

Vancomycin-resistant enterococci (VRE)

What are enterococci?

Enterococci are bacteria found in the stomach and bowels of about 19 out of every 20 healthy people. They are also normally found in the mouth and the throat, the female genital tract and on skin around the anal area. Human stools (bowel movements) have the highest levels of these bacteria. The bacteria can be present in or on the body but usually do not cause illness.

Occasionally enterococci can get into open wounds or skin ulcers, and cause infection. Less often, they can cause more serious infections of the blood, urinary tract or other body tissues.

What are vancomycin-resistant enterococci (VRE)?

Vancomycin is an antibiotic medication that is used to treat serious infections caused by organisms that are resistant to other antibiotics such as penicillins. Vancomycin-resistant enterococci (VRE) are enterococci that are resistant to vancomycin.

VRE are not easier to catch and do not cause more severe infections than other enterococci, but they are much more difficult to treat.

Why is VRE a concern?

The antibiotic vancomycin is one of the few antibiotics that can treat serious infections caused by some enterococci. Infections caused by VRE may be very hard to treat.

How is VRE spread?

The most common way VRE spreads from person to person is by direct contact, usually with your hands.

If your hands become contaminated, the VRE bacteria can enter your body if you put your hands into your mouth or eat something without first cleaning your hands. VRE can also be spread if you eat food that is contaminated with VRE. Food can be contaminated if the person preparing the food does not wash their hands before making and serving the food.

What are your chances of getting VRE?

If you are healthy and living in the community, your chances of becoming infected with VRE are low, even if you have been in contact with someone with VRE. You may be at higher risk if you have been treated with frequent doses of vancomycin before, or if you have stayed for a long time in a hospital where there have been previous VRE cases. Patients whose immune systems are suppressed are also at greater risk of getting sick from VRE.

Currently in Canada, VRE infections are very uncommon. Some people are identified as carriers of VRE by routine testing of skin and anal swabs done before or during a stay in hospital. Others may be identified when testing is done if a VRE infection occurs. In British Columbia, there have been some reports of VRE cases from across the province, with several cases of VRE in patients reported from a few hospitals.

How long does VRE last?

Healthy people may carry VRE for weeks or even years, and may clear the bacteria from their bodies without treatment. However, if you have had a serious VRE infection, the infection can come back again, particularly after treatment with vancomycin or other antibiotics that are not effective.

How are VRE infections treated?

If you have a VRE infection, your health care provider will give you the treatment you need. While difficult to manage, serious VRE infections may still be treated with high doses of vancomycin-like antibiotics. Some new antibiotics may also be effective.

If you are carrying VRE and you are healthy, you do not need treatment. You can continue with your normal activities.

If you are a carrier, the chance of transmitting VRE is low to your family, co-workers, or to the public. To reduce the risk, it is important for you to wash your hands regularly using hand soap and warm water. Using an alcohol-based hand rub may help stop you from spreading VRE when touching surfaces with your hands. You do not need to disclose the fact that you carry VRE to your workplace, school or daycare setting.

How can you prevent VRE infections?

There is no vaccine to protect you from VRE. The most important thing you can do is wash your hands before eating, drinking, smoking or applying personal care products, and after using the toilet. Wash your hands well for at least 20 seconds using warm water and soap,

and use a paper towel to dry your hands. If your hands are not visibly dirty and you don't have access to soap and water, alcohol-based hand rubs can be used.

Bacteria can survive on surfaces like railings, faucets and handles for up to 7 days. Regular cleaning of these surfaces with normal household cleaners can help reduce the spread of bacteria.

For more information on hand washing, please visit [HealthLinkBC File #85 Hand washing: Help stop the spread of germs](#).

Do special precautions need to be taken for hospital visits?

While in hospital, visitors will need to follow hospital guidelines to prevent the spread of VRE. This will include washing hands or using alcohol-based hand rub when entering and leaving the hospital and/or the patient's room.

If you may be a carrier of VRE and are going to be admitted into hospital, it is very important for you to let hospital admitting staff know. Precautions will be taken to protect other patients and hospital staff from VRE infection.



BC Centre for Disease Control
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