

# Clinical Guideline

## Vancomycin Resistant Enterococci (VRE) and Methicillin-resistant Staphylococcus aureus (MRSA) Screening and Management in the Adult Renal Patient Population Clinical Guideline

**Policy developed by:** Statewide Renal Clinical Network

**Approved SA Health Safety & Quality Strategic Governance Committee on:**  
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**Summary** The Renal Clinical Network updated the Vancomycin Resistant Enterococci (VRE) and Methicillin-resistant Staphylococcus aureus (MRSA) Screening and Management in the Adult Renal Patient Population Clinical Guideline in alignment with the revised SA Health guidelines for management of patients with Vancomycin Resistant Enterococci (VRE) and Methicillin-Resistant Staphylococcus aureus (MRSA) which were updated in 2014.

**Keywords** Renal Patients, Vancomycin Resistant Enterococci, VRE, Methicillin-Resistant Staphylococcus aureus, MRSA, Haemodialysis, Peritoneal Dialysis, Dialysis, Renal Replacement Therapy, Prevention, Management, Screening, Clinical Guideline

**Policy history** Is this a new policy? **N**  
Does this policy amend or update an existing policy? **Y**  
Does this policy replace an existing policy? **Y**  
If so, which policies?  
**Multi-Resistant Organism Guidelines for Renal Replacement Therapy December 2011**

**Applies to** Renal Services and Dialysis Units CALHN, SALHN, NALHN, CHSALHN, WCHN

**Staff impact** All Clinical, Medical, Nursing, Allied Health, Emergency, Dental, Pathology

**PDS reference** CG166

### Version control and change history

Version	Date from	Date to	Amendment
1.0	12/2011	14/10/2014	Original version
2.0	14/10/2014		Revised and renamed

Guidelines for Vancomycin-resistant enterococci (VRE) and Methicillin-resistant *Staphylococcus aureus* (MRSA) screening and management in the adult renal patient population.

October 2014

### Please note

The Renal Clinical Network mandates that health professionals obtain informed consent from patients before any procedure is implemented.

(See Department of Health Guideline - Consent to Medical treatment available at <http://10.22.161.35:8080/policies/documents/Consent%20to%20medical%20treatment.doc> )

The Australian Community, and the Aboriginal and Torres Strait Islander Community, are culturally and linguistically diverse.

Every patient /individual has different needs to enable them to give informed consent according to their age, gender, sexuality, religion, culture, race, ability or disability.

Patients have the right to:

- To be treated with respect, dignity and courtesy regardless of age, gender, sexuality, religion, culture, ability or disability
- To have all information given to them in a language/format they can understand (this includes the right to an interpreter if needed)

The SA Health's booklet "*Your Rights and Responsibilities, A Charter for Consumers of the SA Public Health System*" gives more details on patient's rights. Available at

<http://www.safetyandquality.sa.gov.au/Default.aspx?tabid=68>

***For this specific guideline, when requesting consent and obtaining faecal specimens and groin swabs from people from certain cultural backgrounds (including Aboriginal and Torres Strait Islander patients) where possible a female attendant/health provider/interpreter for a female patient, or a male attendant/health provider/interpreter for a male patient, should be utilised.***

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## Vancomycin Resistant Enterococci (VRE) and Methicillin-resistant *Staphylococcus aureus* (MRSA) Screening and Management in the Adult Renal Patient Population.

These guidelines replace the Multi-Resistant Organism Guidelines for Renal Replacement Therapy (December 2011).

These guidelines should be read in conjunction with:

- SA Health Guideline for the management of patients with Methicillin-resistant *Staphylococcus aureus* (MRSA)  
2014 [http://www.sahealth.sa.gov.au/wps/wcm/connect/bd32928042372b299e5bfeef0dac2aff/Clinical+Guideline\\_MRSA\\_April2014.pdf?MOD=AJPERES&CACHEID=bd32928042372b299e5bfeef0dac2aff](http://www.sahealth.sa.gov.au/wps/wcm/connect/bd32928042372b299e5bfeef0dac2aff/Clinical+Guideline_MRSA_April2014.pdf?MOD=AJPERES&CACHEID=bd32928042372b299e5bfeef0dac2aff)
- SA Health Guideline for the management of patients with Vancomycin-resistant enterococci (VRE)  
2014 <http://www.sahealth.sa.gov.au/wps/wcm/connect/e7b306004023a72496fcbfd30eb2c8cd/VRE-guidelines-V6-phcs-ics-20120831.pdf?MOD=AJPERES&CACHEID=e7b306004023a72496fcbfd30eb2c8cd>

### Scope

The adult renal patient population attending for renal treatments or services in South Australia.

Services include:

- Renal Outpatient Clinics
- Satellite Haemodialysis Units
- Country Haemodialysis Units
- Incentre Haemodialysis Units
- Renal patients admitted to hospital (inpatients)
- Peritoneal Dialysis patients
- Patients dialysing in the home haemodialysis training unit
- Home Haemodialysis patients

## Preventing transmission of VRE and MRSA in the adult renal patient health care setting.

Transmission of Vancomycin-resistant enterococci (VRE) and Methicillin-resistant *Staphylococcus aureus* (MRSA) can be minimised by strict adherence to Standard Precautions, i.e. hand hygiene, cleaning of shared patient equipment, and environmental cleaning. In some situations, such as hospital inpatient care, contact precautions will be required.

### Standard Precautions

**All** patients regardless of their infectious status will require the use of standard precautions.

Standard precautions include the following practices:

- **Hand Hygiene** according to the SA Health Hand Hygiene Policy Directive and Guideline. [http://www.sahealth.sa.gov.au/wps/wcm/connect/765d5d0046d2cefe9be0fb2e504170d4/Guideline\\_Hand+Hygiene\\_Oct2012.pdf?MOD=AJPERES&CACHEID=765d5d0046d2cefe9be0fb2e504170d4](http://www.sahealth.sa.gov.au/wps/wcm/connect/765d5d0046d2cefe9be0fb2e504170d4/Guideline_Hand+Hygiene_Oct2012.pdf?MOD=AJPERES&CACHEID=765d5d0046d2cefe9be0fb2e504170d4)
  - Alcohol based hand gels or rubs (with 70% v/v ethyl alcohol) are the most effective method for decontaminating the hands. They should be used for hand hygiene when hands are not visibly soiled.
  - Visibly soiled hands should be washed with soap and water.
  - Staff must perform hand hygiene as per Hand Hygiene Australia 5 moments of hand hygiene.
  - A clinical hand basin should be provided within close proximity to the patient.
  - Alcohol based hand gels should be made available for staff and patients in each clinical area and each dialysis station.
  - All patients and visitors should be strongly encouraged to perform hand hygiene on entry and exit to the clinical area.
- Use of aseptic technique where required
- Use of personal protective equipment (PPE) according to risk of body fluid exposure
- Environmental controls including cleaning and spills management.
- Appropriate reprocessing of re-useable instruments and equipment
- Safe handling and disposal of sharps and potentially infectious material
- Safe handling of waste and linen
- Personal hygiene (including respiratory hygiene and cough etiquette)

## Transmission Based Precautions - Contact Precautions

Contact precautions should be used when there is a risk of direct or indirect contact transmission of VRE and MRSA and may include the following elements:

Whilst a ward inpatient in a hospital:

- Single room or geographical isolation
- Dedicated ensuite – toilet / bathroom where possible
- Infection control signage
- Dedicated patient equipment where possible. If this is not possible shared patient equipment must be cleaned and disinfected prior to use on another patient
- Minimise the quantity of disposable consumables in the patient room
- Appropriate use of PPE for contact precautions (i.e. gown or apron, and gloves)
- Appropriate cleaning measures.

Note: there are no special requirements for laundering of linen, disposal of waste, or cleaning of eating utensils for patients with VRE and MRSA colonisation or infection.

Link to SA Health website on standard and transmission based precautions:

<http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+topics/healthcare+associated+infections/prevention+and+management+of+infections+in+healthcare+settings/prevention+and+management+of+infection+in+healthcare+settings>

## Standard Cleaning Procedure for all renal patient areas

**The standard cleaning procedure for all renal patient areas regardless of VRE / MRSA status is using detergent and disinfectant.**

Key points of this cleaning procedure are:

- > All patient equipment should be cleaned with detergent and water and disinfected prior to use on or by another patient.
- > Use a Therapeutic Goods Administration (TGA) approved hospital grade disinfectant (preferably with label claims against VRE or MRSA **or** a chlorine-based product with 1000 ppm available chlorine – as approved by hospital or unit.
- > All surfaces are saturated with detergent / disinfectant and allowed to air dry
- > Particular attention should be paid to all frequently touched surfaces, such as the dialysis station<sup>1</sup>.
- > In the dialysis settings where electrical equipment is in use using a bucket and cloth method of cleaning is not advisable due to the risk of damage to the equipment and safety concerns. Cleaning/disinfectant wipes are a suitable alternative; however these must be used in a manner that ensures adequate cleaning and disinfection. The following points should be considered when using cleaning/disinfection wipes:
  - An alcohol wipe can be used on electrical items that are not visibly soiled. If soiled then cleaning is required according to the manufacturer's instructions
  - Cleaning/disinfection wipes should be 'wet' enough to ensure that all surfaces are adequately cleaned and disinfected. More than one cleaning wipe may be required.
  - The wipe should not be used to clean multiple items.
- > Ensure that all cleaning equipment and solutions are changed before moving to the next patient area to be cleaned.

Link to SA Health guidelines on environmental

cleaning: <http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+topics/healthcare+associated+infections/prevention+and+management+of+infections+in+healthcare+settings/environmental+hygiene+in+healthcare>

Link to NHMRC routine environmental cleaning. <http://www.nhmrc.gov.au/book/australian-guidelines-prevention-and-control-infection-healthcare-2010/b1-4-2-routine-environme>

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<sup>1</sup> The dialysis station consists of:

- Haemodialysis machine / Automated Peritoneal Dialysis (APD) machine
- Blood pressure cuff
- Bed or chair
- Any other furniture dedicated to that patient area e.g. overway table.



## Patient and Visitor Activity

- Patients should apply an alcohol based hand rub or gel on entry to the unit, before and after using the weigh scales, before leaving the dialysis station, and after using the toilet.
- Patients can be served meals in the usual manner and no special care of crockery or other utensils is required.
- Visitors are not required to don PPE unless they have close contact with patient but must perform hand hygiene before and after visiting the patient.
- Both the patient and any visitors should be requested not to visit other patients during the session.

## Patient supplies

- Minimal amounts of equipment and supplies should be taken into patient areas.
- Items taken into the dialysis station should either be single use, dedicated for single patient use, or cleaned and disinfected before being used by another patient. Ideally patients should have their own dedicated equipment. It is the responsibility of the nursing staff to identify and pack up the equipment to be kept for the individual patients.
- Unused medications or supplies taken to the patient's station should be used only for that patient and should not be returned to a common clean area or used for other patients.
- Patients' charts and medical records should be left outside the patient area.

## Linen and Waste Disposal

- **Standard precautions** apply to the handling, transport and laundering of linen.
- **Standard precautions** apply to the handling and disposal of general and clinical waste.
- A linen skip may be dedicated to the VRE/MRSA patient for the shift. It should be cleaned and removed at the end of the shift
- One sharps container can be dedicated to the VRE/MRSA patient and the external surface cleaned and disinfected following use. Following cleaning the container can be returned for regular use.

## Screening for VRE in the adult renal patient population

### Background / Rationale

Evidence has shown that Renal Patients (particularly Haemodialysis (HD) patients) have a high prevalence of VRE colonisation but low VRE infection rate.<sup>i ii iii iv</sup>

### Peritoneal Dialysis and Haemodialysis Patients

Routine population screening (3 monthly) for VRE in dialysis patients (Peritoneal Dialysis and Haemodialysis) is **not** required.

### All Renal Inpatients

All renal patients *will be screened* for VRE within 24 hours of an inpatient hospital admission.

Contact precautions are required pending VRE screening results **only** if the patient is classified as high risk for transmission, such as diarrhoea with faecal incontinence, enterostomies or discharging wounds that cannot be contained by a dressing. (See assessment of transmission risk below)

Routine screening is not required on discharge from South Australian hospitals or on return to a South Australian Satellite or country Unit.

NOTE: Strict adherence to standard precautions is recommended universally for all patients irrespective of VRE status at these sites.

## Assessment and Management of the VRE positive patient.

### Assessment of transmission risk.

A risk assessment should be completed on each VRE positive renal patient to identify any risk factors that increase dissemination and transmission of VRE.

VRE positive patients can be classified as **HIGH RISK** if they meet the following criteria:

- Diarrhoea with faecal incontinence.
- Enterostomies (stomas).
- Discharging wounds that cannot be contained by a dressing.
- Impaired self-care (dementia), delirium, high level care in a nursing home.
- Linezolid Resistant VRE (Notify Infection Control Service)

If a haemodialysis patient is assessed as high risk they should be considered for incentre dialysis in a tertiary hospital. High risk patients may be considered suitable for satellite haemodialysis depending on environmental factors i.e. presence of isolation rooms, availability of dedicated toilets and should be risk assessed by the receiving site to ensure patient safety is maintained.

## Management of VRE positive patients according to renal service settings.

Regular auditing of compliance with standard precautions in these settings is highly recommended as per South Australian Health audit tools and your facilities protocols.

### Satellite Haemodialysis Units and Country Haemodialysis Units

All dialysis patients in metropolitan satellite dialysis units (TQEH incentre is classified as satellite) and country dialysis units should be managed with strict adherence to standard precautions.

Personal Protective Equipment (PPE) is only required to be worn where there is known or potential risk of exposure to blood and body fluids (i.e. cannulation / connection / disconnection).

No special considerations need to be given to staffing of known non-high risk VRE colonised patients.

Thorough cleaning and disinfection of the dialysis station (as per page 6) should occur after patient discharge and prior to being used for another patient.

### Hospital admissions – inpatients

All renal patients should have a VRE Screen within 24 hours of admission to hospital.

Contact precautions are required pending VRE screening results **only** if the patient classified as high risk for transmission, such as diarrhoea with faecal incontinence, enterostomies or discharging wounds that cannot be contained by a dressing.

VRE positive inpatients are managed on the ward using **contact precautions**.

If dialysis is performed on VRE positive inpatients outside of the ward e.g. in the incentre dialysis unit, contact precautions are implemented as per instructions below.

#### Cleaning for inpatients

- SA Health Cleaning Standard (working draft) – June 2013 and
- Refer to the SA Health Guideline for the management of patients with Vancomycin-resistant enterococci (VRE)  
2014 <http://www.sahealth.sa.gov.au/wps/wcm/connect/e7b306004023a72496fcbfd30eb2c8cd/VRE-guidelines-V6-phcs-ics-20120831.pdf?MOD=AJPERES&CACHEID=e7b306004023a72496fcbfd30eb2c8cd>

## Tertiary Hospital Haemodialysis Units (Incentre haemodialysis units)

“HIGH RISK” VRE positive maintenance haemodialysis patients and VRE positive inpatients on admission screening are managed using *contact precautions*.

### Incentre patient placement

Patient placement / cohorting of patients within an in-centre unit should reflect the following considerations;

- Non high risk, non-admitted maintenance haemodialysis patients dialysing incentre should be cohorted together adjacent to inpatients known to be VRE negative on admission screening.
- VRE positive inpatients and “HIGH RISK” VRE maintenance haemodialysis patients should be cohorted together at the opposite end of the unit and managed according to *contact precautions*.

### Staffing of incentre units

The number of staff allocated to “HIGH RISK” VRE patients should be kept to a minimum whilst meeting the health care needs of the patient.

In an outbreak situation cohorting of staff (i.e. staff may be rostered to care for VRE patients only) may be considered.

Pregnant staff may be allocated to care for a patient colonised or infected with VRE.

### Alerting Systems

Patients known to be infected or colonised with VRE must have an Infection Risk Alert placed in their case notes and added to the facility’s alert system by the Infection Control Coordinator to alert other departments within the organisation of infection risk.

### **Outpatient clinics, emergency department, radiology, dental and primary care.**

Management of renal VRE positive patients in non-inpatient settings can generally be managed by strict adherence to standard precautions as long as the patient does not have risk factors that facilitate transmission, such as diarrhoea with faecal incontinence, enterostomies (stomas), discharging wounds that cannot be contained by a dressing or poor compliance with, or inability to manage personal hygiene. (See Assessment of transmission risk page 8.)

- All patients, regardless of infection status, should perform hand hygiene on admission to the area.
- Patients can sit in the waiting area providing all discharging wounds are covered with a clean dressing and there are no visible signs of faecal soiling.
- Hand hygiene should be performed by all staff before and after patient contact
- If close physical contact is required (e.g. complicated wound care or assistance with enterostomies and/or toileting) and the patient has risk factors such as those listed on page 8, then gloves and a gown or apron are required.

### **Home Dialysis Patients**

- **Peritoneal Dialysis Patients**
- **Home Haemodialysis Patients dialysing in the Home Haemodialysis Training Unit**
- **Home haemodialysis patients dialysing in their own home**

If the Home Dialysis VRE positive patient attends an Outpatient Clinic they are managed as for OPD Clinic.

If the Home Dialysis VRE positive patient is admitted to hospital they are managed as for Hospital admission (inpatient).

## VRE Clearance

Routine clearance of VRE colonised renal patients is not recommended.

There is no definitive process by which clearance can be confirmed.<sup>v</sup>

It is essential that senior infection control personnel are involved in discussions regarding clearance of VRE status.

A decision to clear a VRE positive renal patient should be as per the SA Health VRE clearance guidelines<sup>vi</sup> and must be done in conjunction with the local hospitals Infection Control Service.

The clearance procedure below is a reasonable approach to clearance for the purpose of cessation of contact precautions, drawn from consideration of the VRE literature.<sup>vii viii</sup>

- More than three months have elapsed since the last positive specimen,
- Three consecutive VRE negative faecal samples obtained at least one week apart.
- The patient must have ceased all antibiotics (intravenous or oral) for at least two weeks before specimens are collected.

# MRSA Screening and Management in the Renal Patient Population

## MRSA Screening

### New dialysis patients

All new dialysis patients will be initially screened for MRSA.

### Potential Renal Transplant Recipients.

All potential renal transplant recipient patients are to be screened as part of the “work up” to be placed on the Renal Transplant Waiting List. Further routine screening is not required.

### Patients in Incentre Dialysis Units, Satellite Dialysis Units and Country Dialysis units

MRSA is a risk in Renal Replacement Therapy (RRT) institutional settings.

Screening for MRSA in Incentre Dialysis Units, Satellite Units and Country Units patients **should occur every six months.**

If the patient has been previously returned a positive MRSA result then further screening is not required.

Patients are to be screened on their return from any other healthcare facility.

Each centre should nominate a week in which all patients who attend for RRT will be screened (in some larger centres this may be co-ordinated by the Infection Control Unit). One screen should be performed for each patient.

### Peritoneal Dialysis Patients and Home haemodialysis Patients

Patients dialysing at home (Peritoneal and Home Haemodialysis) and in the home dialysis training unit who are new to dialysis should be screened in line with the new patient pathway. Further routine screening is not required.

## Screening method

Method	Sites for screening
Culture based techniques	Nose and perineum or groin, <i>plus</i> unhealed wound or indwelling medical device (including umbilical catheter in neonates)
PCR rapid testing	Nose, <i>plus</i> unhealed wound or indwelling medical device.

## Collection of Specimens

For optimum detection of MRSA the method of specimen collection is important:

1. Follow manufacturer's instruction on specimen collection swab, or laboratory instructions
2. Prior to taking wound swabs, clean away surface debris and exudate with saline
3. Swabs must be placed in transport medium
4. Swabs should be clearly labelled, specifying the site of collection
5. Request "MRSA screen" on the lab request form and send to laboratory as soon as possible. If a swab is taken for possible infection request "MC&S"

## Communication of Results

A positive result and its consequences must be communicated to the patient by their treating doctor or their delegate. Interpretation of results can be discussed with Infection control. The patient should be given the opportunity to ask questions and ideally be given some written literature to take away with them.

A new positive result should be communicated to the Infection Control Unit at the patient's main hospital, so that hospital records can be kept up to date.

## Alerting Systems

Patients known to be infected or colonised with MRSA must have an Infection Risk Alert placed in their case notes and added to Oacis / patient management system by the Infection Control Coordinator to alert other departments within the organisation of infection risk.



## MRSA Clearance

Any decision to clear a MRSA positive renal patient should be as per the SA Health MRSA clearance guidelines and must be done in conjunction with the local hospitals Infection Control Service.

Information can be found in the SA Health guidelines. *Clinical guideline: Guideline for the Management of Patients with Methicillin-resistant Staphylococcus aureus (MRSA), April 2014.* [http://www.sahealth.sa.gov.au/wps/wcm/connect/bd32928042372b299e5bfeef0dac2aff/Clinical+Guideline\\_MRSA\\_April2014.pdf?MOD=AJPERES&CACHEID=bd32928042372b299e5bfeef0dac2aff](http://www.sahealth.sa.gov.au/wps/wcm/connect/bd32928042372b299e5bfeef0dac2aff/Clinical+Guideline_MRSA_April2014.pdf?MOD=AJPERES&CACHEID=bd32928042372b299e5bfeef0dac2aff)

## Preventing transmission of MRSA in the health care setting.

Instructions re **standard precautions**, **contact precautions** and **cleaning procedures** for all renal patient areas for preventing transmission of MRSA can be found on page 4-6.

Effective control of MRSA requires a combination of strict adherence to **standard precautions** and **contact precautions**.

Where the Renal Replacement Treatment is occurring in a major hospital where MRSA guidelines are established, the hospital guidelines should be followed in place of these listed in the next section.

## Management of the MRSA patients in different renal service settings.

### Satellite Haemodialysis Units,

### Country Haemodialysis Units,

### Tertiary Hospital Haemodialysis Units (Incentre haemodialysis units).

MRSA positive are managed using **contact precautions**.

#### Patient Placement

- Cohorting of high risk VRE and MRSA patients in the same area or looked after by the same nurse is not recommended.
- A separate dialysis room is preferred or dialyse the patient at the end or corner of the unit.
- Dialyse the MRSA patient at a station with as few adjacent stations as possible.
- MRSA positive patients should not dialyse adjacent to patients with central venous catheter or wounds nor have the same nurse allocated to care for them due to the risk of cross contamination.

#### Staffing

- MRSA patients with the same organism can be cohorted and cared for by the same nurse.
- Staff with active exfoliative skin conditions such as eczema, dermatitis and psoriasis should not be allocated to care for these patient(s).

#### Personal Protective Equipment (PPE)

- Staff caring for the patient or touching the patient's equipment at the dialysis station must wear non-sterile disposable gloves and a long sleeved gown or apron. The choice of sleeve length depends on the procedure being undertaken and the extent of risk of exposure of the healthcare worker's arms. If an apron is used, it is important to ensure that wrists and forearms are included in the hand hygiene procedure. All wrist jewellery and long sleeved clothing must be removed prior to the procedure to ensure hand hygiene can be performed adequately.
- All PPE must be removed and discarded prior to leaving the station.
- If MRSA patients have been cohorted, staff must change PPE and perform hand hygiene between caring for the individual patients.
- Other PPE (e.g. mask, waterproof apron) should be used as required by standard precautions.
- Hand hygiene should be performed before donning and after doffing PPE.

## Hospital admissions – inpatients

MRSA positive inpatients are managed using **contact precautions**.

Information can be found on page 13 of the SA Health guidelines. *Clinical guideline: Guideline for the Management of Patients with Methicillin-resistant Staphylococcus aureus (MRSA), April*

2014. [http://www.sahealth.sa.gov.au/wps/wcm/connect/bd32928042372b299e5bfeef0dac2aff/Clinical+Guideline\\_MRSA\\_April2014.pdf?MOD=AJPERES&CACHEID=bd32928042372b299e5bfeef0dac2aff](http://www.sahealth.sa.gov.au/wps/wcm/connect/bd32928042372b299e5bfeef0dac2aff/Clinical+Guideline_MRSA_April2014.pdf?MOD=AJPERES&CACHEID=bd32928042372b299e5bfeef0dac2aff)

## Outpatient clinics, emergency, radiology, dental, primary care

In these settings, *strict adherence to standard precautions* (i.e. hand hygiene, cleaning shared patient equipment and environmental cleaning) for ALL patients will assist in minimising cross-transmission risks.

- All patients, regardless of infection status, should perform hand hygiene on admission to the area.
- Patients can sit in the waiting area providing all discharging wounds are covered with a clean dressing and there are no visible signs of faecal soiling.
- Hand hygiene should be performed by all staff before and after patient contact
- If close physical contact is required (e.g. complicated wound care) then gloves and a gown are required.

## Links/ Supportive Documents

SA Health Infection Control Service

[www.sahealth.sa.gov.au/infectionprevention](http://www.sahealth.sa.gov.au/infectionprevention)

Link to SA Health guidelines on environmental

cleaning: <http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+topics/healthcare+associated+infections/prevention+and+management+of+infections+in+healthcare+settings/environmental+hygiene+in+healthcare>

Link to NHMRC routine environmental cleaning. <http://www.nhmrc.gov.au/book/australian-guidelines-prevention-and-control-infection-healthcare-2010/b1-4-2-routine-environme>

SA Health Hand Hygiene Audit Guide –

Haemodialysis [http://www.sahealth.sa.gov.au/wps/wcm/connect/eb426280404922879815bfa05d853418/HH-audit-tool-haemodiaylsis\\_V5.1-phcs-ics-20140225.pdf?MOD=AJPERES&CACHEID=eb426280404922879815bfa05d853418](http://www.sahealth.sa.gov.au/wps/wcm/connect/eb426280404922879815bfa05d853418/HH-audit-tool-haemodiaylsis_V5.1-phcs-ics-20140225.pdf?MOD=AJPERES&CACHEID=eb426280404922879815bfa05d853418)

SA Health Guideline for the management of patients with Methicillin-resistant *Staphylococcus aureus* (MRSA)

2014 [http://www.sahealth.sa.gov.au/wps/wcm/connect/bd32928042372b299e5bfeef0dac2aff/Clinical+Guideline\\_MRSA\\_April2014.pdf?MOD=AJPERES&CACHEID=bd32928042372b299e5bfeef0dac2aff](http://www.sahealth.sa.gov.au/wps/wcm/connect/bd32928042372b299e5bfeef0dac2aff/Clinical+Guideline_MRSA_April2014.pdf?MOD=AJPERES&CACHEID=bd32928042372b299e5bfeef0dac2aff)

SA Health Guideline for the management of patients with Vancomycin-resistant enterococci (VRE)

2014 <http://www.sahealth.sa.gov.au/wps/wcm/connect/e7b306004023a72496fcbfd30eb2c8cd/VRE-guidelines-V6-phcs-ics-20120831.pdf?MOD=AJPERES&CACHEID=e7b306004023a72496fcbfd30eb2c8cd>

## References.

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