

VRE

Vancomycin Resistant Enterococci

What is VRE?

VRE stands for Vancomycin Resistant Enterococci. Enterococci are bacteria that are naturally found in the bowel of humans and animals. They do not normally cause infections. Vancomycin is an antibiotic. Some strains of enterococci have become resistant to vancomycin, and are called VRE.

What types of infections does VRE cause?

VRE can live in the human bowel without causing any symptoms. This is called “colonization”. When an infection caused by VRE occurs, the symptoms depend on where the infection is. For instance, a wound infected with VRE, will cause the wound to be red and to have a discharge. If the infection is in the urine, it may cause burning when urinating.

How is VRE spread?

VRE is found in large quantities in the bowel. Once VRE is outside of the body, it can survive in the environment for prolonged periods of time (weeks or months). It has been found on stethoscopes, bed rails, blood pressure cuffs, call buttons and toilets. These are called “high touch objects”, and become contaminated when hands soiled with feces touch them.

VRE is usually spread by direct contact with hands, environmental surfaces or medical equipment that has been contaminated by the feces of an infected person. VRE is not usually spread through casual contact such as touching or hugging. VRE is not spread through the air by coughing or sneezing.

Who gets VRE?

VRE is not harmful to healthy individuals, but can cause problems for people who are seriously ill with a weakened immune system.

People at increased risk for VRE are those who have:

- critical illness
- severe underlying health conditions
- abdominal surgery
- history or current antibiotic usage
- medical devices such as urinary catheters that stay in for a long time

Can VRE be treated?

People who are colonized with VRE, but have no symptoms do not usually need treatment. Infections with VRE can be treated, but it is difficult. The antibiotics that will be effective will be determined by laboratory testing.

What types of precautions are needed when caring for people with VRE?

Special precautions are taken to prevent spreading VRE from one person to another. These precautions will be different depending on the location of the patient, resident or client.

In the hospital, patients with VRE will have:

- Private room with a private bathroom.
- Staff and visitors entering the room will wear gowns and gloves.
- Sign on the door to remind staff of the precautions to take
 - Put on gowns and gloves when entering the room
 - Remove gowns and gloves upon leaving the room
 - Wash hands thoroughly.
- Dedicated equipment (blood pressure cuffs, stethoscopes, etc.) for their use only during their stay.
- Environmental cleaning – high touch surfaces and equipment to be cleaned twice daily.
- Terminal cleaning – upon discharge, all surfaces of the room will be thoroughly disinfected.
- Swabs of feces collected regularly to see if they are still VRE positive.

In long term care, the resident with VRE will have:

- Private room, or share with a roommate who has VRE, or who is at low risk of getting VRE.
- Staff will wear gowns and gloves when providing direct care (such as assisting with toileting).
- Sign on the door reminding of the precautions to be taken before entering the room.
- Dedicated equipment and enhanced environmental cleaning.

In their own home, clients will:

- Notify healthcare providers of their VRE status (physician, home care provider, paramedics).
- Remind any family who assist with care to wash hands thoroughly after contact.
- Wash hands thoroughly after using the toilet.
- Clean areas that may become contaminated with VRE (e.g. toilets) using a household disinfectant at least once a week.

Hand Hygiene

Hand hygiene is cleaning the hands with alcohol-based hand rub or soap and water.

Hand hygiene must be performed by all staff before and after each contact with client/patient/resident. Clients/patients/residents should be encouraged and assisted in performing hand hygiene.



For more information contact BGH Infection Control at Ext 1259

REFERENCES

- Centers for Disease Control and Prevention, [Information for the public about VRE](#), November 2005
- St. Mary's Hospital, Kitchener, Ontario, [VRE Fact Sheet – An Information Guide for Patients](#), accessed November 2006
- Hamilton Health Sciences/St. Joseph's Healthcare, Hamilton, Ontario, [VRE](#), February 2006
- New York State Department of Health, [Vancomycin Resistant Enterococci](#), June 2004
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