

VANCOMYCIN RESISTANT ENTEROCOCCI (VRE) - SCH

PROCEDURE[®]

DOCUMENT SUMMARY/KEY POINTS

- **Standard** and **Contact** infection control requirements apply and must be adhered to.
- [Hand Hygiene](#) must be observed.
- **Personal Protective Equipment** must be observed every time a VRE patient's room is entered.
- **VRE inpatients** MUST be isolated in a single room with en-suite and bathroom facilities.
- **VRE outpatients** on C2North should be admitted to the Isolation Room ASAP upon arrival.
- **VRE patients presenting to ED** must be isolated in the isolation room on arrival.
- Parents, carers and visitors are not required to gown and gloves whilst in the patient's room, but must wear a long sleeved gown when assisting or bathing when clothes are likely to be soiled
- VRE can contaminate the environment; therefore cleaning must be of the highest standard.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1 st July 2013	Review Period: 3 years
Team Leader:	Clinical Nurse Consultant	Area/Dept: Infection Control

CHANGE SUMMARY

- Due for mandatory review: Minor changes throughout document.
- Changes in:
 - New introduction and definitions.
 - Cleaning procedure.
- Replaces SCH Document of same title i.2V.2.

READ ACKNOWLEDGEMENT

- All Clinical Nurses and Medical Officers must read and notify their local manager that they understand the content of the document.
- Local managers will maintain records of read receipts for subsequent compliance and other audits.

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1 Vancomycin Resistant Enterococcus (VRE)

Enterococci are normally found in the bowel and the female genital tract. When exposed to antibiotics, drug resistant strains of these bacteria may survive and multiply. Enterococci can infect or colonise patients, particularly in the hospital environment. A rapid increase in the incidence and prevalence of VRE have been reported in the USA since 1989, and more recently in Australia. The problems associated with VRE include limited available antibiotics to treat infection and the possibility of genetic transfer of resistance to other gram-positive organisms, e.g. *Staphylococcus aureus*.

Those at increased risk of VRE colonization: include patients with a history of previous use of vancomycin, and/or multi-antimicrobial therapy, underlying disease requiring multiple antibiotic use or immunosuppression, and intra-abdominal surgery. Transmission of VRE from person to person occurs through contact via the hands of personnel and/or contact with contaminated patient care equipment and environmental surfaces.

Colonisation: Colonisation is the presence, growth and multiplication of the organism without observable clinical symptoms or immune reaction.

Infection: Infection refers to invasion of bacteria into tissues with replication of the organism. Infection is characterised by isolation of the organism accompanied by clinical signs of illness such as fever, elevated white blood count, purulence (pus) and inflammation (warmth, redness, and swelling).

Outcome:

- precautions to limit the risk of transmission.
1. Standard and Additional Transmission-based precautions shall be used in the care of patients identified to be colonised/ infected, currently or previously, with VRE (refer to Guideline 1 below).
 2. Patients with conditions predisposing to high levels of shedding of VRE e.g. diarrhoea, may be isolated in C3W , after discussion with the Infection Prevention and Control CNC or Infectious Diseases service .
 3. On identification of a new VRE patient, notify the Infection Prevention and Control nurse who will assess the patient and advise the medical and nursing staff, Medical Record Department Manager, Cleaning Department Manager, Bed Managers, Admissions, Outpatients and Emergency Departments of the VRE patient's name and Medical Record Number (MRN) [[Appendix 1](#)].
 4. The decision to screen contacts of newly identified patients with VRE should only occur after consultation with the Infection Prevention and Control nurse in conjunction with the Infectious Diseases team.
 5. All Departments involved in patient care and treatment e.g. X-ray, Transport, Operating Rooms, must be notified on booking of the patient's VRE status.

6. Notify the Infection Prevention and Control nurse before transfer of the patient to another ward within the hospital.
7. Staff with chronic skin or nail conditions should notify their departmental manager and shall not be allocated to care for patients with VRE.
8. Single room accommodation with an attached bathroom is required for the duration of the child's admission. Patients with VRE may be cohorted in the same room. A sign should be displayed on the door indicating "Before Entering Consult Nursing Staff."
9. Non-critical equipment e.g. stethoscope, sphygmomanometer, thermometer, tourniquet, shall be allocated for single patient use for duration of stay. Disposable crockery is not required.
10. This policy should be used in conjunction with:
 - Standard Precautions
 - Isolation
 - Handwashing for Basic Hygiene and Aseptic Procedures
 - Infection Control in the Health Care Setting
 - Transport of Infectious Patients

2 Guideline for Vancomycin Resistant Enterococci (VRE)

2.1 Standard and Transmission-Based Additional Precautions

- **HANDWASHING** with either an antiseptic containing hand wash or alcoholic hand rub before and after all patient contact or contact with the environment, taking care not to re-contaminate hands on leaving the room.
- **GLOVES** must be used at all times. Remove gloves and handwash/hand rub prior to leaving room.
- **A GOWN** is worn if prolonged contact and/or contamination of clothing is likely, e.g. if patient is incontinent. Remove gown and handwash/hand rub prior to leaving room
- **LINEN** and **WASTE** is handled using Standard precautions.
- **VISITORS** must be instructed in the procedure for hand hygiene after visiting. Gloves and gown are not required unless the visitor identifies as being at risk from VRE infection.

2.2 Screening for VRE Carriage

- Roommates of patients newly identified to be VRE carriers shall be identified and screening and/or isolation shall be performed only after consultation with Infection Prevention and Control nurse in consultation with Infectious Disease team.

2.3 Admission of Patients Colonised with VRE (Carriers)

- Patients previously identified as colonised with VRE (carriers) shall be placed on isolation precautions on admission and for the duration of their stay.
- Swabs from body sites taken for microbiology that do not identify VRE do not indicate a clearance of VRE carriage in persons previously identified as VRE carriers.

2.4 Cleaning Procedure

- Designated cleaning equipment shall be allocated to the room.
- The room shall be cleaned daily with an approved detergent using the designated bucket and cloth.
- On discharge the room and non-disposable equipment shall be cleaned with an approved disinfectant.

2.5 Staff with Skin Conditions

- Staff with chronic skin or nail conditions e.g. paronychia or dermatitis, should notify their Department Manager, seek the advice of their General Practitioner and not be allocated to care for patients with VRE.

2.6 Summary for Ward Areas

- See [APPENDIX 2](#)

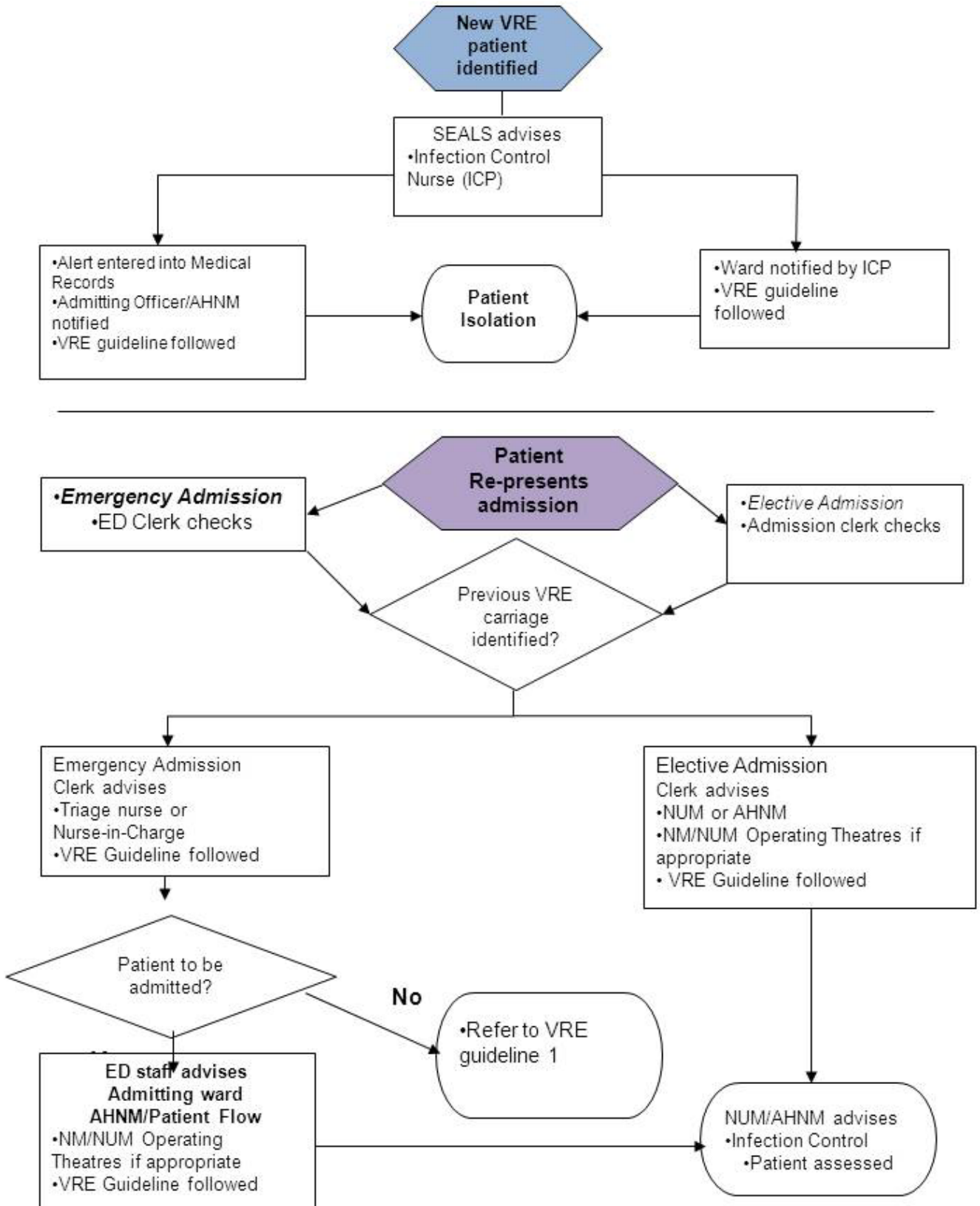
3 Reference

1. Australian Commission on Safety and Quality in Healthcare "Australian Guidelines for the Prevention and Control of Infection in Healthcare. Australian Government National Health and Medical Research Council : 2012 http://www.safetyandquality.gov.au/wp-content/uploads/2012/10/Standard3_Oct_2012_WEB.pdf

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Appendix 1: Procedure for Notification of a Vancomycin Resistant Enterococci (VRE)



Appendix 2: VRE Infection Prevention and Control Guide

Summary for Staff and for Ward and Related Areas

VRE colonisation can persist indefinitely. There are no guidelines currently for determining if a patient is clear of VRE. Patient confidentiality is paramount at all times.

1. *Infection Prevention and Control Precautions*

- STANDARD AND CONTACT infection control precautions apply and must be adhered to. (NSW Health policy directive PD 2007_036)
http://www.health.nsw.gov.au/policies/pd/2007/pdf/PD2007_036.pdf
- HAND HYGIENE must be observed at all times (NSW health PD 2010_058)
http://www.health.nsw.gov.au/policies/pd/2010/pdf/PD2010_058pdf
 - Hands must be decontaminated using either an antiseptic hand wash (aqueous chlorhexidine gluconate 2% - green solution) or alcoholic hand rub. Hands must be decontaminated whether gloves are used or not.
 - Hands must be decontaminated on entry, just before exit AND again immediately after leaving the room (to reduce re-contamination from door handles)
- PERSONAL PROTECTIVE EQUIPMENT (PPE) must be worn by staff every time the room is entered
 - Single use long sleeved gown and non-sterile gloves on entry to room
 - Additional use of eye protection and mask with “exposure prone procedures” (procedures which pose a risk of contamination with bodily fluid)

2. *Isolation Requirements*

Inpatients

- Patients MUST be isolated in a single room with en-suite toilet and bathroom facilities
- All staff personnel entering the room must wear Protective Personal Equipment (PPE) including single use long sleeved gown and non-sterile gloves
- Non critical equipment e.g. stethoscope, sphygmomanometer, thermometer, tourniquet, must be allocated for single patient use for duration of stay
- A dedicated set of weighing scales should be provided in the event of urine output monitoring and should remain in patient's room for duration of stay
- If there is a clinical need – e.g. admission for chemotherapy or a non-acute gastroenteritis illness, admission to ward C2W is possible (preference is Bed 1 or Bed 22)
- If the patient has diarrhoea or vomiting due to acute gastroenteritis – **discuss with Infection Prevention and Control or Infectious Diseases Team, or the After Hours Nurse Manager, regarding isolation in ward C3W which is the preferred ward for admission.**
- Patients will not be able to use the Starlight Room, attend school or visit other in-patients. School can be bought to the patient in hospital.

Outpatients (ward C2 north)

- The patient should be admitted to the Isolation Room ASAP on arrival
- All staff personnel entering the room must wear Protective Personal Equipment (PPE) including single use long sleeved gown and non-sterile gloves
- As there is no en-suite in the isolation room (C2N), he/she should be provided with a bed pan if needed
- Only nursing staff are to take the bed pan to the sluice room. Nursing staff must wear Protective Personal Equipment (PPE) including single use long sleeved gown and non-sterile gloves when disposing of bed pan contents in sluice room, double 'flush' and only then remove PPE.
- If needing a procedure in the "Procedure Room" – he/she should be scheduled for the end of the list
- All surfaces such as the chair and x-ray table used by the patient must be cleaned using bleach cleaner. The cleaning must be attended to before the equipment is used for another patient.

Emergency Department (ED)

- Patients with VRE presenting to ED must be isolated in the isolation room on arrival
- All staff personnel entering the room must wear Protective Personal Equipment (PPE) including single use long sleeved gown and non-sterile gloves
- As there is no en-suite in the isolation room (ED), he/she should be provided with a bed pan if needed
- Only nursing staff are to take the bed pan to the sluice room. Nursing staff must wear Protective Personal Equipment (PPE) including single use long sleeved gown and non-sterile gloves when disposing of bed pan contents in sluice room, double 'flush' and only then remove PPE.
- See sections below for hand hygiene, staff and parent responsibilities, cleaning of room and linen/waste handling

3. *Nursing /Medical/Allied Health Staff*

- 'Traffic' in and out of the room should be kept to a minimum e.g. minimal number staff to enter patient's room
- All staff personnel entering the room must wear Protective Personal Equipment (PPE) including single use long sleeved gown and non-sterile gloves
- Wash hands following removal of gown and gloves and again, immediately after leaving the room in case the door handle is contaminated.
- Staff with chronic skin or nail conditions should notify their department manager and should not be allocated to care for patients with VRE.

4. Parents, Carers, Relatives and Visitors

- Parents, carers and visitors are not required to gown and gloves whilst in the patient's room.
- However, family and carers must wear a gown if their clothes are likely to be soiled e.g. assisting with bathing.
- Family, carers or visitors must decontaminate hands on entering patients room, just before exit AND again, immediately after leaving the room in case the door handle is contaminated.
- Decontaminate hands with antiseptic hand wash (aqueous chlorhexidine gluconate 2% - green solution) or with alcoholic hand rub provided.
- Family, carers and visitors must not use the communal areas, including the ward kitchen and hospital café, and need to leave the hospital directly after they exit the room.
- After leaving the hospital family, carers and visitors have no restrictions.

5. Other Departments for Diagnostic Tests

- The receiving department must be notified in advance of the patient's VRE status, e.g. X-ray, Transport, Operating Rooms.
- Porters must wear single use long sleeved gown and gloves when transporting the patient. These must be removed and discarded once patient contact has finished Wash hands following removal of gown and gloves.
- All surfaces such as the chair and x-ray table used by the patient must be cleaned with bleach.
- The cleaning must be attended to before the equipment is used for another patient.

6. Room Cleaning Requirements

- VRE can contaminate the environment; therefore cleaning must be of the highest standard.
- Daily cleaning should occur as per the Cleaning Services policy.
- It is advisable to clean the patient room last to accommodate efficient work practice.
- Clean with bleach (as per manufacturer's instructions); disinfect by wiping over surfaces with bleach. Cleaning must include all surfaces that the patient comes in contact with, paying particular attention to the bed, commodes, chairs, hoists, toilets, hand basins, door handles, bed rails, taps, telephones, and call bells.
- Dedicated cleaning equipment is required
- Cleaning cloths and mop heads should not be used elsewhere and after use are subject to normal laundry procedure.

7. Linen and Waste

- Place all soiled linen into linen bags

- A dedicated linen skip for the patient must be provided
- Handle as usual after appropriate washing
- Waste should be discarded into yellow plastic bags and handled in the normal manner for infectious waste.

8. *Cleaning of Room and Bathroom After Discharge*

- Cleaning procedures are as per Cleaning Services policy
- Discard all pre -sterile consumable items, on discharge only.
- Equipment normally processed in the central sterile supply department (CSSD) should be placed in the Ward CSSD container for return to CSSD.
- Items for personal hygiene used by the patient are to be discarded.
- All surfaces, patient equipment, doorknobs, tap handles, curtains and electronic devices etc must be included in the cleaning of the room / environment.
- Bed curtains and shower curtains must be changed and toilet brush should be discarded.
- The room, bathroom and all patient care equipment inside the room must be quarantined until the area is cleaned
- Following discharge, an inspection of the room will be undertaken by the Infection Control staff after the required terminal cleaning

9. *Empiric Antibiotic Choice*

This should be discussed with the Infectious Diseases team.