Cheshire and Wirral Partnership
NHS Foundation Trust

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Policy for the Aseptic Technique using the principle of aseptic no touch technique

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Type of document	Policy
Target audience	All CWP staff
Document purpose	The Aseptic technique policy relates to all CWP NHS Trust staff. Its purpose is to provide guidance for those members of staff who have face to face contact with service users to reduce the risk of Health Care Associated Infections (HCAI)

Approving meeting	Infection Prevention and Control Sub Committee	Date 24/04/2019
Implementation date	July 2019	

CWP documents to be read in conjunction with	
HR6	Mandatory Employee Learning (MEL) policy
IC2	Hand decontamination policy and procedure
HS1	Waste Management policy
IC3	Standard (universal) infection control precautions policy
IC1	Trustwide infection prevention and control operational policy

Document change history	
What is different?	Document reviewed, changes made to in relation to the TNA and competency.
Appendices / electronic forms	N/A
What is the impact of change?	Low

Training requirements	Yes - Training requirements for this policy are in accordance with the CWP Training Needs Analysis (TNA) with Education CWP.

Document consultation	
Clinical Services	Consultation via Infection Prevention and Control Sub Committee
Corporate services	Consultation via Infection Prevention and Control Sub Committee
External agencies	Consultation via Infection Prevention and Control Sub Committee

Financial resource implications	No

External references

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15. Aseptic Non Touch Technique (ANTT) Procedure Policy – Manchester Mental Health and Social Care Trust.

Equality Impact Assessment (EIA) - Initial assessment	**Yes/No**	**Comments**
Does this document affect one group less or more favourably than another on the basis of:		
- Race	No	
- Ethnic origins (including gypsies and travellers)	No	
- Nationality	No	
- Gender	No	
- Culture	No	
- Religion or belief	No	
- Sexual orientation including lesbian, gay and bisexual people	No	
- Age	No	
- Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
Is there any evidence that some groups are affected differently?	No	
If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable?		
Select		
Is the impact of the document likely to be negative? - If so can the impact be avoided? - What alternatives are there to achieving the document without the impact? - Can we reduce the impact by taking different action?	No N/A N/A N/A	
Where an adverse or negative impact on equality group(s) has been identified during the initial screening process a full EIA assessment should be conducted. If you have identified a potential discriminatory impact of this procedural document, please refer it to the human resource department together with any suggestions as to the action required to avoid / reduce this impact. For advice in respect of answering the above questions, please contact the human resource department.		
Was a full impact assessment required?	No	
What is the level of impact?	Low	

Contents

Quick reference guide

Process for Clean and Aseptic Technique

1

Key Stages and Risk Assessment

Clean technique should be used for:

-Dressing open wounds that are healing by secondary intention e.g. pressure sores, leg ulcers, dehisced wounds, healing wounds, simple grazes and when removing sutures
-Endotracheal suction
-Removal of an indwelling urinary catheter
-Emptying a urinary catheter drainage bag
-Vaginal examination (in the absence of instrumentation)

2

Aseptic technique should be used for:

-When inserting, maintaining or dressing any invasive devices, e.g. urinary catheter or a wound drain
-When dressing wounds or burns healing by primary intention
-When dressing deep wounds that lead to a cavity or sinus
-When suturing wounds
-When infusing sterile fluids and medication
-When the patient is immunosuppressed, diabetic or at high risk of infection

Environmental Management

-Remove or avoid environmental risks and adapt to setting if required
-Clean work area with universal or detergent wipe
-Gather all equipment needed for procedure

3

-Remove or avoid environmental risks and adapt to setting if required
-Decontaminate work surface with detergent and warm water or detergent wipe
-Assemble sterile procedure packs
-Ensure windows are closed and fans switched off

Personal and Equipment Decontamination and Protection

-Decontaminate hands
-Wear single use apron and gloves at appropriate times throughout procedure

4

-Decontaminate hands
-Wear single use apron and gloves (non-sterile and sterile) at appropriate times throughout procedure

Procedure

-Decontaminate hands
-Lay our equipment and protect key parts at all times using a no touch technique
-Secure waste bag
-Put on gloves and perform the procedure

5

-Decontaminate hands
-Prepare sterile field
-Lay out equipment and protect key parts at all times used a no touch technique
-Secure waste bag

Post Procedure

-Discard waste as per Trust policy
-Decontaminate work surface with detergent and warm water or detergent wipe
-Decontaminate hands
-Document the procedure

6

-Dispose of all used items including soiled dressings into plastic waste bags and sharps into appropriate sharps bin
-Discard Waste as per Trust Policy
-Decontaminate work surface with detergent and warm water or detergent wipe
-Decontaminate hands
-Document procedure

1. Introduction

Aseptic Technique is a practice which healthcare workers implement when carrying out a clinical procedure. It is utilised in a way that minimises the risk of introducing micro-organisms into a wound or insertion area where they may cause an infection. The area may be colonised with micro-organisms however, the primary aim of aseptic technique is to avoid introducing additional contamination.

Regardless of the healthcare setting the aim of aseptic technique is to prevent micro-organisms from hands, surfaces, equipment or the working environment being introduced into susceptible **key sites** by identification and protection of procedural **key parts**.

Purpose

The purpose of this policy is to support healthcare workers when they perform procedures using the aseptic technique; allowing standardisation of the aseptic technique approach. The policy is based on sound infection prevention and control (IPC) principles and national guidance.

Scope

This policy is applicable to all staff employed in all CWP healthcare settings who have a direct or indirect patient care role regardless of the care environment. The policy is also applicable to agency, locum and bank staff.

2. Standard Infection Prevention and Control Precautions

2.1 Hand Hygiene

It is essential that healthcare workers hands are effectively decontaminated in accordance with the World Health Organisations 'Five moments for hand hygiene' prior to and after aseptic procedures are performed. Effective hand hygiene is critical to the prevention of cross infection. Transient bacteria can be removed by effective hand hygiene techniques. Healthcare workers should clean their hands in line with the hand hygiene standard operating procedure (SOP) and in accordance with the World Health Organisation 5 moments for hand hygiene (Appendix 2).

Important general aspects of aseptic technique are outlined below.

2.2 Use of Personal Protective Equipment (PPE)

Non-sterile gloves and aprons provide a barrier between microorganisms on hands, clothing and the susceptible sites. Gloves must be worn for standard procedures where there is contact with non-intact skin, mucous membranes, and any activity where there is a risk of exposure to blood or body fluids.

Gloves must be removed with care to prevent shedding or spreading of micro-organisms.

Non-sterile gloves are typically used for clean procedures e.g. intravenous medication, parenteral nutrition and venepuncture.

Sterile gloves are not always required for aseptic technique procedures. Each procedure must be risk assessed.

Sterile gloves should be used if you are likely to come into contact with susceptible sites/ports i.e. wounds, cannulas and catheter connections.

3. Environmental / Air Contamination

Airborne micro-organisms in hospitals are increasingly being shown to present a risk of infection. Sensible precautions can be taken to reduce the risk of environmental contamination and include:

- Preparation of drugs to be undertaken in an appropriate designated area away from the bedside;
- Do not undertake aseptic technique when bacteria levels are likely to be at their highest e.g. ward/department cleaning, adjacent to electric fans or close to open windows or building refurbishment;
- Do not undertake aseptic technique following recent bed making or patient undressing/dressing.

4. The Key Principles of Aseptic Technique

- Always ensure hands are decontaminated effectively prior to the procedure
- Never contaminate key parts of sterile materials/equipment of the patient's susceptible key sites
- Touch non-key parts with confidence
- Take appropriate IPC precautions at all times.

5. Clean Technique

This technique can be used for undertaking procedures on vulnerable sites that are not sterile, but there is a need to avoid the introduction of micro-organisms to the site. The use of sterile equipment and sterile cleansing fluids are not crucial.

A clean technique should be used for the following:

- Dressing open wounds that are healing by **secondary intention**, e.g., pressure sores, leg ulcers, dehisced wounds, healing wounds, simple grazes and when removing sutures;
- Endotracheal suction;
- Removal of an indwelling urinary catheter;
- Emptying a urinary catheter drainage bag;
- Vaginal examination (in the absence of instrumentation).

A disposable apron and non-sterile gloves can be worn during the aseptic technique procedure and tap water rather than sterile saline can be used for cleaning wounds.

If two procedures are being undertaken, e.g., suction and a wound redressing, the healthcare worker will be expected to change their gloves and decontaminate their hands between each individual procedure.

6. Performing a clean technique

A clean technique is a non-touch technique and is defined as a modified aseptic technique.

1.	Ensure the environment is conducive for the procedure to be undertaken
2.	Discuss with patient and obtain consent
3.	Decontaminate hands
4.	Decontaminate the trolley (or working surface to be used if trolley not available, e.g., in a service users home) with detergent and warm water or detergent wipes and allow to dry
5.	Allow to dry
6.	Decontaminate hands
7.	Gather all equipment and consumables
8.	Check suitable for use (e.g. expiry dates)
9.	Don single use disposable apron
10.	Decontaminate hands
11.	If required, open dressing pack/sterile drape
12.	Open and prepare equipment/consumables
13.	Decontaminate hands
14.	Apply gloves (non-sterile or sterile)
15.	Perform procedure using aseptic technique
16.	Dispose of waste into appropriate waste stream
17.	Remove gloves and apron
18.	Decontaminate hands
19.	Clean trolley/tray
20.	Decontaminate hands
21.	Document procedure into appropriate care records

7. Examples of when Aseptic Technique should be implemented

Asepsis must be applied to all clinical procedures which bypass the body's natural defences such as:

- When inserting, maintaining or dressing any invasive devices, e.g. urinary catheter or a wound drain;
- When dressing wounds or burns healing by **primary intention**;
- When dressing deep wounds that lead to a cavity or sinus;
- When suturing wounds;
- When infusing sterile fluids and medication;
- When the patient is immunosuppressed, diabetic or at high risk of infection.

8. Procedure for Aseptic Technique

Avoid exposing or dressing wounds or performing an aseptic procedure for at least 30 minutes after bed making or domestic cleaning such as mopping or dusting to allow any dust particles to settle.

1.	Staff should always be 'Bare below the Elbows' (*see Appendix 1*)
2.	Maintain a sterile field throughout the procedure
3.	Decontaminate hands by washing with liquid soap and warm water or by applying alcohol hand rub, using the recommended technique (*see Appendix 3 Hand hygiene poster*)
4.	Decontaminate the trolley (or working surface to be used if trolley not available, e.g., in a service users home) with detergent and warm water or detergent wipes and allow to dry
5.	Assemble sterile procedure packs, e.g., dressing packs and equipment, check all items are in date and the packaging is intact and free from moisture
6.	Ensure all windows are closed and that fans switched off
7.	Explain and discuss the procedure with the service user
8.	Ensure service user is positioned both comfortably and so the area to be exposed is accessible without undue exposure
9.	Put on a disposable apron
10.	If an old dressing is in place, loosen the tape/adhesive securing it, but leave in place. Decontaminate hands with alcohol hand rub
11.	Open sterile procedure pack outer packaging, sliding the contents onto the top shelf of the trolley (or working surface)
12.	Open the sterile field by using the corners of the paper
13.	Add any extra items without compromising the sterile field
14.	Decontaminate hands with alcohol hand rub
15.	Lift the plastic waste disposal bag from the sterile field carefully by its open end and holding one edge of the opening end, place the other hand into bag, hence covering the hand with a sterile 'glove'. Using the sterile 'glove', arrange sterile items on the sterile field
16.	With sterile 'glove' still in place, remove the old dressing from wound. Invert the 'glove', removing it from hand ensuring the old dressing is left inside it. Attach the bag to the trolley, below the top shelf or on a nearby surface if in a service user's home
17.	Avoid exposing the wound for longer than the minimum time to prevent air borne contamination and to maintain optimal wound temperature
18.	Apply alcohol hand rub and put on sterile gloves ensuring hands do not contaminate outer surface of the glove
19.	Perform the procedure, including cleaning of the skin with sterile water/saline/antiseptic
20.	Obtain a wound swab/specimen if infection is suspected
21.	Label swabs giving details such as where the swab was obtained and detail any clinical indications which are present e.g. malodour, heat, level of wound exudate etc.
22.	Ensure that any dressing applied to cover the wound has at least a 1cm border
23.	Ensure that any equipment is discarded if it becomes contaminated
24.	Dispose of all used items, including soiled dressings, into the plastic waste disposal bag and seal

25.	Dispose of any sharps used during the procedure in a sharps disposal bin and close the temporary closed position, or close in the locked position if 2/3 full
26.	Remove gloves and apron, discard into the infectious waste bag
27.	Discard disposal waste bag
28.	Decontaminate the working surface with detergent and warm water or detergent wipe
29.	Decontaminate hands with liquid soap and warm water or apply alcohol hand rub
30.	Complete appropriate documentation

9. Considerations

When carrying out clean aseptic technique procedures in the community setting such as in patients' homes, schools or residential homes the healthcare worker will not always be able to work in conditions best suited for undertaking an aseptic technique procedure. Adaptations may be required to ensure the environment is conducive to the procedure being performed and that the necessary equipment remains sterile or clean.

The use of a wipeable surface such as table or a chair should be used to arrange the dressing equipment.

In the patient's own home, any pets present should be temporarily removed from the environment during the aseptic technique procedure. Also extraneous people should be asked to vacate the environment to reduce the risk of contamination and allow the privacy and dignity of the patient.

For healthcare workers generating waste in the hospital setting and at a service user's home environment refer to the CWP waste management policy.

10. Definitions

Asepsis
This prevents contamination from pathogens such as bacteria, viruses, fungi and other micro-organisms that may increase the risk of infection.

Aseptic Technique
Is a practice which healthcare workers implement when carrying out a procedure in a way that minimises the risk of introducing micro-organisms into a wound or insertion area where they may cause an infection. The area may be colonised with micro-organisms but the aim must be to avoid introducing additional contamination.

Clean Technique
A clean technique is a no touch technique and is defined as a modified aseptic technique that involves procedures to reduce the number and transmission of pathogens.

****Standard Aseptic Technique (*Appendix 4*)**
This is required for procedures that are technically simple. Typically procedures will be of short duration and involve few small Key-Parts and Key-Sites. In Standard-Aseptic Technique, Key-Parts are protected primarily by no touch technique.

****Surgical-Aseptic Technique (*Appendix 4*)**
This is required for procedures that are technically complex, are of longer duration, involve large open-sites and large or numerous key-parts. In contrast to Standard-Aseptic Technique, in Surgical-Aseptic Technique, key-parts are managed on one main Critical Aseptic Field (sterile drape) and sterile gloves are essential.

	Aseptic Technique / Clean Technique (10.3)	Aseptic Technique (10.4)
Gloves	Non-Sterile	Sterile
Dressings	Sterile	Sterile
Cleaning solution	Tap water	Sterile water/saline/antiseptic

Decontamination
Is the process of removing, or killing pathogens on an item or surface to make it safe for handling, re-use or disposal by cleaning, disinfection and/or sterilisation.

Healthcare Associated Infection (HCAI)
Any infection acquired by a person as a consequence of healthcare interventions regardless of where care is delivered.

Hand Hygiene (HH)
Is the single most important procedure for preventing the spread of HCAI. Effective hand hygiene is essential to aseptic technique and must take place prior to and after all invasive techniques.
***Hand hygiene applies to hand washing, antiseptic hand wash, antiseptic hand rub or surgical hand antisepsis.*

Invasive Procedure
A medical/nursing procedure usually caused by cutting or puncturing the skin or by inserting instruments into the body cavity.

Key-Parts
Are the critical parts of any equipment that come into contact with key-sites such as any liquid infusion or contact with any other active key-parts connected to the patient via a medical device. If contaminated during a procedure, key-parts provide a route for the transmission of pathogens onto or into the patient, and present a significant infection risk.

Key-Sites
Open wounds, including insertion and puncture sites for invasive medical devices.

Micro-organism
Any living thing (organism) that is too small to be seen by the naked eye, i.e. bacteria, viruses and some parasites.

Personal Protective Equipment (PPE)
This refers to the equipment a healthcare worker wears to protect themselves from risks to their health or safety e.g. disposable gloves and disposable aprons.

Primary Intention
Primary healing occurs when a wound is made in a sterile environment via a surgical incision. The advantage of primary healing is that the time to closure is short which reduces the risk of infection and, furthermore any possibility of scarring is limited.

Secondary Intention
Secondary intention healing occurs in chronic wounds such as venous leg ulcers, self-harm wounds or dehisced surgical wounds. Secondary healing will typically be characterised by visible granulation tissue and the scar will be bigger than in wounds healed by primary intention. Wounds healing by secondary intention will be open for longer which will render them at high risk of infection. Furthermore, chronic wounds may be typically colonised or infected and as such they are more prone to complications.

Standard Precautions
Are a set of infection control practices used to prevent transmission of diseases that can be acquired by contact with blood, body fluids, non-intact skin (including rashes), and mucous membranes.

11. Duties and Responsibilities
For general duties and responsibilities in infection prevention and control, please refer to Infection prevention and control policy.

12. Further Reading and Links

- ANTT® Principles (click here to view) (www.antt.org).
- 'The ANTT-Approach' (click here to view) (www.antt.org/ANTT_Site/ANTT-Approach.html)
- Public Health Wales (PHW) website: (click here to view)
- PHW link to ANTT: (click here to view)
- WHAIP: (click here to view)

Appendix 1 – Bare Below the elbows

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Bare Below the Elbows

Hands and arms up to the elbows / mid forearm are free from:

- Clothing
- Stoned rings
- Jewellery (bracelets and bangles)
- Wrist watches / Fitbit
- Nail varnish
- Acrylic / gel / shellac nails
- False nails

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Appendix 2 – Five Moments of Hand Hygiene

1	**BEFORE PATIENT CONTACT**	**WHEN?** Clean your hands before touching a patient when approaching him/her **WHY?** To protect the patient against harmful germs carried on your hands
2	**BEFORE AN ASEPTIC TASK**	**WHEN?** Clean your hands immediately before any aseptic task **WHY?** To protect the patient against harmful germs, including the patient's own, from entering his/her body
3	**AFTER BODY FLUID EXPOSURE RISK**	**WHEN?** Clean your hands immediately after an exposure risk to body fluids (and after glove removal) **WHY?** To protect yourself and the healthcare environment from harmful patient germs
4	**AFTER PATIENT CONTACT**	**WHEN?** Clean your hands after touching a patient and her/his immediate surroundings when leaving the patient's side **WHY?** To protect yourself and the healthcare environment from harmful patient germs
5	**AFTER CONTACT WITH PATIENT SURROUNDINGS**	**WHEN?** Clean your hands after touching any object or furniture in the patient's immediate surroundings when leaving – even if the patient has not been touched **WHY?** To protect yourself and the healthcare environment from harmful patient germs

Appendix 3 – Hand Hygiene Poster

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This sink is for hand washing only

Wet hands thoroughly with warm water and apply liquid soap

Palm to palm

Right palm over left dorsum and left palm over right dorsum

Palm to palm fingers interlaced

Backs of fingers to opposing palms with fingers interlocked

Rotational rubbing of right thumb clasped in left palm and vice versa

Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa

Remember to include wrists, remove all soap, dry hands thoroughly with paper towels and use moisturiser at least three times a day

Alcohol hand gel should be applied in the same way briskly to increase evaporation

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Appendix 4 - Pre-requisite methods of effective aseptic technique

The risk of microbiological contamination during aseptic technique procedures can be reduced by important pre-requisite measures including:	
1.	Effective environmental cleaning
2.	Effective hand washing
3.	Use of standard precautions
4.	Wear appropriate personal protective equipment e.g. apply gloves and protect uniforms by wearing a disposable apron
5.	Ensure that fluids and all materials to be used are in date
6.	Institute a non-touch technique
7.	Do not contaminate key parts
8.	Dispose of single use items, do not reuse
9.	Dispose of waste as per local policy
10.	Store sterile equipment in clean, dry conditions, off the floor and away from potential damage
11.	Safe storage of procedure equipment
12.	Ensure compliance with decontamination procedures and policies
13.	Rationalisation and standardisation of procedure equipment choices
14.	Compliance with decontamination procedures and policies