Plymouth Community Healthcare CIC

PVL-Associated Staphylococcal Infections Management and Control

Version No 2.4

Notice to staff using a paper copy of this guidance

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PVL-Associated Staphylococcal Infections Management and Control

1. **Introduction**

   This policy aims to:

   1. Ensure that patients colonised or infected with PVL-associated Staphylococcal infections receive effective and appropriate care. This includes in patients, patients in their own home and care homes who are visited by community nurses.

   2. Minimise the risk of transmission of PVL-associated Staphylococcal infections.

2. **Purpose**

   This policy aims to provide essential infection prevention and control information and guidance to all staff, who work in Plymouth Community Healthcare (PCH) in patient areas and those who visit patients in community settings to promote a high level of compliance with infection prevention and control practice in order to reduce the risk of Health Care Associated Infections (HCAI).

3. **Duties**

   3.1 The **Chief Executive** is ultimately responsible for infection prevention and control and the content of all Policies and their implementation. The Chief Executive delegates the day to day responsibility of implementation of the policies to the **Director of Infection Prevention and Control (DIPC)** and the Infection Prevention and Control team (IPCT).

   3.2 **Directors** are responsible for identifying, producing and implementing PCH Policies relevant to their area.

   3.3 The **Assistant Directors** will support and enable operational Clinical Leads and Managers to fulfil their responsibilities and ensure the effective implementation of this Policy within their speciality.

   3.4 **All Staff both clinical and non clinical** have a responsibility for ensuring they have read, understood and adhere to local Protocols and Policies.

4. **Responsibilities**

   4.1.1. **Responsibilities of all staff**

   This policy relies heavily on staff taking responsibility for infection control and accepting that they are the principle route of transmission. All staff should accept responsibility for maintaining a high standard of infection control in their practices and reminding others of their responsibilities. These are as follows:
All staff should be familiar with the practices referred to in this policy, including standard isolation procedures.

All staff should be familiar with PCH policy on hand decontamination as described in the ‘Hand Hygiene Policy’.

If there is any doubt about infection control procedures staff should consult their line manager or a member of the IPCT.

Staff should ensure they are up to date with infection control training by attending mandatory Training sessions provided by the IPCT. If more training would be helpful the Team should be contacted.

Under exceptional circumstances, staff may be required to submit screens for carriage of PVL-positive S. aureus. Those identified as being colonised will be managed on a case-by-case basis the Occupational Health and Wellbeing and the IPCT.

4.1.2. Responsibilities of the Infection Prevention and Control Team

- Communicate results of colonisation or infection to the ward staff and the patient. If available, an information leaflet will be given to the patient. The IPCT will also be available to discuss the result with relatives and visitors if requested.

- Ensure staff are aware of and comply with this policy.

- If appropriate, complete and insert a Care Plan (Appendix B) in the patient’s nursing notes.

- Audit and assess the effectiveness of this policy and infection control practices in general.

- Undertake prospective, targeted surveillance of PVL-associated Staphylococcal infections and feedback the result the relevant stakeholders.

- Assist ward staff in patient risk assessment for the use of standard isolation (Appendix A) or contact precautions.

- Inform Occupational Health and Wellbeing of colonised or infected staff and provide expert advice on their management as necessary. This will include an assessment of the risk a colonised staff member poses to others.

4.1.3. Responsibilities of Ward Manager/ Matron

The Ward Manager/Matron is responsible for ensuring that all members of staff, patients and visitors adhere to good infection control procedures and as such should:

- Emphasise the need to maintain good hand hygiene and support initiatives to improve compliance with hand hygiene policy (e.g. Cleanyourhands campaign).
• Encourage staff to attend infection control training sessions.

• Support the ward Infection Control Link Practitioner and, whenever possible, allow them two hours of protected time per week to perform infection control-related duties.

• Comply with this policy and ensure patients are risk assessed for source isolation (Appendix A).

• Ensure staff observe standard infection control precautions when attending the patient or their immediate surroundings.

• Inform relevant hospital staff of the colonisation status.

• Ensure the patient receives therapeutic treatments as prescribed or advised by the IPCT or medical staff.

• Liaise closely with the IPCT with regards to the ongoing management of colonised patients.

• Adhere to admission, transfer and discharge protocols.

• Screen patients as directed by the IPCT.

• Ensure the patient has access to appropriate patient information leaflets (Appendix D).

• Communicate the colonisation status of individual patients on discharge to district nursing, community hospital nursing or nursing home team as appropriate.

4.1.4. Responsibilities of doctor in charge of patient

• Medical staff responsible for the admission of patients should assist the Ward Manager in assessing the risk the patient poses to others and isolate as appropriate.

• Practice good infection control procedures as laid down in this and associated policies.

• Inform the patient of the situation and provide information regarding its management as required.

• Inform relevant hospital staff of the colonisation status.

• Prescribe therapeutic antibiotics as advised by a Consultant Microbiologist.

• Prior to transfer of a colonised/infected patient to another hospital, notify the receiving clinician at the receiving hospital.

• On transfer back to primary care inform the patient's General Practitioner of the patient's colonisation status and advise on further management.
4.1.5. Responsibilities of Occupational Health and Wellbeing

The management of members of staff who are colonised or infected with PVL-positive *S. aureus* is the responsibility of Occupational Health and Wellbeing. The Occupational Health and Wellbeing Department will:

- Accept referrals of staff being considered who are colonised or infected with PVL-producing *S. aureus*.
- Prescribe eradication therapy recommended by a Consultant Microbiologist.
- Contact the General Practitioner of staff prescribed systemic eradication therapy.
- Conduct follow-up screening of staff if advised by the Consultant Microbiologist.
- Ensure staff have access to appropriate patient information leaflets. (Appendix D).

4.1.6. Responsibilities of relatives and visitors

Relatives and visitors should be encouraged to visit patients. Those who wish to discuss issues related to infection status and isolation care should be referred to the IPCT who will meet with them and/or provide appropriate written information.

- Visitors are expected to comply with good infection control practice and are encouraged to practice hand decontamination as outlined in the Hand Hygiene Policy.
- For patients nursed under Standard Isolation, visitors must decontaminate their hands before and after contact with the patient, their immediate surroundings and on leaving the room.
- The wearing of gloves and apron is not required unless relatives and visitors are assisting with the nursing of the patient or visiting other patients on the same day.
- Patients and visitors may challenge staff about hand decontamination. They should be able to do this without concern that it will adversely affect their clinical management or relationships with staff.

5. Panton Valentine Leukocidin. Background

5.1 A new pattern of disease due to Panton-Valentine Leukocidin (PVL)-producing strains of *S. aureus* is emerging in Plymouth, as well as across the United Kingdom and worldwide. Approximately 2% of strains of *S. aureus* produce the PVL exotoxin, which destroys white blood cells and causes cell lysis and tissue necrosis. PVL-producing strains of *S. aureus* are associated with skin and soft tissue infections, including ‘spider bite’ lesions, boils, furunculosis, abscesses and cellulitis. Recurrent infections may occur due to persistent nasal or skin carriage of
the organism, and spread within families and households, as well as within health or residential care settings, is common. It is therefore important to ask patients whether they have any close contacts that have or have had skin infections.

5.2 PVL-producing strains of *S. aureus* can also cause severe invasive infections such as septic arthritis, bacteraemia and purpura fulminans. There is a striking association with a rapidly progressive, haemorrhagic necrotising pneumonia that is mainly acquired in the community by otherwise healthy children and young adults. The pneumonia may be preceded by influenza-like symptoms and has a high mortality.

5.3 PVL-producing strains of *S. aureus* are more often acquired in the community than in hospital. The PVL toxin can be produced by both meticillin-sensitive *S. aureus* (MSSA) and meticillin-resistant *S. aureus* (MRSA). To date the majority of isolates causing infection in Plymouth have been MSSA with a characteristic susceptibility profile: they are usually resistant to penicillin, gentamicin and trimethoprim, and may also be resistant to erythromycin and fusidic acid. PVL-producing MRSA remains much less common locally.

5.4 By far the most important route of transmission from one patient to another is via the hands of healthcare workers. Other routes of transmission include via contaminated equipment, airborne (e.g. in dust containing skin scales) or droplets from a patient with a respiratory tract infection due to PVL-producing *S. aureus*.

6. **Clinical management PVL-associated Staphylococcal infections**

6.1 Advice on the clinical management of patients with suspected or confirmed infections due to PVL-associated Staphylococcal infections should be obtained from a Consultant Microbiologist, who will advise on the appropriate specimens to send and the type and duration of antibiotic and other therapy.

6.2 The following have been proposed as useful diagnostic clues for PVL-positive *S. aureus* pneumonia: multilobar infiltrates on CXR, usually with effusions and cavitation; hypotension; high CRP; temperature >39°C; tachycardia >140 bpm; haemoptysis; and leucopenia. A gram film of sputum may reveal staphylococcal-like gram-positive cocci.

6.3 For skin and soft tissue infections, surgical intervention, such as incision and drainage of collection(s) or debridement, should be considered where appropriate. Whenever possible, urinary and intravascular catheters should be removed or replaced from patients with urinary tract or line-related infections due to PVL-positive *S. aureus*.

6.4 For patients requiring surgical intervention, additional antibiotic prophylaxis effective against PVL-positive *S. aureus* may need to be added to the usual peri-operative regimen. Advice on the choice of antibiotic should be sought from a Consultant Microbiologist.

6.5 Strains of *S. aureus* (MSSA and MRSA) isolated from patients suspected of having infections due to PVL-positive *S. aureus* should be sent to the national reference laboratory for strain characterisation, including PVL testing. To investigate potentially related cases or outbreaks in community or healthcare settings, inter-strain comparisons (typing) should be performed to determine strain relatedness.
6.6 Cases of PVL-positive *S. aureus* pneumonia, cases involving recurrent skin infections within a family, and cases associated with nursing/residential homes should be reported to Public Health England staff on 03442 253557.

7. **Tests for colonisation with PVL-positive *S. aureus***

7.1 Screening for carriage of PVL-positive *S. aureus* is not routinely performed, but may be undertaken under certain other circumstances, such as the investigation and control of outbreaks, in response to specific incidents or following individual or household eradication therapy. Certain high-risk patients may also require surveillance cultures. In these situations, the IPCT and a Consultant Microbiologist will make appropriate recommendations regarding when sampling should be performed and which specimens should be sent. In general, the following samples will be requested: nose, throat, perineum/groin, skin lesions, urine if a urethral catheter is in situ, and sputum if the patient has a productive cough.

7.2 Specimens should be sent to the laboratory with a request form clearly marked ‘PVL *S. aureus* screen’ and should be differentiated from clinical specimens as the two are processed differently.

7.3 The interpretation of results and management of colonised patients will be performed by a Consultant Microbiologist (see below).

8. **Treatment of colonisation**

8.1 In general, eradication therapy (mupirocin and chlorhexidine/triclosan) will be prescribed. Simultaneous family or household eradication will frequently be recommended. Advice should be sought from a local medical microbiologist for pregnant and breast feeding women; neonates; infants younger than 12 months; patients with dermatological conditions or fragile skin, and patients with invasive devices (for example, renal dialysis shunts, medication/feeding lines). The use of chlorhexidine in premature neonates may cause damage to the skin; therefore specialist advice must be sought (*Panton-Valentine Leukocidin*- positive *Staphylococcus aureus* (PVL-SA), RCN guidance for health professionals (2011)).

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<th>Propriety name</th>
<th>Usual dose</th>
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<td>4% chlorhexidine or 2% Triclosan</td>
<td>Aquasept or Hibiscrub</td>
<td>Daily for five days. Other bathing products can be used afterwards.</td>
<td>Apply directly to skin as liquid soap on a disposable wipe &amp; lather well, Particular attention should be paid to armpits, groins, under breasts hands and buttocks leave for 1 minute and then rinse well.</td>
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4% chlorhexidine or 2% Triclosan | Aquasept or Hibiscrub | Shampoo on days one, three and five of treatment. Other bathing products may be used after triclosan | Rinse hair with normal shampoo after applying triclosan or chlorhexidine to scalp

Mupirocin | Bactroban nasal ointment | Apply thrice daily for five days | Place a pea-sized amount of ointment on the squamous portion of each nostril and massage gently upwards.

8.2 It is the responsibility of the attending clinician to consider whether the prescription is issued after assessment of the clinical state of the patient, concurrent therapy and potential adverse reactions and drug interactions that may arise. If the strain of *S. aureus* is reported as ‘Mupirocin-Resistant’ or if deviation from these recommendations is considered, the management of the patient should be discussed with a Consultant Microbiologist. Likewise, if a patient is identified as colonised in the throat only contact a Consultant in Medical Microbiology for advice.

8.3 A full set of post-eradication swabs should be taken one week after completing the course. If this screen is negative, then colonisation can be considered to have been cleared or reduced to a safe level. If the screen is positive, advice should be sought from a Consultant Microbiologist. A further round of eradication therapy may be prescribed and the process repeated. If this fails to eradicate colonisation, further rounds of treatment are unlikely to be successful. Again, advice should be sought from a Consultant Microbiologist. A risk assessment will be performed and systemic eradication therapy may be recommended.

9. Management of Plymouth Community Healthcare staff colonised with PVL-positive *S. aureus*

9.1 Under certain circumstances, such as the investigation and control of outbreaks or in response to specific incidents, staff may be required to submit screens for carriage of PVL-positive *S. aureus*. Screening of staff for PVL-positive *S. aureus* should only be performed at the instruction of the IPCT and will be carried out under the supervision of the Matron or Ward Manager of the clinical area involved. Staff colonised with PVL-positive *S. aureus* may also be identified from specimens taken for the investigation of clinical disease.

9.2 The IPCT will normally be the first to be aware of staff colonised with PVL-positive *S. aureus* and will inform the Occupational Health and Wellbeing Department, who will assume responsibility for follow-up and treatment, with advice from the IPCT and a Consultant Microbiologist. Regular communication between the Occupational Health and Wellbeing Department, the IPCT and a Consultant Microbiologist is essential for the optimal management of each case of staff colonised PVL-positive *S. aureus*.
9.3 Staff found to be carrying PVL-positive *S. aureus* will be managed on a case-by-case basis and will be offered topical eradication therapy in the first instance. A full set of post-eradication swabs should be taken 72 hours after completing the course. If this screen is negative, then two further sets of swabs should be taken at weekly intervals. Once three negative screens have been obtained, colonisation can be considered to have been cleared or reduced to a safe level. However, staff should stop working if a further skin lesion develops, even if screens have been negative.

If any of these screens are positive, a further round of eradication therapy should normally be prescribed and the process repeated. If both courses are unsuccessful, a risk assessment will be performed and systemic eradication therapy may be recommended. Systemic eradication therapy will involve close liaison between the Occupational Health and Wellbeing Department, the IPCT and a Consultant Microbiologist. Under normal circumstances, the prescription for systemic eradication therapy will be issued by the Occupational Health and Wellbeing Department.

9.4 Food handlers should remain off work if they have infected skin lesions that cannot be completely covered (using a distinctly coloured, waterproof dressing) ([Food Handlers: Fitness to Work Regulatory Guidance and Best Practice Advice For Food Business Operators, 2009](#)). Agreement to return to work should be obtained from Occupational Health and Wellbeing.

10. **Work restrictions**

10.1 Staff must not work in a clinical area if suffering from an active skin infection, such as a boil, nail fold infection, impetigo or infected eczema or dermatitis. This should apply even if these are not due to infection with PVL-positive *S. aureus*. Staff with clinical PVL-positive *S. aureus* infections will be treated with appropriate antibiotics and should not return to work until asymptomatic. All skin lesions must be dry and eradication therapy commenced at least 48 hours before return to work. Eradication therapy is unlikely to be successful if started before the skin has healed. Eradication treatment does not include the antibiotics used to treat the infection. Occupational Health and Wellbeing and the IPCT will decide when the member of staff can return to work.

10.2 Staff with asymptomatic carriage only, will be required to remain off work for the first 48 hours of any course of eradication therapy.

10.3 Absence will be treated as paid sick leave according to the PCH’s Sickness Absence Policy.

10.4 Longer periods of absence may be considered necessary by the Occupational Health and Wellbeing Department and the IPCT under certain circumstance, such as an uncontrolled exfoliating skin condition (e.g. eczema or psoriasis), or where there is clear epidemiological evidence of on going transmission associated with the member of staff.

10.5 Any colonised member of staff must be deemed fit for work by the Occupational Health and Wellbeing Department prior to return to work and must pay particular attention to hand hygiene.
10.6 The management of persistently colonised members of staff will be decided on a case-by-case basis by the Clinical Director or Matron, in conjunction with the Occupational Health and Wellbeing Department and the IPCT. If a definitive opinion on the management of individual staff member cannot be agreed, advice will be sought from the Medical Director, Director of Nursing or Director of Operations as appropriate.

11. **Prevention of spread of infection between patients**

The predominant means of spread is on the hands of staff and this can be interrupted by good hand hygiene. Secondary modes of transmission include via fomites. The following procedures are intended to minimise transmission.

11.1. **Hand Hygiene**

11.1.1 Prevention is based on rigorous hand hygiene before and after contact with patients and their potentially contaminated environments (please refer to Hand Hygiene Policy). Hand washing and decontamination with alcohol hand gel is essential when in contact with the patient and the patient’s environment.

11.1.2 In addition, hands should be washed with soap and water at the start and end of clinical duties, when hands are visibly soiled or potentially contaminated and following the removal of gloves. Routine periodic hand decontamination with alcohol-based rub should be performed between every patient contact, or between each activity for the same patient, when hands are not visibly soiled.

11.2. **Isolation**

11.2.1 A risk assessment of the potential for cross-infection should be performed by the Ward Manager and IPCT. When there is increased risk of transmission, source isolation in a side room is required (see Appendix A and C). The reasons for isolation must be explained to the patient and their visitors. This is particularly important for children requiring isolation.

11.2.2 Patients colonised with the same resistant organism may be nursed in the same cohort bay. This should only be considered on the advice of the IPCT. On occasion, when isolation is not possible, patients should not be nursed next to patients who have urinary or intravascular catheters, open wounds, a history of transplantation or who are immunosuppressed.

11.2.3 Isolation precautions should only be discontinued on the advice of the IPCT Appendix (C).

11.3. **Standard Contact Procedures**

11.3.1 Standard contact procedures reduce hand and clothing contamination and are intended for all staff having contact with colonised or infected patients and their immediate surroundings. Meticulous hand hygiene and contact precautions must be employed not only when in contact with patient but also their surroundings.

11.3.2 The following procedures are particularly high risk:

- Dressing wounds
- Draining surgical drains
- Manipulating vascular and urinary catheters
- Manipulating tracheostomies.

11.3.3 Standard infection control procedures (Appendix A) include:

- **Hand-washing.** All staff and visitors must decontaminate their hands before and after contact with the patient, their immediate surroundings and on leaving the room/area patients own home.

- **Gloves.** Health care workers must wear disposable gloves when in contact with potentially colonised skin, secretions and surroundings. Remove and dispose of gloves prior to leaving the patient’s room/area and perform hand washing with soap and water.

- **Plastic apron.** A disposable plastic apron is to be worn when clothing is likely to come into contact with colonised/infected patients or their surroundings. Remove and dispose of apron prior to leaving the patient’s room/area. Perform hand washing with soap and water.

- **Linen.** Treat linen as infected. Please refer to Linen Services Policy.

- **All Waste.** Treat all waste, including household, as clinical waste.

- **Stethoscopes.** Stethoscopes should be wiped with a detergent wipe after each patient use.

- **Cleaning.** See below.

- **Death.** No special precautions are required when handling the deceased.

11.3.4 In general, other than observing good hand hygiene practice, visitors do not need to follow the same precautions unless they have certain conditions (e.g. open and suppurating wounds) or if they are assisting with the nursing care of a patient.

11.3.5 Standard infection control precautions should only be discontinued on the advice of the IPCT.

11.4. **Additional precautions for pneumonia due to PVL-positive S. aureus**

11.4.1 For patients with a pneumonia due to a PVL-positive *S. aureus*, the following precautions should also be taken:

- **Surgical masks and eye protection.** The performance of aerosol-generating procedures (e.g. nebulisers, positive pressure ventilation via a face mask, physiotherapy, intubation and extubation, and airway suctioning) should be minimised as far as possible without compromising patient care. Surgical masks and eye protection should be worn by all persons present in the room during such procedures. To avoid unnecessary exposures, only those health care workers needed to perform the procedure should be present.
- **Suction.** Closed tracheal suction should be used.

11.4.2 Staff exposed to the respiratory secretions of a patient with a pneumonia due to a PVL-positive *S. aureus* who have not worn appropriate PPE should contact Occupational Health and Wellbeing for further advice.

11.4.3 Close (e.g. partner) or household contacts of a patient diagnosed with necrotising pneumonia likely to be caused by a PVL-positive *S. aureus* may be the source of, or acquire and subsequently suffer from infections due to PVL-positive *S. aureus*. Close/household contacts should be offered a five-day decolonisation regimen starting immediately (including chlorhexidine gargle if feasible)\(^3\). Consideration should also be given to using anti-viral prophylaxis (e.g. oseltamivir), if influenza A is diagnosed in the index case.\(^3\)

11.5. **Cleaning**

11.5.1 All clinical equipment must be cleaned according to manufacturer’s recommendations and in line with PCH’s Disinfection and Cleaning Policy.

11.5.2 Clean all ‘patient-touch’ surfaces, including bed frames and patient equipment, with detergent solution twice daily. All items must be stored dry.

11.5.3 On discharge, there should be terminal environmental cleaning with a detergent solution and the Ward Manager should assess the cleanliness of the fittings.

12. **Admissions, discharges and transfers**

12.1. **Admission of patients colonised with PVL-positive *S. aureus***

Patients who are known to be colonised or infected should undergo a risk assessment of the potential for cross-infection. This should be performed by the Ward Manager and IPCT. Where there is an increased risk of transmission, such as in a patient with pneumonia, exfoliative skin condition or major wound infection, source isolation in a side room is required.

12.2. **Discharge of patients colonised with PVL-positive *S. aureus***

12.2.1 Ward staff must ensure that all relevant staff are aware of the patient’s status on discharge (e.g. General Practitioners, District Nurses, Residential/Nursing Home staff) and should recommend follow-up treatment as appropriate (e.g. when and where to screen and what eradication therapy to use). This should be based on advice received from the IPCT or a Consultant Microbiologist.

12.2.2 Reference to the patient’s status should be made in the discharge notes/letter by the doctor in charge of the patient.

12.2.3 If discharged to a nursing/residential home, the home’s senior nursing staff should be made aware of the patient’s status by the Ward Manager. Rarely should this hamper the patient discharge.

12.3. **Transfer to another hospital or long-term care facility**
12.3.1 It is the responsibility of the Ward Manager to inform the receiving ward’s nursing and ambulance staff of the patient’s status and the medical staff to inform the receiving doctors or General Practitioner. This should be documented in the referral notes.

12.3.2 Surfaces that come into direct contact with the patient during transfer, such as stretchers, should be cleaned with detergent and water after use. Ambulance staff are not required to take specific precautions over and above normal contact precautions and good hand hygiene.

12.4. Transfer of colonised/infected patients within the hospital

12.4.1 Transfer of patients colonised or infected with PVL-associated Staphylococcal infections should be avoided if at all possible. Such patients should be transferred to an isolation facility in the receiving ward.

12.4.2 Infected/colonised patients may attend clinical service departments for necessary investigations or treatments.

12.4.3 There should be clear communication between departments about the patient’s status and transfer should only proceed when the receiving area are fully prepared.

12.4.4 Measures to reduce the risk of transmission should be taken. The colonised patient should be last on any list and there should not be excessive waiting in the Department. Exposed sites of colonisation, such as pressure sores, ulcers and skin lesions, should be covered with an occlusive dressing before leaving the ward. Surfaces exposed to the patient or their potentially contaminated secretions should be wiped down after use with water and detergent.

Community Nurses/Teams

All measures to reduce the risk of cross transmission should be taken when visiting clients in their own home/care home. If possible for known clients with PVL infection they should be visited last on the list. Standard precautions which include meticulous hand hygiene should be adopted.

For a planned patient transfer to another setting a referral letter will be written and sent with the patient.

For emergency transfers the nurse will telephone the ward / care home to discuss the patient’s care. They will also document in the patient held record that they have contacted the new care provider.
14. Bibliography


All policies are required to be electronically signed by the Lead Director. Proof of the electronic signature is stored in the policies database.

The Lead Director approves this document and any attached appendices. For operational policies this will be the Locality Manager.

The Executive signature is subject to the understanding that the policy owner has followed the organisation process for policy Ratification.

Signed: Director of Infection Prevention & Control.

Date: 17th September 2015
Standard Source Isolation

Accommodation

A single-bedded room is generally suitable, unless directed otherwise by the Infection Prevention and Control Team. When several patients are affected, as in an outbreak, cohort nursing in one or more bays or an entire ward may be appropriate. For management of individual infections, please see relevant specific infection control policies.

Visitors

Visitors should seek permission of the nurse-in-charge before entering and should be encouraged to wash hands on entry and exit of the isolation room. In general visitors of patients isolated in Standard Isolation do not need to take any specific precautions providing they are not visiting other clinical areas.

Patients

Patients are advised not to leave this area without permission.

Visitors and staff should observe these rules:

Door
Keep closed (an external window may be opened).

Plastic Aprons*
Wear when in the room. Dispose as clinical waste.

Masks*
Not necessary.

Gloves*
Wear for all body fluids contacts. Dispose as clinical waste.

Hand washing
After removing and disposing apron and gloves.
Then wash hands and apply alcoholic hand-rub.

Crockery & cutlery
Return to kitchen and wash in dishwasher.

Excreta
If the room has no toilet, provide a bedpan, urinal or commode exclusively for the patient and wear disposable apron and gloves when handling it. If the ward bedpan washer disinfects satisfactorily or disposable bedpans are in use, dispose of excreta by these means. If a commode has been used, ensure the frame is thoroughly cleaned with detergent and water before moving out of the area. Contact the IPCT if further advice is needed.

Linen
Put all used linen in a water-soluble bag within a red linen bag and securely fasten.

SDU equipment
Return to SDU in a sealed yellow bag with a blue return Bag clearly labelled with a ‘Danger of Infection’ label.
<table>
<thead>
<tr>
<th><strong>Equipment</strong></th>
<th>Dedicated equipment or single-use items are preferred when possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical equipment for Maintenance</strong></td>
<td>Inform Maintenance Department (MEMs) before return and attach an orange decontamination certificate.</td>
</tr>
<tr>
<td><strong>Pathology requests</strong></td>
<td>Put “Danger of Infection” label on request form and specimen. Use leak proof containers and send specimen and form in a sealed polythene specimen bag.</td>
</tr>
</tbody>
</table>

**Queries:** Contact a member of the Infection Control Team on 434167.
Appendix B

Nursing Intervention Care Plan PVL

<table>
<thead>
<tr>
<th>Signs/symptoms of clinical infection?</th>
<th>Yes / No</th>
<th>Colonised only?</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of infection / colonisation:</td>
<td></td>
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</table>

**Goal:**
- Reduce risk of PVL from colonised sites causing infection in susceptible sites (e.g. surgical wounds)
- Reduce risk of cross infection
- Maintain patient comfort

<table>
<thead>
<tr>
<th>Date goal set:</th>
<th>Name / signature / designation:</th>
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</thead>
</table>

**Treatment:**
- Staff must avoid patient contact if they have any skin lesions (e.g. eczema, Paronychia) unless approval obtained from Occupational Health.
- Adhere to local policy for screening (on admission and prior to/following treatment). Remember to include open wound sites and sites of invasive procedure.
- Liaise with Infection Control Team for advice and follow current Infection Control PVL Policy. Ensure ‘Alert’s are placed on outside of main set of clinical records/on outside of MDT records/On SystmOne.
- Explain PVL results to patient and relatives if patient consent gained and give information leaflet; ensure patient, staff and visitors maintain good hand washing.
- Isolate high-risk patients in accordance with Policy, and commence an environmental enhanced clean.
- Maintain contact precautions as per Infection Control Policy. Place appropriate sign on door of room. **If in open ward ensure strict standard infection control precautions are adhered to.**
- If a treatment is indicated this must be prescribed and administered. **Please complete below details:**
  - **Start date:**
  - **Completion date:**
- Apply lotion prescribed directly to the skin as a liquid soap on a cloth and lather well prior to rinsing (daily for 5 days). Shampoo hair on days 1, 3 and 5 with lotion as prescribed. Apply mupirocin/bactroban cream 3 times daily for 5 days. Place pea-sized amount in each nostril and massage gently upwards.
- Change bed linen daily after washing.
- Rescreen 7 days after completion of treatment and maintain IPC precautions until this time.
- Inform relevant personnel of PVL status as and when necessary (whilst an inpatient and on discharge/transfer).
### Date - Site - Initial - Result - Treatment

<table>
<thead>
<tr>
<th>Date</th>
<th>Site</th>
<th>Initial</th>
<th>Result</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On admission</strong></td>
<td>Carriage sites</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Date:</td>
<td>Wound sites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7 days Post treatment</strong></td>
<td>Carriage sites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td>Wound sites</td>
<td></td>
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</tbody>
</table>

**Subsequent or further PVL swabs/screening**

<table>
<thead>
<tr>
<th>Date</th>
<th>Site</th>
<th>Initial</th>
<th>Result</th>
<th>Treatment</th>
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The patient / client signature should not be considered as an indication of capacity to consent. It is designed to demonstrate that the content of the care plan has been discussed and explained to the patient.

<table>
<thead>
<tr>
<th>Patient’s signature</th>
<th>Date:</th>
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<tbody>
<tr>
<td></td>
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Staff sign/print name/designation:  

<table>
<thead>
<tr>
<th>Date:</th>
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Appendix C

Five Stage Hand Washing Technique

1. Wet hands with running water
2. Apply enough liquid soap to cover all hand surfaces
3. Wash
4. Rinse hands with running water
5. Dry thoroughly with a paper towel

When using our services please do not be afraid to ask members of staff to wash their hands.

If you have any further questions or comments, please do not hesitate to ask a member of staff.

Plymouth Community Healthcare CIC
Issue date: March 2014

A Simple Guide to Panton-Valentine Leukocidin (PVL)

This guide explains PVL and how it can cause infection.
What is PVL Staphylococcus Aureus?

Staphylococcus Aureus is the body's normal flora (a microbe or bacterium). Most of the time it lives harmlessly on the skin. It particularly likes to live on the moist surfaces of the body such as inside the nostrils, the armpits and the groin area. People in the wider community carry many different strains of Staphylococcus Aureus. Some strains are more likely to cause infections than others, i.e. they are more virulent. Strains that secrete a toxin called Panton-Valentine Leukocidin (PVL) are more likely to cause infections, particularly of the skin.

The number of cases this strain of Staphylococcus Aureus has been rising over the past few years. Almost all of the cases identified so far have been in normally fit, healthy people living at home, or those living in nursing and residential homes.

Is PVL harmful?

PVL Staphylococcus Aureus is more like to cause skin infections than other strains. In the majority of cases it causes boils (skin abscesses). More rarely it can cause more serious infections, such as pneumonia and septicaemia (blood poisoning).

Why is it a problem?

Some people require a minor operation to drain skin abscesses (boils) caused by PVL. Other members of the household or close contacts may also get skin infections. Once an individual gets a skin infection other skin infections may follow because PVL is still carried on the skin and in the nose.

What if I am carrying PVL?

If tests show you have an infection or are carrying PVL, you will be offered a five-day skin treatment to try and get rid of it from your nose and skin. This reduces the chance of you getting repeated infections and from passing it on to others. This treatment is best done soon after the skin is healed and is separate from any antibiotics that you may be given. You should not work in a nursery, residential home or other healthcare facility if you have an active infection, such as a boil. If in doubt, please discuss this with your doctor or nurse.

Are my family or friends at risk?

As with any strain of Staphylococcus Aureus, it is possible to pass it to the people we live with. For many people this just means that PVL will live on their skin or in their nose, i.e. they will 'carry' it.

You can help reduce the spread of PVL to others by:

- Regularly washing your hands
- Encouraging others in your household to regularly wash their hands
- Using separate towels/toiletries
- Closely following the instructions for the five-day skin treatment as prescribed by your GP

Do not use a gym, sauna, spa pool, swimming pool, or play contact sports if you have boils or skin sores. Wait until you have completed your treatment, your sores have healed and your GP has agreed you can resume sports.

What should I do if I think I have PVL?

If you are worried that you or a family member might have PVL discuss this with your doctor. All the family may need treating at the same time to break the cycle of re-infection.

Could PVL return?

Yes. Staphylococcus Aureus is a strain of the normal flora that lives on our bodies and can sometimes be difficult to get rid of. If you are found to be persistently carrying this PVL in your nose or on your skin, please discuss this with your GP.

With thanks to the Devon Health Protection Unit who kindly supplied the words
### Isolation and Daily Review Care Plan

<table>
<thead>
<tr>
<th>Patient Name</th>
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<tbody>
<tr>
<td>NHS Number</td>
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<tr>
<td>Reason Isolation Required</td>
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<tr>
<td>Date and Time of Sample</td>
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<td>Date and Time of Results</td>
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<tr>
<td>Date Isolation Started</td>
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<tr>
<td>Date IPCT informed</td>
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**IPCT contact telephone number: 34167**

### Please use the blue sign

**Standard Isolation for** Diarrhoea & vomiting Norovirus, C diff.
- Wear apron and gloves when entering the room
- Discard apron and gloves in the clinical waste bin inside the room
- Wash hands before leaving the room
- Always keep the door closed
- Enhance clean twice daily (please see bed space cleaning guidance)
- Treat all waste as infectious clinical
- Treat all linen as infected (place in soluble bags and use red linen bags)

**Equipment decontamination**
Clean with detergent and disinfectant after each use and label.

**Commodities/Bodily fluids**
Clean with detergent followed by disinfectant.

### Please complete a daily review of the patient’s infectious status and isolation requirements (Please see reverse side of this Daily Care Plan)

### Please use the green sign

**Standard Isolation** for TB, MRSA, Serratia marcescens, PVL, Klebsiella, pseudomonas, neisseria, meningitis, E coli, enterococcus, & ESBL, GREVRE, CPE.
- Wear apron and gloves when entering the room
- Discard apron and gloves in the clinical waste bin inside the room
- Wash hands before leaving the room
- Always keep the door closed
- Enhance clean twice daily (please see bed space cleaning guidance)
- Treat all waste as infectious clinical
- Treat all linen as infected (place in soluble bags and use red linen bags)

**Protective Isolation (Please use green sign)**
Isolation measures are the same as standard isolation. Protective isolation is to protect susceptible patients from acquiring an infection from other sources.

**Equipment decontamination**
Clean with detergent after each use and label.

**Commodities/Bodily fluids**
Clean with detergent followed by disinfectant.
### Daily Review for isolation

<table>
<thead>
<tr>
<th>Date</th>
<th>Is the patient in a side room?</th>
<th>If the patient is not in a side room please document reasons for this decision</th>
<th>Are all standard IPC measures in place?</th>
<th>Please print name, job title and sign care plan on a</th>
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Adapted from: PHINT IPC Isolation Care Plan and Daily Review Tool v1.3