ASEPTIC TECHNIQUE

Policy

This document can only be considered current when viewed via the Trust intranet/internet. If this document is printed or saved to another location, you are advised to check that the version you use remains current and valid, with reference to the review due date.

CONTENTS

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>KEY POINTS</td>
<td>2</td>
</tr>
<tr>
<td>2.0</td>
<td>FLOW DIAGRAM (Not used)</td>
<td>2</td>
</tr>
<tr>
<td>3.0</td>
<td>INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>4.0</td>
<td>DEFINITIONS</td>
<td>3</td>
</tr>
<tr>
<td>5.0</td>
<td>ROLES and RESPONSIBILITIES</td>
<td>4</td>
</tr>
<tr>
<td>6.0</td>
<td>SURGICAL ASEPTIC TECHNIQUE</td>
<td>5</td>
</tr>
<tr>
<td>7.0</td>
<td>STANDARD ASEPTIC NON TOUCH PROCEDURE (ANTT)</td>
<td>6</td>
</tr>
<tr>
<td>8.0</td>
<td>TRAINING / COMPETENCE REQUIREMENTS</td>
<td>7</td>
</tr>
<tr>
<td>9.0</td>
<td>MONITORING</td>
<td>8</td>
</tr>
<tr>
<td>10.0</td>
<td>REFERENCES</td>
<td>8</td>
</tr>
<tr>
<td>11.0</td>
<td>DOCUMENT CONTROL</td>
<td>9</td>
</tr>
<tr>
<td>12.0</td>
<td>LIST OF APPENDICES</td>
<td>9</td>
</tr>
<tr>
<td>13.0</td>
<td>APPENDIX A – ANTT THEORETICAL PRACTICE FRAMEWORK</td>
<td>10</td>
</tr>
<tr>
<td>14.0</td>
<td>APPENDIX B – LIST OF PROCEDURES WHERE ANTT MUST BE MAINTAINED</td>
<td>11</td>
</tr>
<tr>
<td>15.0</td>
<td>APPENDIX C – PROCEDURAL EXAMPLES OF STANDARD ANTT</td>
<td>12</td>
</tr>
</tbody>
</table>
1.0 KEY POINTS

1.1 Aseptic technique must be used to prevent microbial contamination or cross-contamination when:
- Undertaking an invasive procedure;
- Accessing a susceptible site or when integrity of the skin is breached

1.2 Aseptic Non Touch Technique (ANTT) requires staff to perform effective hand hygiene, wear appropriate personal protective equipment and then identify “key parts” and avoid touching them during a procedure. It is a standard for safe, effective practice that can be applied to all aseptic procedures.

1.3 The setting should be prepared including the decontamination of the working surface or tray to be used with detergent / disinfectant wipes and allowed to dry.

1.4 A “key part” or “key site” is one which, if contaminated, increases the risk of introducing micro-organisms into the patient. Therefore avoiding contamination of the key parts and sites is the core action of an ANTT. If the key parts or sites such as patient’s skin must be touched following decontamination, sterile gloves must be worn.

1.5 Standard and Surgical ANTT require different aseptic field management.

2.0 FLOW DIAGRAM – Not used

3. INTRODUCTION

3.1 Infection is caused by organisms which enter and overcome the body’s immunological defence mechanisms. Therefore strict adherence to an aseptic non touch technique when accessing a susceptible site (an area on the body that is more vulnerable to infection such as the site of insertion of a cannula), or when the integrity of the skin is breached, is essential to prevent infection.

3.2 ANTT is a core nursing and medical skill, but the standard to which it is practiced can be inconsistent. A poor aseptic technique may be instrumental in causing a healthcare associated infection (HCAI). An ANTT theoretical practice framework can be found in Appendix A.

3.3 Aseptic Non Touch Technique is an aseptic procedure where touching the patient and “key parts” of the sterile field is avoided. It aims to prevent the contamination of wounds and other susceptible sites, by ensuring that only uncontaminated equipment, (“key parts”) or sterile fluids come into contact with susceptible or sterile body sites (“key sites”) during the procedure. For this reason it should be used during any invasive procedure that bypasses the body’s natural defences, e.g. the skin or mucous membranes. For example cannulation, venepuncture, wound care and urinary catheter manipulation.
3.4 There are 2 types of asepsis -
   - Standard asepsis (ANTT) is the technique of choice when procedures meet all of the following criteria: They involve minimal Key-Parts and small Key-Parts, are not significantly invasive, are technically uncomplicated to achieve asepsis and are short in duration (approximately <20 minutes)
   - Surgical asepsis (ANTT) which is a strict process practised in operating theatres and for some invasive procedures which uses an Aseptic Non Touch Technique and maximal sterile barriers including a sterile gown, sterile gloves and sterile drapes as used in the insertion of central venous devices.

3.5 The purpose of this policy is to ensure that staff carry out clinical procedures in a manner that promotes asepsis, and to provide standardised information to be able to undertake an Aseptic Technique Procedure and focus on Standard ANTT.

3.6 Procedural examples of Standard ANTT can be found in Appendix B at the end of this policy.

4.0 DEFINITIONS

4.1 Asepsis – The method by which microbial contamination is prevented during clinical procedures which bypass the body’s natural defences.

4.2 Aseptic Non Touch Technique (ANTT) –
   is the practice of carrying out a procedure in such a way that you minimize the risk of introducing contamination into a vulnerable area or contaminating an invasive device (Marsden Manual, 9th Edition). It is a standardised technique where staff are taught to identify and protect the key-parts of any procedure, perform effective hand hygiene, institute a non touch technique, and wear only the appropriate personal protective equipment.

4.3 Critical Aseptic Field - Used when an open, invasive procedure requires a large aseptic working area for an extended length of time, as in the operating theatre. Only equipment that has been sterilised and is aseptic can be introduced onto the critical aseptic field; it must be managed as a key part (i.e. the whole surface area can only come into contact with other aseptic equipment). (Ref: ANTT Theory and Practice Framework).

4.4 General Aseptic Field - Used for Standard ANTT when key parts can easily be protected by micro critical aseptic fields and a non-touch technique (and other standard infection control measures). The general aseptic field does not have to be managed critically and is essentially promoting rather than ensuring asepsis of key parts and key sites; typically, non-sterile gloves are used. (Ref: ANTT Theory and
Practice Framework). However, if key sites must be touched after decontamination, sterile gloves must be worn.

4.5 **Invasive** – Involving puncture or incision of the skin, or insertion of an instrument or foreign material into the body which is not a normal route of entry.

4.6 **Key Part** - The parts of equipment that if contaminated during a procedure, then provide a direct route for the transmission of pathogens onto or into the patient, thereby increasing the risk of infection. (e.g. in intravenous therapy, key parts are those which come into direct contact with the liquid infusion, such as needles, syringe tips, exposed central line lumens).

4.7 **Key Site** – Open wounds, including insertion and puncture sites.

4.8 **Standard ANTT**- A process to achieve asepsis by identifying the key parts and key sites of a procedure, and not touching them either directly or indirectly and applying standard principles of infection prevention, as well as hand decontamination, the use of PPE and maintaining an aseptic area. Standard ANTT can be performed in a ward / department setting.

4.9 **Pathogenic** – Capable of causing disease.

4.10 **Sterile** – Free from micro-organisms, including spores.

4.11 **Sterile Technique** – Can only be achieved in controlled environments such as under laminar air flow or in a specially equipped theatre.

4.12 **Surgical ANTT** – A strict process to achieve asepsis by identifying the key parts and key sites of a procedure, and not touching them either directly or indirectly as well as using maximal sterile barriers including a sterile gown, sterile gloves and sterile drapes as used in the insertion of central venous devices. Surgical ANTT mostly takes place in a theatre setting.

4.13 **Susceptible Patient Site** – An area on the body that is more vulnerable to infection, such as the site of insertion of a cannula.

**5.0 ROLES and RESPONSIBILITIES**

5.1 **Director of Infection Prevention & Control (DIPC)**

The Director of Infection Prevention and Control is responsible for:

- Overseeing this policy and its implementation;
- Reporting directly to the Chief Executive and Trust Board.

5.2 **Infection Prevention and Control Team**

The Infection Prevention and Control team will be responsible for:

- Giving advice and education as required on the ANTT;
- Auditing standards of compliance with ANTT policy in the clinical area and departments;
- Promoting good practice and challenging poor compliance.
5.3 **Associate Directors for Patient Care, Matrons and Clinical Directors**
Associate Directors of Nursing, Matrons and Clinical Directors are responsible for:
- Establishing a positive culture across their directorates and hospitals and promoting compliance with ANTT by staff;
- Supporting Ward / Departmental Managers by providing resources for implementation of ANTT in clinical areas;
- Supporting Ward / Departmental Managers in monitoring levels of ANTT compliance.

5.4 **Medical Staff**
Medical Staff are responsible for:
- Applying ANTT principles to all procedures requiring aseptic technique;
- Ensuring compliance with infection control policies;
- Promoting good practice and challenging poor compliance.

5.5 **Ward / Departmental Managers**
Ward / Departmental Managers are responsible for:
- Identifying staff to undertake ANTT assessor training;
- Ensuring that all staff are only able to undertake invasive techniques following training and assessment of competence in ANTT procedure;
- Ensuring employees are compliant with this policy and best practice guidance;
- Promoting good practice and challenging poor compliance.

5.6 **Individual Employees**
Staff undertaking ANTT are responsible for:
- Ensuring they are trained and competent in the procedure;
- Ensuring they are compliant with this policy and best practice guidance.

5.7 **Trainers**
ANTT education must be included in all clinical training sessions where it is required as part of a procedure (e.g. Intravenous Therapy training).

### 6.0 SURGICAL ANTT

6.1 Surgical ANTT is a procedure to eliminate micro-organisms from an area. It is practiced in operating theatres, some treatment areas and occasionally wards and other departments for invasive procedures such as the insertion of central lines. It is rarely used within Mental Health Services Directorate settings, but will be used within the Acute Trust and Community health Services.

6.2 Surgical ANTT is demanded when procedures meet one or more of the following criteria:
They are technically complex;

- Involve extended procedure time (approx. more than 20 minutes);
- Involve a large open key-site and large or numerous key parts;
- The procedure includes the use of additional maximal sterile barrier precautions i.e. sterile gowns and sterile drapes;
- The main aseptic field needs to be managed ‘critically’ i.e. only sterilised and aseptic equipment can come into contact with the aseptic field. Surgical ANTT will employ a critical aseptic field, sterile gloves and often full barrier precautions.
- Sterile gloves must be used, as it is not possible to undertake a procedure without directly touching or contaminating key-parts or sites;

7.0 STANDARD ANTT

7.1 An Aseptic Technique using a Non Touch procedure (Standard ANTT) is the method employed to help prevent contamination of wounds and other susceptible sites by pathogenic organisms, by ensuring that only uncontaminated equipment and fluids come into contact with sterile / susceptible body sites during certain clinical procedures.

7.2 Standard ANTT is the technique of choice when procedures meet all of the following criteria:

- Either: - Gloves not required OR Non-sterile gloves are used as it is possible to undertake a procedure without directly touching or contaminating key-parts or sites. (However if after decontamination key sites must be touched, sterile gloves must be worn);
- They are technically simple;
- Short in duration (approximately less than 20 minutes);
- Involve small key sites and key parts;
- Have minimal numbers of key parts;
- The main (general) aseptic field does not need to be managed critically as the aseptic focus is on the small key sites and parts.
7.3 Standard ANTT can be applied to aseptic procedures such as intravenous therapy and wound care. It requires staff to perform effective hand washing; wear appropriate protective clothing; identify key parts and key sites; and avoid touching them during a procedure (Rowley and Sinclair 2004). However, urinary catheterisation requires the Standard ANTT method, but sterile gloves should be worn as it is very difficult not to touch key parts/sites during this procedure.

Procedural examples of Medical ANTT (e.g. Wound Care, Peripheral Venepuncture / Phlebotomy and Indwelling Urinary Catheterisation) can be found in Appendix C

7.4 The key principles of aseptic technique using a non-touch method are:

- Always clean hands effectively;
- Never contaminate key parts or key sites;
- Touch non key parts and non-key sites with confidence;
- Take appropriate infection prevention precautions such as the use of protective equipment – standard precautions
- Maintain a sterile field at all times;
- Ensure only sterile items come into contact with susceptible sites.

Examples of procedures where either Standard or Surgical ANTT must be maintained can be found Appendix B

8.0 TRAINING / COMPETENCE REQUIREMENTS

8.1 All staff carrying out standard and Surgical ANTT must be trained in the procedure that they are going to undertake. Training should include:

- Hand Hygiene;
- Personal Protective Equipment;
- Avoiding contact with key parts and key sites;
- Maintaining a sterile field;
- Aseptic Technique using a Non Touch Procedure.

8.2 For staff undertaking wound dressings a module on Mollie is available to assess competency (MPH staff) and an instructional video is available via Learning Zone (Sompar staff)
9.0 MONITORING

<table>
<thead>
<tr>
<th>Element of policy for monitoring</th>
<th>Section</th>
<th>Monitoring method - Information source (e.g. audit)/ Measure / performance standard</th>
<th>Item Lead</th>
<th>Monitoring frequency / reporting frequency and route</th>
<th>Arrangements for responding to shortcomings and tracking delivery of planned actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard ANTT</td>
<td>5</td>
<td>The IP&amp;C team or link practitioners will observe at least 20 episodes of care requiring ANTT. Compliance of ANTT will be measure for each procedure observed.</td>
<td>IP&amp;C Team</td>
<td>Audit report will be tabled at the Infection Control Committee with directorate action plans for necessary improvements to be owned by the directorates and reviewed by ICC</td>
<td>To be tabled at directorate &amp; ward level</td>
</tr>
</tbody>
</table>

10.0 REFERENCES

10.1 Aseptic Non Touch Technique 2012  antt.org.uk


11.0 DOCUMENT CONTROL

<table>
<thead>
<tr>
<th>Document Author</th>
<th>Tracey Doolan / Lisa Stone Infection Control team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Owner</td>
<td>Alison Wootton</td>
</tr>
<tr>
<td>This Version</td>
<td>1</td>
</tr>
<tr>
<td>Replaces</td>
<td>T&amp;S NHS Trust</td>
</tr>
<tr>
<td></td>
<td>Aseptic Technique Policy Active May 2009, Author Sharon Hilton</td>
</tr>
<tr>
<td></td>
<td>SOMPAR</td>
</tr>
<tr>
<td></td>
<td>Aseptic Non Touch Technique Policy Nov 2018, Author Lisa Stone</td>
</tr>
<tr>
<td>Status</td>
<td>FINAL</td>
</tr>
<tr>
<td>Approval Date</td>
<td>23 August 2019</td>
</tr>
<tr>
<td>Where</td>
<td>Infection Control Committee</td>
</tr>
<tr>
<td>Ratification Date</td>
<td>3 January 2020</td>
</tr>
<tr>
<td>Where</td>
<td>Joint Policy Review Group</td>
</tr>
<tr>
<td>Date of issue</td>
<td>6 February 2020</td>
</tr>
<tr>
<td>Review date</td>
<td>February 2023</td>
</tr>
<tr>
<td>Applies to</td>
<td>All staff required to perform activities that require aseptic technique skills</td>
</tr>
<tr>
<td>Exclusions</td>
<td>None</td>
</tr>
</tbody>
</table>

12.00 APPENDICES

12.1 Appendix A  ANTT Theoretical Practice Framework
12.2 Appendix B  List of procedures where ANTT must be maintained
12.3 Appendix C  Procedural examples of Standard ANTT
Appendix A

ANTT Theoretical Practice Framework

CLINICAL PRACTICE

**Principle 1**
The main infection risk to the patient is the health care worker

**Principle 2**
Health care workers must understand what asepsis is and how to establish and maintain it

**Principle 3**
Identifying and protecting key-parts and key-sites is paramount

**Principle 4**
Clinical procedures should be risk assessed to determine the level of aseptic technique required

**Principle 5**
Asepsis is maintained with either Standard or Surgical ANTT

**Principle 6**
Aseptic fields are important. Standard and Surgical-ANTT require different aseptic field management.

**Principle 7**
Non-touch technique is the most important component of Surgical and Standard-ANTT

**Principle 8**
Appropriate infective precautions help promote and ensure asepsis

CLINICAL AND ORGANISATIONAL MANAGEMENT

**Principle 9**
Aseptic practice should be standardised

**Principle 10**
Safe aseptic technique is reliant upon effective staff training, and safe and fit for purpose environments
# Appendix B

**List of Procedures where ANTT must be Maintained**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central venous catheter insertion &amp; change of</td>
<td>Surgical ANTT</td>
</tr>
<tr>
<td>Chest drain insertion</td>
<td>Surgical ANTT</td>
</tr>
<tr>
<td>Chest drain manipulation/ breaking of system</td>
<td>Standard ANTT</td>
</tr>
<tr>
<td>Cervical Smear</td>
<td>Standard ANTT</td>
</tr>
<tr>
<td>Epidural Insertion</td>
<td>Surgical ANTT</td>
</tr>
<tr>
<td>Epidural manipulation / breaking the system</td>
<td>Standard ANTT</td>
</tr>
<tr>
<td>Gastrostomy or jejunostomy (endoscopic/surgical or radiological guidance) Insertion</td>
<td>Surgical ANTT</td>
</tr>
<tr>
<td>Lumbar Puncture</td>
<td>Surgical ANTT</td>
</tr>
<tr>
<td>Peripheral cannulation</td>
<td>Standard ANTT</td>
</tr>
<tr>
<td>Intermittent Urethral Catheterisation for health care worker performing the procedure</td>
<td>Standard ANTT</td>
</tr>
<tr>
<td>IV medication preparation for immediate use and administration for peripheral and central devices (including TPN)</td>
<td>Standard ANTT</td>
</tr>
<tr>
<td>Urethral catheterisation insertion</td>
<td>Standard ANTT using sterile gloves</td>
</tr>
<tr>
<td>Suprapubic catheter insertion</td>
<td>Standard ANTT using sterile gloves</td>
</tr>
<tr>
<td>Urethral and Suprapubic catheterisation care</td>
<td>Standard ANTT</td>
</tr>
<tr>
<td>Venepuncture procedures</td>
<td>Standard ANTT</td>
</tr>
<tr>
<td>Wound care for majority of surgical wounds, acute burns, acute trauma wounds,</td>
<td>Surgical ANTT</td>
</tr>
<tr>
<td>Wound care for chronic leg ulcers, pressure ulcers in sacral/perianal areas.(Contact TVN or refer to wound care policy)</td>
<td>Standard ANTT</td>
</tr>
</tbody>
</table>
Appendix C
Procedural Examples of Standard ANTT

1. Clean hands with alcohol hand rub or soap & water
2. Clean trolley using wipe available on wrack/delon
3. Gather dressing pack & equipment & place on bedside shelf
4. Apply apron (this can be hands if required)
5. Open dressing pack & position waste bag
6. Open equipment onto a sterile field using non-touch technique (NTT)
7. Apply non-sterile gloves
8. Place sterilised drape under wound
9. Remove dressing, using NTT & dispose of dressing in waste bag
10. Dispose of gloves at end
11. Clean hands with alcohol hand rub or soap & water
12. Apply sterile or non-sterile gloves & assemble equipment
13. Clean wound using NTT
14. Dress wound using NTT
15. Dispose of equipment, waste & then gloves
16. Clean hands with alcohol hand rub or soap & water
17. Clean trolley according to local policy
18. Clean hands with alcohol hand rub or soap & water
**NB - For Venepuncture Only**

As the needle is not left in-situ, skin can be cleansed for 15 seconds and allowed to dry before performing venepuncture.
1. Prepare patient, expose IV access.
2. Clean hands with alcohol based rub or soap & water.
3. Clean tray according to local policy - disposing general waste, clean within tray.
4. Gather equipment, place around tray.
5. Clean hands with alcohol based rub or soap & water.
6. Apply non sterile gloves and plastic apron (use steril gloves if you must touch key parts).
7. Open equipment, prepare IV injection, protecting key parts using non touch technique (NIT).

If IV port is exposed and gloves are not contaminated:

- Scrub key parts:
  - Using NIT: use at least 2% chlorhexidine 70% alcohol wipe
  - Scrub the port tip for 15 seconds using different areas of the wipe
  - Then, wipe away from the tip
  - Allow to dry before use

If IV port is not exposed and/or gloves are contaminated, clean hands & re glove.

8. Administer drugs using NIT
9. Dispose of sharps & equipment
10. Clean tray according to local policy
11. Dispose of gloves immediately
12. Clean hands with alcohol based rub or soap & water

Somerset Partnership NHS Foundation Trust

Version: Draft Version 1
Issue date: June 2019
Review date: June 2020
Page 18 of 18