococci (VRE). VRE can affect people in two different ways - colonization or infection. If a person carries the organism with no signs of illness, they are said to be colonized. If a person shows signs of illness, they are said to be infected. Colonization is more common than infection.

What types of infections does VRE cause?

Enterococci can cause infections in wounds, the urinary tract, and/or the blood. When these infections are caused by enterococci that are resistant to the antibiotic Vancomycin, they can be difficult to treat.

Who is at risk for getting VRE?

People who have other medical problems are more likely to get enterococcal infections than people who are healthy. The following people are at greater risk of becoming infected with VRE:

- patients in Intensive Care Units,
- people with chronic illnesses like diabetes and heart disease,
- people who are immunocompromised,
- people who are hospitalized for long periods of time,
- people who have undergone surgery or other invasive procedures,
- people with urinary catheters, central venous catheters, and other indwelling devices,
- the elderly,
- people who have been treated with vancomycin or other antibiotics for a long time and
- people who have been colonized with VRE in the past.

How is VRE spread?

VRE is not spread through the air like the viruses that cause the common cold or flu. VRE is spread from one person to another by touch. Hands may become contaminated when they touch infected feces or stool or they come in contact with environmental surfaces or medical equipment that has been contaminated by an infected person. Direct contact by a caregiver with these items may contaminate their hands so that they can spread the bacteria to those at risk.

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How long do VRE infections last?

Healthy people who carry VRE may carry it for weeks or even years and may get rid of the bacteria without treatment. If you have been ill with VRE in the past, the infection can return again if you are treated with antibiotics.

How do we prevent VRE infection?

It is very important to prevent the spread of VRE from one person to another. Uncontrollable diarrhea, poor personal hygiene and inadequate cleaning increase the likelihood of spreading the bacteria between people. If you have VRE, or someone you are caring for has VRE, it is important to follow the following precautions:

Personal Hygiene.

Careful handwashing is the single most effective way to prevent the spread of VRE. The use of soap in pump dispensers to wash hands followed by drying with paper towels and the use of waterless hand sanitizer gels are very effective in removing bacteria from your hands and preventing spread of VRE to others.

- People who help someone with VRE use the toilet or with their personal hygiene should wash their hands afterwards.
- Everyone in the household, including the person with VRE, should wash their hands before preparing and eating food.
- People infected with VRE must practice careful personal hygiene when using the toilet. Plenty of toilet paper should be used for wiping and good hand washing afterwards is essential.
- If you are carrying VRE, it is important to wash your hands regularly to stop the spread of VRE to surfaces you touch with your hands.

Use of barriers.

Caregivers in the home should wear gloves if they come into contact with body fluids such as feces or bandages from infected wounds that may contain VRE. Good hand washing with soap and water or waterless hand sanitizer gels must be practiced following glove removal.

Environmental cleaning.

Because these bacteria can live for a long time on surfaces and objects, extra cleaning of personal articles and equipment used by people with VRE is very important. Since VRE is spread through feces, toilets need special attention. If possible, toilets should not be shared with other people, especially, if there is someone else in the house who is at risk for getting VRE. If this is not possible, shared toilets in the home should be cleaned and disinfected regularly. When choosing a commercial product to clean with, the word 'disinfectant' should appear on the label. Follow the manufacturer's instructions for use.

Equipment such as thermometers, blood pressure cuffs and articles for personal use should not be shared with other people. No special cleaning of furniture or items such as dishes in the home is required.

Community movement.

People with VRE should not be restricted from moving freely throughout their home and community. If they are unable to control their bowel movements, proper management, i.e. the use of diapers, is essential.

Laundry and waste disposal.

No special precautions are needed for laundry or for waste disposal. The VRE bacteria are destroyed during the normal laundering process and all garbage can be put out for normal pick-up.

Communication.

If you have VRE, be sure to tell your healthcare providers. This will allow them to take special precautions to help prevent the spread of VRE to others.

For further information consult your health care provider or call the Infectious Disease Control Team at 519-663-5317 ext.2330 or go to www.healthunit.com.

References:

Centers for Disease Control website. Accessed on November 13, 2015,
"Healthcare-associated Infections (HAIs)"
<http://www.cdc.gov/HAI/organisms/vre/vre.html>

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Reviewed: November 13, 2015