

NMDHB

INFECTION CONTROL FACT SHEET

VANCOMYCIN RESISTANT ENTEROCOCCI (VRE)

What are VRE?

Enterococci are bacteria that are normally present in the human intestines and in the female genital tract and are often found in the environment. These bacteria occasionally cause infections. Vancomycin is an antibiotic that is often used to treat infections caused by enterococci. In some instances, enterococci have become resistant to this drug and thus are called vancomycin-resistant enterococci (VRE).

What types of infections does VRE cause?

VRE usually live in the human intestines and female genital tract without causing disease. Occasionally, VRE cause urinary tract infections, bloodstream infections and wound infections.

Are certain people at risk of getting VRE?

The following persons are at an increased risk becoming infected with VRE:

- Those who have previously been admitted to a hospital overseas
- Persons who have been previously treated with vancomycin and combinations of other antibiotics such as penicillin and gentamicin
- Persons who are hospitalised, particularly when they receive prolonged antibiotic treatment
- Persons with weakened immune systems such as patients in Intensive Care Units, or in cancer or transplant wards
- Persons who have undergone surgical procedures such as abdominal or chest surgery
- Persons with medical devices that stay in for some time such as urinary catheters or central intravenous catheters.

How common is VRE?

VRE was first reported in U.S. hospitals in 1989. It is now thought to cause about 1 of every 3 infections in U.S. hospital intensive care units.

The first case of VRE was identified in New Zealand in 1996 and until recently it remained relatively rare. However, since 2007 there have been increasing numbers of cases reported in the Auckland and Waikato regions. These have raised concerns nationally and many hospitals have begun screening patients previously hospitalised in Auckland, Waikato or overseas for VRE.

VRE is best detected by sampling stool, rectal swabs, wounds, chronic ulcers or urine in patients with chronic indwelling catheters.

What is the treatment for VRE?

Clinical infection with VRE can be treated with antibiotics other than vancomycin. The treatment of VRE is determined by laboratory testing to determine which antibiotics are effective. For persons who get VRE infections and have urinary catheters, removal of the catheter when it is no longer needed can help getting rid of the infection. People who are colonised (bacteria are present, but have no symptoms of an infection) with VRE do not usually need treatment.

How is VRE transmitted?

VRE is usually passed to others by direct contact with stool, urine or blood containing VRE. It can also be spread indirectly via the hands of healthcare workers or on contaminated environmental surfaces. VRE usually is not spread through casual contact such as touching or hugging. VRE is not spread through the air by coughing or sneezing.

Prevention of transmission

Patients with VRE in hospital are managed using Contact Isolation Precautions. Good hand cleansing and environmental cleaning are also important ways to prevent transmission.

Decolonisation

It is not possible to decolonise someone with VRE - once acquired, a person may carry it for years.

Please notify the NMDHB Infection Control Service by phone (03) 546 1800 or fax (03) 539 3519 of any patients who you identify to be colonised or infected with VRE.

Patients identified as carrying VRE will have an alert placed on the electronic patient management system to enable them to be identified and managed using contact isolation precautions each time they come to NMDHB hospitals in the future.