

## Infection Prevention and Control Assurance - Standard Operating Procedure 10 (IPC SOP 10)

### Aseptic Procedures

**Why** we have a procedure?

The Health and Social Care Act 2008: Code of Practice for the NHS for the Prevention and Control of Healthcare Associated Infections (*revised January 2015*) stipulates that NHS bodies must, in relation to preventing and controlling the risk of Health Care Associated Infections (HCAI), have in place appropriate core policies/procedures, including clinical procedures that maintain and promote the principles of asepsis. Implementation of this procedure will contribute to the achievement and compliance with the Act.

**What** overarching policy the procedure links to?

- This procedure is supported by the Infection Prevention and Control Assurance Policy

**Which** services of the trust does this apply to? **Where** is it in operation?

Group	Inpatients	Community	Locations
Mental Health Services	✓	✓	all
Learning Disabilities Services	✓	✓	all
Children and Young People Services	x	✓	all

**Who** does the procedure apply to?

This document applies to all clinical staffs employed by or working on behalf of the Black Country Partnership NHS Foundation Trust who are required to undertake aseptic procedures as part of their role and job description.

**When** should the procedure be applied?

When performing any aseptic procedures e.g. venepuncture, cannulation, wound dressings, administering injections, obtaining specimens for microbiological investigations etc.

**How** to carry out this procedure

**Additional Information/ Associated Documents**

- Infection Prevention and Control Assurance Policy
- Hand Hygiene Policy
- Infection Prevention and Control Assurance - Standard Operating Procedure 1 (IPC SOP 1) - Standard Infection Control Precautions
- Preventing infection in vascular access & subcutaneous infusion devices policy

**Aims**

This procedure details the actions to be followed within the Black Country Partnership NHS Foundation Trust to provide guidance in order to establish Aseptic Non-Touch Technique (ANTT) as the safe and effective technique for all aseptic procedures.

It encompasses the necessary infection prevention and control measures to prevent pathogenic micro-organisms on hands, surfaces or equipment from being introduced to susceptible sites during clinical practice and the contamination of specimens obtained for diagnosis.

## Definitions

<b>Asepsis</b>	<ul style="list-style-type: none"> <li>Asepsis is the method by which we prevent microbial contamination during invasive procedures or care breaches of the skin's integrity and the complete absence of bacteria, fungi, viruses and other microorganisms that cause disease</li> </ul>
<b>Aseptic technique</b>	<ul style="list-style-type: none"> <li>A method developed to ensure that only uncontaminated objects/fluids make contact with sterile/susceptible sites</li> <li>It should be used during any procedure that by-passes the body's natural defences</li> </ul>
<b>Aseptic Non-Touch Technique (ANTT)</b>	<ul style="list-style-type: none"> <li>The Aseptic Non-Touch Technique (ANTT) is a standard for safe and effective practice that can be applied to <b>all aseptic procedures</b> such as intravenous therapy, wound care, urinary catheterisation and collection of specimens and any procedure involving the use of sterile equipment etc. It standardises practice and rationalises the many different techniques currently in use</li> <li>An ANTT means that when handling sterile equipment, only the part of the equipment <b>not</b> in contact with the susceptible site is handled</li> </ul>
<b>Hand Hygiene</b>	<ul style="list-style-type: none"> <li>A general term that applies to hand washing, antiseptic hand wash, antiseptic hand rub or surgical antiseptics</li> </ul>
<b>Invasive procedure</b>	<ul style="list-style-type: none"> <li>A clinical procedure that invades (enters) the body, usually by cutting or puncturing the skin or by inserting instruments or devices into the body</li> </ul>
<b>Key part</b>	<ul style="list-style-type: none"> <li>Any piece of equipment used during aseptic technique that will increase the risk of infection if contaminated by infectious material</li> </ul>

## Key Principles

**A**lways clean hands effectively

**N**ever contaminate 'key parts'

**T**ouch none 'key parts' with confidence

**T**ake appropriate infection prevention precautions (use of standard precautions)

## Hand Hygiene

Healthcare workers hands are the most common vehicle for the transmission of healthcare associated pathogens from patient to patient and within the healthcare environment. Effective hand decontamination is essential to ANTT and should take place prior to and after all

invasive techniques, aseptic procedures and after removal of gloves (See **Hand Hygiene Policy**).

## **Personal Protective Equipment (PPE)**

Personal protective equipment such as gloves and aprons provide a barrier between micro-organisms on hands, clothing and the susceptible site. Gloves must be worn for:

- Undertaking invasive procedures
- Contact with sterile sites
- Contact with non-intact skin
- Contact with mucous membranes
- Activities where a risk of exposure to blood, bodily fluids, excretions and contaminated instruments can occur

Non-sterile gloves can be used for wound care, venepuncture or cannulation where it is possible to undertake the procedure without touching key parts.

Sterile gloves **MUST** be worn for urinary catheterisation or central venous catheter insertion or dressing which involve touching the wound.

## **Key Parts**

A core component of ANTT is maintaining asepsis during invasive procedures. Key parts are those parts of equipment that if contaminated by infectious material increase the risk of infection, not touching them either directly or indirectly is perhaps the single most important component of achieving asepsis. For example in wound care, consider all of the dressing pack equipment as key parts or in venepuncture consider the needle and syringe/butterfly as key parts.

## **Aseptic Field**

A clean working environment and an aseptic field are essential precautions for all clinical procedures. This can be achieved effectively by a non-touch technique method and a basic aseptic field such as a well cleaned tray or dressing trolley with a sterile towel/drape.

- Equipment used during ANTT such as plastic trays or dressing trolleys must be thoroughly cleaned before and after use
- If the equipment is visibly soiled or not in regular use, clean from the inside to outside with a detergent wipe or soap and water and dry thoroughly
- Immediately prior to use, clean the equipment with a 70% alcohol based product
- After use, clean from the inside to outside with a detergent wipe or soap and water and dry thoroughly

## **Preparation of the Environment**

Prior to undertaking the intervention staff must:

- Ensure the environment clean and tidy
- Ensure doors and windows are *closed*
- Ensure fans are *turned off*
- Draw curtains around door/bed (if available)
- Limit the number of people who will be entering the area
- Check that the following are clean prior to commencing the procedure:

- Service users clothing
- Bedding materials, or couch cover
- Any equipment which is to be used

The appendices in this document provide specific information in relation to performing an ANTT when undertaking venepuncture, giving injections, dressing a wound and undertaking cannulation. These are standard principles which can be applied to any aseptic procedure.

### ***Where do I go for further advice or information?***

- Infection Prevention and Control Team
- Your Service Manager, Matron, General Manager, Head of Nursing, Group Director and Physical Health Matron
- Your Group Governance Staff

### **Training**

Staff may receive training in relation to this procedure, where it is identified in their appraisal as part of the specific development needs for their role and responsibilities. Please refer to the Trust's Mandatory and Risk Management Training Needs Analysis for further details on training requirements, target audiences and update frequencies.

### **Monitoring / Review of this Procedure**

In the event of planned change in the process(es) described within this document or an incident involving the described process(es) within the review cycle, this SOP will be reviewed and revised as necessary to maintain its accuracy and effectiveness.

### **Equality Impact Assessment**

Please refer to overarching policy

### **Data Protection Act and Freedom of Information Act**

Please refer to overarching policy

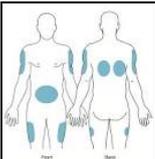
## Appendix 1 - ANTT – Peripheral Venepuncture / Phlebotomy

<b>Step 1</b>		<b>Clean hands</b> - Wash your hands with soap and water (see hand hygiene policy). This will break any potential transmission of infection from the clinical ward environment to the clean preparation area/room. Effective hand hygiene is vital to reduce the risk of contaminating key parts/sites. (see hand hygiene policy)
<b>Step 2</b>		<b>Clean the procedure tray</b> - Clean the procedure tray creating an aseptic field which provides a sufficiently large, robust and controlled working area and while it dries .....
<b>Step 3</b>		<b>Gather equipment</b> – collect all the equipment required for the procedure. Hands are contaminated when gathering equipment from storage cupboards etc. It's important therefore to gather all equipment before performing hand hygiene at Step 4. Gathering equipment at this point also allows the tray to dry properly and saves a little time. Place equipment on the tray once dry.
<b>Step 4</b>		<b>Clean hands</b> - wash your hands with soap and water or use approved hand sanitizing gel. This occurs immediately before assembly of equipment and the preparation of drugs. This way, hands are optimally clean prior to glove application and non-touch technique key part in manipulation.
<b>Step 5</b>		<b>Prepare equipment</b> – opening the packaging, place the equipment onto the prepared sterile field protecting the key parts and using a non-touch technique, check packaging and expiry dates for all equipment to be used (including the blood specimen tubes)
<b>Step 6</b>		<b>Apply tourniquet</b> – after checking the patient's details against the request form apply the tourniquet and palpate the vein (tourniquet must be disposable or cleaned according to the manufacturer's instructions before and after use). Staff should endeavour to use single use tourniquets.
<b>Step 7</b>		<b>Sanitise hands using gel and put on gloves and apron</b> – non-sterile (or sterile gloves if you need to re-palpate the puncture site) and assemble needle and syringe. Primarily, gloves and apron are worn to protect the user from exposure to drugs and blood products. <i>If gloves become contaminated – decontaminate hands and re-glove.</i>
<b>Step 8</b>		<b>Clean puncture site</b> – for 30 seconds with 2% chlorhexidine and 70% alcohol wipes and allow time to dry
<b>Step 9</b>		<b>Access patient's vein</b> – protecting key parts and sites using a non-touch technique, and allow the tube to fill, release tourniquet. Remove tourniquet on completion. Apply pressure to the puncture site to prevent haematoma (patient may assist with this). Label the tubes in front of the patient ensuring all details match the request form.
<b>Step 10</b>		<b>Discard used sharp</b> – discard used sharps immediately into the approved sharps bin, Discard PPE into clinical waste bin and clean the procedure tray on completion. Re-usable trays are reprocessed at the end of the procedure to prevent cross infection between patients and staff.
<b>Step 11</b>		<b>Clean procedure tray and armrest</b> - Clean the procedure tray and the arm rest of the chair on completion. Cleaning the tray according to local policy will prevent cross infection.
<b>Step 12</b>		<b>Clean hands</b> - Wash your hands with soap and water, It is essential that the post-procedure hand hygiene is performed immediately after glove removal i.e. before contact with the environment (because gloves encourage the hands to sweat-out organisms from the skin).

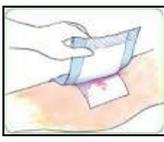
## Appendix 2 - ANTT – When Inserting a Cannula/Butterfly

<b>Step 1</b>		<b>Clean hands</b> - Wash your hands with soap and water (see hand hygiene policy). This will break any potential transmission of infection from the clinical ward environment to the clean preparation area/room. Effective hand hygiene is vital to reduce the risk of contaminating key parts/sites.
<b>Step 2</b>		<b>Clean the procedure tray</b> - Clean the procedure tray creating an aseptic field which provides a sufficiently large, robust and controlled working area and while it dries .....
<b>Step 3</b>		<b>Gather equipment</b> – collect <b>all</b> the equipment required for the procedure. Hands are contaminated when gathering equipment from storage cupboards etc. It's important therefore to gather all equipment before performing hand hygiene at Step 4. Gathering equipment at this point also allows the tray to dry properly and saves a little time. Check the packaging of all assembled equipment for expiry dates and damage and place on the tray
<b>Step 4</b>		<b>Clean hands</b> - wash your hands with soap and water or use approved hand sanitizing gel. This occurs immediately before assembly of equipment. This way, hands are optimally clean prior to glove application and non-touch technique key part manipulation.
<b>Step 5</b>		<b>Prepare equipment</b> – protecting the key parts and using a non-touch technique, checking expiry dates, and for any sign of contamination etc. <b>without directly handling equipment.</b>
<b>Step 6</b>		<b>Sanitise hands and put on gloves and apron</b> – non-sterile gloves, primarily gloves and apron are worn to protect the user from exposure to blood and body fluids.
<b>Step 7</b>		<b>Place a sterile towel</b> - under the site to be cannulated. This will promote asepsis and help protect the surrounding environment from contamination.
<b>Step 8</b>		<b>Clean chosen insertion site</b> – for 30 seconds with 2% chlorhexidine and 70% alcohol wipes and allow time to dry
<b>Step 9</b>		<b>Access patient's vein to insert the cannula</b> – protecting key parts and sites using a non-touch technique, insert the cannula, release tourniquet.
<b>Step 10</b>		<b>Discard used sharp</b> – discard used sharps immediately into the approved sharps closing the aperture after use.
<b>Step 11</b>		<b>Apply the dressing</b> - A non-touch technique will help protect the site from colonisation or infection and secure the cannula in place. Discard PPE into the clinical waste bag which will minimise the movement of waste and protect the wider working environment. Document date, time and site of insertion in the patient record.
<b>Step 12</b>		<b>Clean tray and hands</b> - Clean the procedure tray on completion, re-usable trays are reprocessed at the end of the procedure to prevent cross infection between patients and staff and cleaning according to local policy will prevent cross infection. Decontaminating hands will help break any chain of potential cross infection.

## Appendix 3 - ANTT – When Giving an Injection – to be used in Conjunction with the Medicine Management Policy and Procedures

<b>Step 1</b>		<b>Clean hands</b> - Wash your hands with soap and water (see hand hygiene policy). This will break any potential transmission of infection from the clinical ward environment to the clean preparation area/room. Effective hand hygiene is vital to reduce the risk of contaminating key parts/sites.
<b>Step 2</b>		<b>Clean the procedure tray</b> - Clean the procedure tray creating an aseptic field which provides a sufficiently large, robust and controlled working area and while it dries .....
<b>Step 3</b>		<b>Gather equipment</b> – collect all the equipment required for the procedure. Hands are contaminated when gathering equipment from storage cupboards etc. It's important therefore to gather all equipment before performing hand hygiene at Step 4. Gathering equipment at this point also allows the tray to dry properly and saves a little time.
<b>Step 4</b>		<b>Clean hands</b> - wash your hands with soap and water or use approved hand sanitizing gel. This occurs immediately before assembly of equipment and the preparation of drugs. This way, hands are optimally clean prior to glove application and non-touch technique key part manipulation.
<b>Step 5</b>		<b>Prepare equipment</b> – protecting the key parts and using a non-touch technique. Check medication against the prescription, checking expiry date, for any sign of contamination etc.
<b>Step 6</b>		<b>Sanitise hands with gel and put on gloves</b> – non-sterile (sterile for intravenous) and assemble needle and syringe. Primarily, gloves are worn to protect the user from exposure to drugs and blood products. <i>If gloves become contaminated – decontaminate hands and re-glove.</i>
<b>Step 7</b>		<b>Draw up medication</b> - draw medication into the syringe (unless using pre-filled dose) as per the patient's prescription. A non-touch technique is the most important component of aseptic practice because a key part cannot be contaminated directly if it is not touched. Key parts should be protected throughout the procedure when they are not in use.
<b>Step 8</b>		<b>Choose the injection site</b> – discuss with patient and gain consent
<b>Step 9</b>		<b>Clean the injection site if required</b> – only needed if skin is visibly dirty
<b>Step 10</b>		<b>Administer the medication</b> – give the prescribed medication via the prescribed route e.g. sub-cut or intramuscular. A non-touch technique should therefore be used even if the user is wearing sterile gloves.
<b>Step 11</b>		<b>Discard used sharp</b> – immediately into the approved sharps bin, remove gloves and clean the procedure tray on completion. Re-usable trays are reprocessed at the end of the procedure to prevent cross infection between patients and staff. Sign the prescription chart to record administration.
<b>Step 12</b>		<b>Clean hands</b> - Wash your hands with soap and water, It is essential that the post-procedure hand hygiene is performed immediately after glove removal i.e. before contact with the environment (because gloves encourage the hands to sweat-out organisms from the skin).

## Appendix 4 - ANTT – When Changing a Wound Dressing

<b>Step 1</b>		<b>Clean hands</b> - Wash your hands with soap and water (see hand hygiene policy). This will break any potential transmission of infection from the clinical ward environment to the clean preparation area/room. Effective hand hygiene is vital to reduce the risk of contaminating key parts/sites.
<b>Step 2</b>		<b>Clean the dressing trolley</b> - Clean the trolley/procedure tray creating an aseptic field which provides a sufficiently large, robust and controlled working area and while it dries .....
<b>Step 3</b>		<b>Gather equipment</b> – collect <b>all</b> the equipment required for the procedure. Hands are contaminated when gathering equipment from storage cupboards etc. It's important therefore to gather all equipment before performing hand hygiene at Step 4. Gathering equipment at this point also allows the tray/trolley to dry properly and saves a little time. Check the packaging of all assembled equipment for expiry dates and damage and place on the bottom shelf.
<b>Step 4</b>		<b>Clean hands</b> - wash your hands with soap and water or use approved hand sanitizing gel. This occurs immediately before assembly of equipment. This way, hands are optimally clean prior to glove application and non-touch technique key part manipulation.
<b>Step 5</b>		<b>Prepare equipment</b> – Open pack, place drape on top shelf and remove waste bag to one side of drape for ease of access later then carefully decant other pack contents onto the sterile field <b>without directly handling equipment</b> protecting key parts using the ANTT.
<b>Step 6</b>		<b>Sanitise hands with gel and put on gloves and apron</b> – non-sterile gloves, primarily, gloves and apron are worn to protect the user from exposure to blood and body fluids.
<b>Step 7</b>		<b>Place a sterile towel</b> - under the site to be dressed. This will promote asepsis and help protect the surrounding environment from contamination.
<b>Step 8</b>		<b>Remove the dressing</b> – expose the wound and dispose of the dressing into the clinical waste bag (the sterile bag can be inverted and used to remove the soiled dressing). Disposing of the dressing here limits the movement of contaminated waste, helping to protect the wider clinical or community environment.
<b>Step 9</b>		<b>Clean hands and apply sterile gloves</b> – Step 8 is a dirty procedure remove gloves and decontaminate your hands. Although not essential for some small, minor dressings, sterile gloves at this stage will help promote asepsis of the wound. NB: Sterile gloves are essential at this stage if the wound requires touching directly with gloved hands. Then arrange the contents of the sterile field for ease of use protecting key parts using the ANTT. <i>(If gloves become contaminated – decontaminate hands and re-glove e.g. new gloves).</i>
<b>Step 10</b>		<b>Clean the wound</b> - protecting key parts using the ANTT clean from the cleanest to the most soiled area. A non-touch technique will help protect the wound from colonisation or infection.
<b>Step 11</b>		<b>Dress wound using non-touch technique</b> - A non-touch technique will help protect the wound from colonisation or infection. Dispose of equipment, waste and gloves Folding the used equipment and waste into the aseptic field drape and disposing it in the attached waste bag will minimise the movement of waste and protect the wider working environment.
<b>Step 12</b>		<b>Clean trolley/tray and hands</b> - Cleaning according to local policy will prevent cross infection. Decontaminating hands will help break any chain of potential cross infection.

## Standard Operating Procedure Details

<b>Unique Identifier</b> for this SOP is	BCPFT-COI-POL-05-10
State if SOP is <b>New</b> or <b>Revised</b>	Revised
<b>Policy Category</b>	Control of Infection
<b>Executive Director</b> whose portfolio this SOP comes under	Executive Director of Nursing, AHPs and Governance
<b>Policy Lead/Author</b> Job titles only	Infection Prevention and Control Team
<b>Committee/Group Responsible for Approval of this SOP</b>	Infection Prevention and Control Committee
<b>Month/year consultation process completed</b>	n/a
<b>Month/year SOP was approved</b>	June 2019
<b>Next review due</b>	June 2022
<b>Disclosure Status</b>	'B' can be disclosed to patients and the public

### Review and Amendment History

Version	Date	Description of Change
1.1	Feb 2019	<ul style="list-style-type: none"> <li>• Updated section – additional information Pg. 1 – one added</li> <li>• No other changes required</li> </ul>
1.0	Jan 2016	<ul style="list-style-type: none"> <li>• New Procedure established to supplement Infection Control Assurance Policy</li> </ul>