ASEPTIC TECHNIQUE & URINARY CATHETER CARE POLICY

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POLICY APPROVED BY: Executive Management Team

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<tr>
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<th>Aseptic Technique &amp; Urinary Catheter Care Policy</th>
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<tr>
<td>Purpose of Policy</td>
<td>The purpose of the policy is to ensure that patients are protected through application of evidence-based practice during invasive procedures to reduce the risk of cross infection.</td>
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<td>Lead Director</td>
<td>Stephanie Dawe, Chief operating Officer and Director of Infection Prevention and Control</td>
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<td>Phil Cohen, Infection Control Nurse</td>
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ASEPTIC TECHNIQUE & URINARY CATHETER CARE POLICY

1.0 Assurance Statement

The purpose of the policy is to ensure that patients are protected through application of evidence-based practice during invasive procedures and wound care to reduce the risk of cross infection.

Compliance with the policy will ensure that procedures that are standardised across the trust are carried out safely to maintain and promote the principles of asepsis. Implementation of the policy will also demonstrate compliance with the Health and Social Care Act 2008 – Code of Practice for the Prevention and Control of Healthcare Associated Infections, (DH 2008).

2.0 Introduction

Aseptic technique is defined as a means of preventing or minimising the risk of introducing harmful microorganisms into sterile areas of the body when undertaking procedures that breach the body’s natural defences. The aim is to prevent contamination of wounds and other susceptible body sites which could lead to infection.

Aseptic techniques should be used during any invasive procedure that by-passes the body’s natural defences, e.g. the skin or mucous membranes. Asepsis must be maintained when handling equipment prior to carrying out invasive procedures e.g. sterile equipment for wound suturing or wound care dressings, intravenous cannulae, and urinary catheters. Maintaining sterility can be difficult but it is important to prevent contamination of sterile equipment.

HCWs have a duty to safeguard the wellbeing of their patients. Poor asepsis can lead to the risk of cross transmission of microorganisms from the healthcare worker’s hands (HCW) and/or the equipment to susceptible patient sites which can result in serious life threatening infections, (Pratt et al 2007).

Related policies:
- Hand Hygiene
- Decontamination of Re-usable Medical Devices
- Single Use Medical Devices
- Standard Infection Control Precautions including
  - Personal Protective Equipment (PPE)
  - Prevention of Blood-borne Viruses Safe Use and safe disposal of Sharps
  - Safe Disposal of Clinical Waste
  - Safe Handling and Transport of Specimens

3.0 Aims and Objectives

To provide HCWs with evidence-based aseptic technique guidelines for the prevention of cross infection when undertaking invasive procedures.

4.0 Duties and Responsibilities

The Board and the Chief Executive have collective responsibility for infection prevention and control.
The Director of Infection Prevention and Control (DIPC) is responsible for overseeing the policy and its implementation in conjunction with the Head of Nursing. The Infection Control Nurse (ICN) is responsible for developing the policy and for the provision of expert advice. The Director of HR training and development is responsible for commissioning clinical skills training for staff that are required to undertake invasive procedures. Matrons and ward/department managers are responsible for ensuring that staff undertaking aseptic procedures have received appropriate training. Clinical staff are individually responsible for their clinical practice. Only trained and assessed as competent staff should perform an aseptic technique procedure. Clinical and Operational Directors are responsible for ensuring that the policy is

- Available in clinical areas.
- Audits of compliance with the policy are undertaken in line with Essential steps to safe clean care guidelines, (DH 2006).
- Staff undertaking invasive procedures have undertaken aseptic technique training and competency assessments.
- Availability of appropriate equipment.

5.0 Implementation Process

The policy and its implementation will be monitored through the Infection Control Group, Local Governance groups and the Integrated Governance Committee.

5.1 Education and Training

The Trust will commission Aseptic technique training for registered nurses who have not had up to date Aseptic training. Training records will be held by the Trust Training and Development department, non attendees will be followed up.

5.2 Audit

Audits of clinical practice will be undertaken by the ICN as part of the annual audit programme using the ICNA audit tool. Tools have been developed for use by the link nurses who have been trained to carry out observations in their use whenever a patient is admitted with a urinary catheter in situ, in line with essential steps to safe clean care (DH 2006), (Appendix1). The results must be fed back to the ward/department managers, matrons and Governance groups for continuous improvement.

6.0 Indications for Aseptic Technique

- Suturing of lacerations.
- Dressing wounds that are healing by primary intention, e.g. surgical wounds, burns, lacerations including self-harm injuries.
- When removing drains or sutures from wounds
- Dressing wounds that are healing by secondary intention, e.g. pressure sores, leg ulcers, simple grazes.
- Insertion or re-siting of an invasive device, e.g. intravenous line during ECT procedures, insertion of a urinary catheter.
- Manipulating of or dressing an invasive device.
- When a patient is immunocompromised
- When taking a sample of urine from an indwelling urinary catheter.

Refer to the Continence Nurse Specialist for advice when patients need to perform intermittent self-catheterization.
Refer to the Tissue Viability Nurse Specialist for advice on the management of pressure ulcers.

7.0 Equipment

- Use a dressing trolley that has been cleaned with detergent and water. The trolley can be decontaminated with a 70% alcohol wipe, (do not use alcohol hand gel which contains emollients for trolley disinfection).
- Check the underside and ensure that there are no breaks in the integrity of equipment or signs of rust.
- Provide a sterile dressing pack containing a disposable plastic tray, low-linting swabs, gloves, sterile field, dressing towel, disposable clinical waste bag.
- Provide single use sterile scissors if sterile dressings need to be cut.
- Wear sterile non-latex gloves.
- Use sterile fluids for wound cleaning/irrigation, a 20 ml sterile saline in a pod or a 20ml syringe for wound irrigation.
- Appropriate dressings including water impermeable outer dressings where necessary.
- Other dressings depending on the nature of the wound or the procedure and as directed by prescription or tissue viability.
- A wound care assessment form as appropriate.

8.0 Preparation

Carry out sterile procedures in a clean clinical treatment room or at the patient’s bedside if the patient is in isolation. Evidence highlights that the environment can be contaminated with microorganisms. Meticillin Staphylococcus aureus (MRSA) and other harmful microorganisms have been found on a variety of surfaces, (Rampling et al 2001). Dressings must be stored above floor level in clean dry cupboards, (HTM 63).

The spread of infection is more likely to occur after cleaning, bed making or other high activity times in the clinical area. Aseptic procedures must be carried out at least 30 minutes after bed making. To avoid air movement windows and doors should be closed and the movement of people restricted. Do not use fans.

Long hair, staff identification tags, scarves or ties must be tied back to avoid contamination of the sterile fid, (Trust dress Code Policy). Remove jackets or cardigans ensuring that arms are bare below the elbows, (DH 2007).

Prior to carrying out an invasive procedure, always remove jewellery. Cover cuts and grazes and perform antiseptic hand hygiene prior to aseptic procedure, (See Trust Hand Hygiene Policy 2009).

Non latex sterile gloves must be worn for invasive procedures, contact with sterile sites, non intact skin or mucous membranes. Gloves are a single use item and must be removed and hands washed with liquid soap and water on removal, (Pratt et al, and 2007).

9.0 Aseptic Technique Procedure

Hand hygiene must be carried out using liquid soap and water and wherever possible non touch taps to avoid re-contamination. Microrganisms have been found on hand wash basins and taps, (French et al 2004). Hand washing must be followed by decontamination using alcohol gel. The six step technique must be adhered to. Application of the guidance will result in a reduction in the incidence of preventable infections which leads to reduced patient morbidity and mortality (Pratt et al, 2007).
A non touch aseptic technique is essential even after the hands have been effectively decontaminated to prevent contamination of the sterile field. Forceps can be used to rearrange the contents of the sterile field if necessary.

Avoid unnecessary or prolonged exposure of the wounds to maintain wound temperature and to avoid contamination.

Avoid contamination of sterile equipment, and should this occur the equipment must be disposed of.

Explain the procedure to the patient. Check the expiry date on all equipment and products. Place all of the equipment for the procedure on the bottom shelf of the trolley.

Wear a disposable apron to avoid contamination of uniform or clothing.

- Open the sterile field touching only the corners of the paper.
- Add any extra items without touching the field and pour the contents into the containers without touching the sterile field also.
- Place the hand inside the sterile disposable bag using it as a glove to arrange the sterile contents. The sterile bag which can be used to remove the soiled dressing from the wound; invert the bag which can later be used to dispose of used products. Carefully remove dressings (A large amount of microrganisms can be shed into the air).
- Assess the wound and if there are any signs of redness, inflammation or discharge take a wound swab for culture and sensitivity.
- Decontaminate the hands again using alcohol gel after removing the dressings. When the alcohol gel has been completely absorbed, apply the sterile gloves ensuring that only the inside wrist end is touched.
- Perform the procedure including skin preparation. Secure the outer dressings and dispose of all products as clinical waste.
- The user is required to dispose of instruments including single use scissors or any other contaminated sharp device used during the procedure immediately after use, at the point of care into a sharps bin (conforming to UN 3291 and BS 7320 standards (see Sharps Injury Prevention Policy).
- Dispose of single use items after single patient treatment as clinical waste, (Single Use Medical Devices policy).
- Dispose of soiled wound dressings, foul or infected material as clinical waste.
- Decontaminate re-usable equipment according to the manufacturer’s guidelines and in line with Trust Decontamination of Medical devices Policy and use single use equipment whenever possible.

10.0 Insertion and Management of Urinary Catheters

Catheterisation places patients at great risk of acquiring a urinary tract infection. The risk of infection is associated with the insertion method, the duration of catheterisation, and the quality of the catheter used. Catheter associated urinary tract infection is the most common Health Care Associated Infection (HCAI) in hospitals, accounting for up to 40% of all infections. Many of these infections are serious and lead to significant morbidity and mortality (Wilson et al, 1997).

Most bacteria gain access to the urinary tract when the catheter is inserted either from contamination of the healthcare worker’s hands (HCW) or from the patient’s perineal flora.
Contamination can also occur as a result of reflux of bacteria from a contaminated urine drainage bag. Bacteria develop into colonies that adhere to the catheter surface and the urine drainage bag. These bacteria are highly resistant to antibiotics. Encrustation of the catheter can develop and is usually as a result of long term catheterisation.

New evidence suggests using catheters that are impregnated with antiseptic or antimicrobial agents can prevent or delay the onset of catheter associated infection, compared with standard ones. Smaller gauge catheters with a 10 ml balloon minimise urethral trauma and residual urine in the bladder which contribute to infection (Pratt et al 2007).

10.1 Assess the Need for Catheterisation

- Only consider using indwelling catheters as a last resort when no other management methods can be employed.
- Document the need, the catheter type, catheter insertion date, and catheter change dates on the care plan.
- Review the need regularly and remove the catheter as soon as possible.

10.2 Catheter selection

- Catheter choice will depend on patient assessment and the duration of catheterisation.
- Always use the smallest gauge e.g. 10 ml for adults.
- Only urological patients will need a larger gauge, which will only be used on the recommendation of a urologist.

10.3 Catheter Insertion

Catheterisation is a skilled aseptic procedure and must be inserted using sterile equipment and an aseptic technique as outlined in sections 1-5 above. Expert opinion suggests that there is no need to use antiseptic preparations for cleaning the urethral meatus prior to insertion (Pratt et al 2007).

- Ensure that the HCW is trained and competent to carry out urethral catheterisation.
- Use sterile lubricant from a sterile single use container to minimise the risk of trauma and infection.
- Clean the meatus with sterile normal saline prior to insertion.
- Routine personal hygiene is all that is needed to maintain meatal hygiene.

10.4 Catheter Maintenance

Maintaining a sterile closed system is central to the prevention of infection. Breaches e.g. when unnecessary emptying of the bag or taking a urine sample can increase the risk of infection. Bladder irrigation or washouts may cause toxic effects and contribute to the development of resistant microorganisms.

- Always connect the urinary catheter to a sterile closed urinary drainage system.
- Ensure that the connection between the catheter and the drainage system is not broken.
- Change the bag in line with the manufacturer’s recommendations.
- Decontaminate the hands and wear clean non sterile gloves before manipulating a patient’s catheter. Decontaminate hands as outlined in the trust hand hygiene policy.
- Position the drainage bag below the level of the patient’s bladder on a stand to prevent contact with the floor.
- Empty the bag frequently, enough to maintain the flow of the urine and to prevent reflux.
- Use a separate clean container for each patient and avoid contact with the end of the drainage tap.
- Do not add antiseptics solutions into the urinary drainage bag.
- Avoid unnecessary bag changing and always adhere to the manufacturer’s guidelines.
- Patients and their relatives should be given information and educated about prevention of urinary catheter infection.

11.0 **Patient Information**

Patients and their carers should be given education and an advice sheet to enable them to manage catheter hygiene. (Appendix 2)

12. **Equality Statement**

The Trust is committed in having in place a sustainable people driven service with care system which are best of class. The Trust values embracing diversity and will make every effort to ensure that the needs of different groups of people, including people from different race, religion or belief systems, age, gender, disability and sexual orientation, are met effectively and sufficiently, as appropriate.
REFERENCES:


Appendix 1

INFECTION CONTROL: URINARY CATHETER CARE
OBSERVATIONAL AUDIT SHEET

Please carry out this audit on a bi-monthly basis. **Observe practice on 5 occasions.** Forward a copy to your Lead Nurse, the NELMHT Infection Control Nurse and retain a copy in your clinical environment.

**Standard:** Clinical practices will be based on best practice and reflect infection control guidance to reduce the incidence of urinary tract infections related to indwelling catheters. **Compliance target = 100%**

For every opportunity observed please record: YES for the correct actions or NO for incorrect actions.

<table>
<thead>
<tr>
<th>Observers Name:</th>
<th>Date:</th>
<th>Time:</th>
<th>Location:</th>
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<tr>
<th>Catheter Care Observations</th>
<th>Nurses</th>
<th>Doctors</th>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urinary catheters are inserted only if no other management can be achieved, and the reason for catheter is documented in patients notes</td>
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<tr>
<td>Catheterisation is performed aseptically</td>
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<tr>
<td>Sterile closed drainage system is used to connect to the catheter</td>
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<tr>
<td>A single-use sterile anaesthetic lubricant is used for insertion for male and females</td>
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<td></td>
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<tr>
<td>Sterile gloves are worn for catheter insertion</td>
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<tr>
<td>When emptying the urinary drainage bag, clean non-sterile disposable gloves and a plastic apron are worn</td>
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<tr>
<td>Hand hygiene is performed after removal of gloves</td>
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<tr>
<td>When emptying the urinary drainage bag, a separate and clean container is used for each patient and contact between the urinary drainage tap and container is avoided</td>
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<tr>
<td>Catheter bags are positioned below the level of the bladder but above floor level, if night bags are used they are single use only</td>
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<tr>
<td>Meatal cleanliness is maintained only as part of routine personal hygiene</td>
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<tr>
<td>Catheter specimens are of urine are only taken when clinically indicated e.g. patient is unwell</td>
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<tr>
<td>Bladder irrigations and washouts are not used for to try to prevent or treat catheter related infection</td>
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CATHETER CARE OBSERVATIONS – FEEDBACK FORM

DATE……………….. TIME…………………… LOCATION…………

OBSERVERS NAMES……………..

NUMBER OF OBSERVATIONS CARRIED OUT……………..

SCORE:

Number of yes scores divided by the total number of observations multiplied by 100 = % Compliance

SPECIFIC FEEDBACK……………………

FEEDBACK GIVEN TO…………………………..
Appendix 2

PATIENT INFORMATION LEAFLET

What is a Urinary Catheter?
A urinary catheter is inserted to assist you to empty your bladder when it is not working properly. The catheter is a tube that drains urine from your bladder into a special drainage bag.

The catheter is inserted into your bladder via the urethra (the tube that normally drains your bladder). A small balloon keeps the catheter in place inside the bladder. With assistance and practice you may be able to manage a catheter at home. Your community nurse will support you and assist with any problems that you may encounter.

When you become able to pass urine again naturally your catheter should be removed by your community nurse as soon as possible to prevent a urinary infection developing.

Avoiding Infection
It is fairly common to get an infection when you have a catheter inside the bladder. Bugs can get into the urethra from the point where the catheter enters the urethra and travel up the catheter or travel from the urine drainage bag. Good hygiene practice will help to reduce the risk of infection (NICE 2003).

- Wash your hands before and after going to the toilet.
- If your hands look dirty or if you have touched any items that are not clean wash them.
- Wash hands using soap and water and dry thoroughly before and after handling the catheter or the drainage bag and before and after changing the bag.

Managing the Catheter
- Clean the area where the catheter is inserted using soap and water and dry thoroughly.
- Keep your drainage bag or catheter valve (if fitted) connected to your catheter at all times. This closed system will reduce the risk of urinary infection developing.
- Keep your drainage bag lower than your bladder to allow free drainage.
- Keep the bag off the floor when you are resting. This will help to prevent infection.
- Empty your drainage bag regularly, e.g. when it looks full or you feel uncomfortable.
- Ask your community nurse to advise you about early signs of infection and what to do if the catheter is not draining properly.

If you develop any unusual symptoms or discomfort inform your community nurse. If you experience severe pain or if you feel unwell contact your doctor.