

Fact sheet for core infection prevention and control strategies for Vancomycin Resistant Enterococci (VRE)

Enterococci (*Enterococcus* species) are bacteria that most often live harmlessly in the bowel as part of the normal human gastrointestinal flora and, in the female genital tract. Heavy usage of antibiotics within healthcare settings can result in resistance to a range of antimicrobials. Vancomycin is an antibiotic used to often treat severe infections caused by enterococci.

Transmission VRE can spread from one person to another through contact with contaminated surfaces or equipment or through person to person spread, often via contaminated hands. VRE can survive on objects (such as patient care equipment), surfaces, gloves and hands for prolonged periods of time. People who are colonised or have infections with VRE and who have faecal incontinence or diarrhoeal infections, have a colostomy or ileostomy are cognitively impaired may more readily contaminate their environment and surroundings.

Mortality and morbidity Most people who are colonised do not develop infections but patients receiving cancer treatment, dialysis patients, transplant recipients, or frail or multimorbid patients are more likely to have clinical infections associated with higher morbidity and mortality.

This fact sheet provides a summary for healthcare providers and healthcare facilities on key control strategies they can undertake if they discover a case(s) of VRE within their facility. Please refer to the [New Zealand national VRE guidelines document](#) for further information

Core strategies for managing patients with VRE (adapted from the Australian Commission on Safety and Quality in Health Care
<https://www.safetyandquality.gov.au/publications-and-resources/resource-library/core-strategies-vre-prevention-and-control>)

Hand Hygiene	Effective hand hygiene is one of the most important interventions to prevent transmission of VRE. VRE can be transmitted through the hands of healthcare workers, direct contact with contaminated objects, equipment and surfaces. Increased risk of transmission can occur when patients have diarrheal infections. All healthcare workers should ensure they follow good hand hygiene practices and hospitals should ensure that the 5 moments of hand hygiene is adhered to.
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	<p>Patients/ clients/residents should be reminded and / or assisted to clean their hands at the most appropriate times such as</p> <ul style="list-style-type: none"> • After toileting • Before eating • Before leaving room/ ward or bay – this is to reduce transmission from hands to other areas of hospital environment, rest home or facility they reside in. • When attending outpatient clinic appointments <p>Visitors should have the means to perform hand hygiene when visiting healthcare facilities including equipment and information.</p>
<p>Personal protective equipment (PPE)</p>	<p>Standard and Contact precautions are required for when providing clinical care to people positive for VRE. PPE should be donned before entering a room/area/setting in which contact precautions are required and removed disposed of safely before leaving room/area. Perform hand hygiene on exiting room/area.</p> <p>Single use gloves –Perform hand hygiene before donning gloves and after removal.</p> <p>Single use Apron/gowns – to protect uniform or clothing from potential sources of environmental contamination. Assessment of whether a gown or apron is required needs to include the risk anticipated contact with blood or body fluids and contact with contaminated objects.</p>
<p>Environmental cleaning</p>	<p>Increasing frequency of cleaning especially in identified high risk areas including high touch objects such as call bell, door handles, bed rails, locker tops, light switches. Bathrooms (toilet/ flush handle, taps, shower faucets). Cleaning should be top to bottom and clean to dirty.</p> <p>Facility cleaning policies should be in place including an auditing feedback process to ensure that cleaning processes are being met.</p> <p>Products used for cleaning and disinfection should be approved for use against VRE and be a hospital-grade product, align with any manufacturer's instructions for use including dwell time, any additional PPE required and stored safely against any health and</p>

	<p>safety requirements. All surfaces should be washable/wipeable and intact.</p> <p>All staff responsible for cleaning should be trained in cleaning processes/techniques and safe use of products.</p> <p>Detergent physical cleans should always occur before chemical disinfection through a 2-step process.</p> <p>Products that combine a 2 in 1 product may be used as an alternative and appropriate but physical/mechanical cleaning is still required.</p> <p>Use of non-touch technologies can be used as per facility policy after physical clean performed.</p> <p>Terminal clean of room following exit/discharge of VRE patients/residents should be undertaken as per local policy.</p>
Patient equipment cleaning	<p>Patient equipment should be single use and dedicated for patient use where possible. Reusable patient-care equipment must be in good condition, wipeable and thoroughly cleaned and disinfected between patients each and every time used. Items that are in poor condition and cannot be cleaned effectively should be discarded.</p>
Screening	<p>All acute healthcare facilities should have a policy for screening for MDROs including VRE that is appropriate to their environment and the situation. This could include the need to set up a local or regional IMT.</p> <p>As a minimum, screening should focus on higher risk situations and areas:</p> <ul style="list-style-type: none"> • If VRE has not been identified at your facility, recommend admission screening on patients who have been hospitalised or received haemodialysis in a centre within a transmission risk area within the preceding 12 months (within NZ or overseas). • Risk assessment and contact tracing should be initiated if a patient is identified with VRE who has not been isolated, and the patient has shared a room or bathroom with others. • A local or regional outbreak committee should be set up to manage VRE clusters. Additional strategies including regular screening of patients in high-risk units may be instituted.

	<ul style="list-style-type: none"> • Admission screening on patients being admitted to ARC, ICU, transplant, haematology or renal unit or any other higher risk units as identified by local IPC service may also be indicated when transmission links are unknown. • Regular screening of patients receiving on-going medical treatments or interventions or who remain in wards or units identified as a high-risk area. <p>Screening and testing enable early possible identification of cases and decreases the risk of cross transmission to other susceptible patients.</p> <p>Routine screening of healthcare staff is not recommended.</p> <p>People who have had an infection or are colonised with VRE are considered to be colonised indefinitely at this time and must always remain in contact precautions for all hospital admissions.</p>
Antimicrobial stewardship	Healthcare facilities and providers should adhere to good practice recommendation for prescribing antimicrobials as per their own prescribing guidance documents or through bpac guidelines
Education	<p>All staff should receive information on VRE including the correct management of patients/residents including good antimicrobial stewardship.</p> <p>Patient information should be provided whilst in hospital and on discharge.</p>
Patient alert	<p>Ensure VRE positive patients and VRE contacts have an alert placed in the medical record or preferably this should be an electronic 'e' alert for easy identification including on readmission.</p> <p>Alerts, including electronic alerts, should only be modified in consultation with the infection control team.</p> <p>Admitting hospitals should have a system to monitor national alerts and warnings and respond appropriately.</p>

<p>Outpatient departments</p>	<p>Hand sanitiser available for use by patient as per normal hospital/IPC measures.</p> <p>Clinic rooms¹ including surfaces, shared patient equipment should be cleaned / disinfected as described above, between patients as per good infection prevention practices.</p> <p>Use disposable/single use equipment as appropriate and dispose of as per hospital policy.</p> <p>Linen such as sheets/pillowcase covers on examination tables should be placed into designated laundry trolley for infectious linen. If paper roll used on examination table should be discarded into appropriate waste stream.</p> <p>Examination table cleaned/disinfected and fresh linen/paper roll applied as standard practice.</p> <p>Terminal clean of room(s) should be undertaken at end of day.</p>
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¹ Where possible and able, a designated clinic room should be used otherwise maintain high standard of cleaning, hand hygiene and appropriate standard and transmission precautions.