# SESLHD POLICY COVER SHEET

| | |
|---|---|
| **NAME OF DOCUMENT** | Aseptic Technique |
| **TYPE OF DOCUMENT** | Policy |
| **DOCUMENT NUMBER** | SESLHDPD/271 |
| **DATE OF PUBLICATION** | July 2025 |
| **RISK RATING** | Medium |
| **LEVEL OF EVIDENCE** | National Safety and Quality Health Service Standards:<br>Standard 3 - Preventing and Controlling Infections<br>NHMRC grade A - Body of evidence can be trusted to guide practice |
| **REVIEW DATE** | July 2028 |
| **FORMER REFERENCE(S)** | Not Applicable |
| **EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR** | Director, Clinical Governance and Medical Services |
| **AUTHOR** | Infection Control Subcommittee<br>SESLHDInfectionContro@Health.nsw.gov.au |
| **POSITION RESPONSIBLE FOR THE DOCUMENT** | Infection Control Policy Working Party |
| **FUNCTIONAL GROUP(S)** | Infection Control |
| **KEY TERMS** | Aseptic technique, Asepsis, sterile technique, clean technique |
| **SUMMARY** | Aseptic technique is a crucial part of using Standard Precautions. It involves a set of practices that prevent patients from acquiring healthcare associated infections.<br><br>These practices also protect the health care worker (HCW) from contact with blood and body substances.<br>Understanding the 5 principles of aseptic technique, knowing when it is appropriate to be used, and being competent in its practice are mandatory requirements for all HCW's.<br>This policy provides an overview of aseptic technique for clinical HCW's and outlines both the principles and the procedures involved in its practice. |

## 1. POLICY STATEMENT

Aseptic technique is an element of standard precautions. It involves a set of practices that protect patients from acquiring healthcare associated infections, and HCW's from contact with blood and body substances.

- **Aseptic Technique:** minimises the contamination of a key site, equipment or the immediate environment by pathogenic organisms.

When aseptic technique is used, *key parts* and *key sites* are protected, and transmission of micro-organisms is reduced. Contamination or transmission can otherwise occur, even between different sites of the same patient. This absence of microorganisms is called asepsis, essential to protecting patients from harmful bacteria, viruses and fungi that may cause infection.

Aseptic Technique differs from:

- **Clean Technique:** the removal of visible contamination or debris e.g., cleaning a grazed area on a patient's knee.
- **Sterile technique:** the complete absence of microorganisms. Near sterile techniques can only be achieved in controlled environments such as specially equipped operating theatres (laminar flow) or pharmacies (clean room).

## 2. AIMS

This policy will:

- Explain the terminology used in aseptic technique
- Provide detailed instructions on how and when to use aseptic technique in order to protect patients and HCW's from harm.

## 3. TARGET AUDIENCE

All competent clinicians who perform procedures that require an aseptic technique.

## 4. RESPONSIBILITIES

### 4.1 General Managers are to:

- Provide resources to enable compliance with this Policy
- Ensure compliance with this Policy is monitored and evaluated.

### 4.2 Directors of Clinical Operations and Directors of Nursing and Midwifery are to:

- Delegate the day-to-day responsibility of establishing and monitoring the implementation of this policy to the relevant clinical teams
- Make appropriate education and training available to all relevant clinical staff (e.g., Nursing, Junior Medical Officers, and Pharmacists who perform procedures in Clean Rooms).

### 4.3 Allied Health Managers and Pathology Collection Managers are to:

- Delegate the day-to-day responsibility of establishing and monitoring the implementation of this policy to the relevant clinical teams
- Make appropriate education and training available to all relevant clinical staff (e.g.,

Physiotherapists, Speech Pathologists and Occupational Therapists)

**4.4 All clinical staff that perform procedures that require an aseptic technique are to:**

- Comply with this policy to perform safe clinical procedures to reduce the risk of the patient acquiring a healthcare associated infection
- Notify breaches of aseptic technique incidents in the incident reporting system (e.g., IIMS) in accordance with the NSW Health Incident Management Policy
- Complete the NSW Health Education and Training Institute (HETI) online learning module: Aseptic Technique (Course Code: 40027445)

## 5. DEFINITION OF KEY TERMS

| Term | Definition | Examples |
|---|---|---|
| **Asepsis** | Free from pathogenic organisms | |
| **Aseptic Field** | The creation and maintenance of an aseptic area or working space by a HCW. | |
| **Critical aseptic field** | When key parts/sites **cannot** be protected with covers, caps or handled with a non-touch technique, or when open and invasive procedures require large working areas for long durations, a critical aseptic field is used. The field itself is managed as a key part. Only sterilized equipment may be used on the field, sterile gloves and often, full barrier precautions are required. | Insertion of central lines, chest drains, operating theatre set up for general surgery |
| **Critical micro aseptic field** | When key parts and sites **can** be protected by syringe caps, sheathed needles, sterile packaging and non-touch technique.<br>Critical micro aseptic fields are used as part of both surgical and standard aseptic technique.<br>They may be used as a component of a larger critical aseptic field, or as the critical component of a general aseptic field. | Administering IV medication Insertion of an Indwelling Catheter, Venepuncture |
| **Glove (sterile) use** | Used when it is necessary to touch key parts or key sites directly. Sterile gloves minimize both the risk of contamination for the patient, and blood and body fluid exposure for the HCW. | Indwelling catheters, insertion of chest drains, taking blood cultures |
| **Glove (non-sterile)** | Used to minimize the risk of contamination to the patient and blood or body fluid exposure for the HCW. | Basic dressing |

| Term | Definition | Examples |
|---|---|---|
| **Hand hygiene** | All HCW's are required to follow to "The 5 moments of hand hygiene", as detailed by the National Hand Hygiene Initiative. | Moment 2: Before a procedure or body substance exposure |
| **Key Part** | The part of clinical instrument or equipment that comes into direct or indirect contact with a key sites, key part, or infusion. | Tips of forceps, scissor tips, the sticky part of a dressing that is applied over a wound, needles or introducers; surgical instruments such as scalpel blades, forceps, and retractors; the bungs of invasive devices such as PIVC's, PICC's or the tip of a urinary catheter. |
| **Key Site** | The area on or attached to the patient that requires protection from micro-organisms. | Wound, IV insertion site |
| **Risk Assessment** | A structured way of assessing whether aseptic technique is needed. | |
| **Sequencing** | Aseptic technique must be performed in a particular sequence to ensure contamination of key parts or key site(s) does not occur. Any variation has the potential to cause a breach with the aseptic field and place the patient at risk. | |
| **Standard Aseptic Technique** | A set of specific practices and procedures, performed by HCW's to prevent healthcare associated infection.<br>A way of preventing pathogenic microorganisms from being introduced to susceptible sites by hands, surfaces and equipment.<br>Risk assessment, planning, diligent hand hygiene, use of micro aseptic fields and non-touch technique are all critical components of standard aseptic technique. | Technically simple procedures of 20 minutes or less such as IV cannulation, simple dressings, IV medication administration |
| **Sterile** | The complete absence of micro-organisms. | |
| **Surgical Aseptic Technique** | Suitable for technically complex procedures longer than 20 minutes. Surgical asepsis may involve large open key sites and numerous key parts. A critical aseptic field, sterile drapes and gloves are used as well as full barrier precautions. Using a non-touch technique a core element of surgical aseptic technique. | Insertion of indwelling catheters, complex wound dressings, insertion of PICC/CVC's, surgical procedures. |

## 6. Risk Assessment and The Principles of Aseptic Technique

Conducting a risk assessment is crucial in when aseptic technique for a procedure. A risk assessment may include, involve and/or consider:

- How technically difficult the procedure is
- How long the procedure will take
- How urgent the procedure is
- Whether the patient is in pain? Compliant or consenting to the procedure?
- The setting / general cleanliness of the environment
- The equipment and resources available
- What type of aseptic field is most suitable and achievable

### 6.1 Principle 1: Sequencing

Aseptic technique must be performed in a particular sequence to ensure contamination of key parts or key site(s) does not occur. Any variation has the potential to cause a breach with the aseptic technique and place the patient at risk of a HAI.

Sequence Steps:

- Assess the risks associated with the patient & procedure, and act to mitigate these.
- Prepare the patient, environment & equipment needed for the procedure, plan each step.
- Perform the procedure using standard precautions in a safe logical manner.
- Pack up & remove all items safely, perform hand hygiene & document (including any breaches in asepsis).

### 6.2 Principle 2: Environmental Control

Aseptic technique procedures should be performed in a safe clean space where environmental contamination will not occur.

Reducing risk in the environment may include:

- Timing the procedure so that environmental cleaning, bed making or patient movements at the time are minimized. (No vacuuming or buffing of floors, no dust generating)
- Always cleaning the procedure trolley immediately prior to a procedure.
  Always using a procedure trolley. The patient bedside table is unsuitable.

### 6.3 Principle 3: Hand Hygiene

HCW's should remove their watch or any jewelry prior to the procedure, ensuring they are bare below the elbows, and wash hands thoroughly as per table on Page 4.

Always perform hand hygiene:

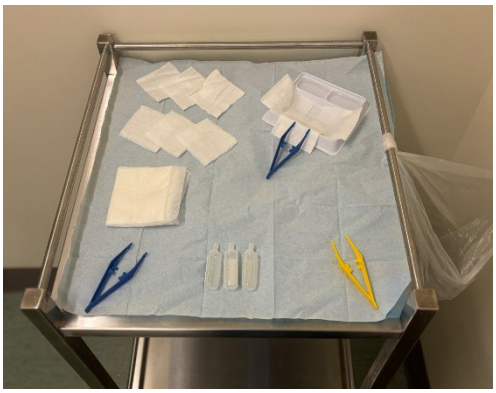
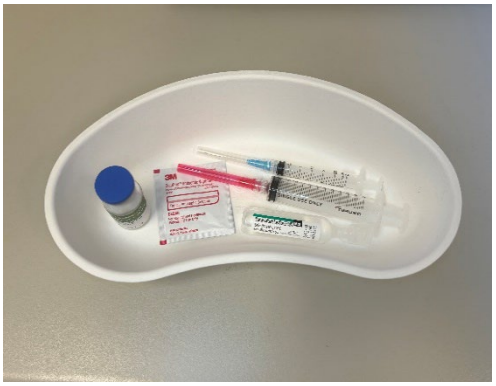
- Before and after collecting equipment
- Before and after setting up an aseptic field
- Immediately before and after a procedure (Moments 3 & 4). If gloves are used, hand hygiene should be performed just prior to donning and just after doffing.

See SESLHDPR/343 Bare Below the Elbows, NSW Health Policy Directive PD2023_025 - Infection Prevention and Control in Healthcare Settings and Infection Prevention and Control Practice Handbook - Clinical Excellence Commission.

| Activity | Method | Action | Duration |
|---|---|---|---|
| Aseptic Technique | Alcohol-based hand rub (ABHR) | Dispense solution into cupped dry hands. Rub vigorously over all areas of the fingers, hands and wrists until the solutions has evaporated and hands are dry. | 30 – 60 secs |
| Simple wound dressings<br>Insertion of IDC<br>Insertion of PIVC<br>Administration of IV Medication | Antiseptic handwash and running water | Wet hands using warm water, apply recommended dose of liquid directly onto hands and work up lather on all areas of the fingers, hands and wrists. Rinse and dry hands with single use towel. | 30 – 60 secs |
| Sterile Technique | Antiseptic handwash and running water | Wet hands using warm water, apply recommended dose of liquid directly onto hands and work up lather on all areas of the fingers, hands, wrists and forearms for 2 minutes then rinse and repeat for a further 2 minutes. Rinse then dry hands with a sterile towel | 5 minutes for first operative procedure, 3 minutes for subsequent procedures. |
| Surgical Procedures | Alcohol-based hand rub (ABHR) | Dispense two pumps of solution into cupped palm of one hand then rub over the opposite forearm from the wrist to the elbow for 1 minute. Repeat this step for the other forearm for 1 minute. Then dispense two pumps solution into cupped hands and fingers for 1 minute until hands are dry. | 3 minutes |

### 6.4 Principle 4: Maintenance of Aseptic Technique

Aseptic fields are important in providing a controlled aseptic working space to protect key parts and key sites from the immediate procedure environment. Aseptic fields are increased in size and sterile drapes added based on procedure complexity.

| | |
|---|---|
| **General Aseptic Fields**<br><br>These fields are most used for wound dressings (sterile dressing packs) and cannulation (sterile IV starter packs.) The general aseptic field allows for key parts to be protected when combined with the use of aseptic non-touch technique. Prior to set-up, the trolley or surface underneath the pack, is cleaned with universal wipes and allowed to dry. |  |
| **Critical Aseptic Fields**<br><br>Generally used for surgical procedures, all items in these fields, (surgical instruments, swabs) are required to be sterile. This protects the many key sites and/or parts during the procedure. Asepsis is maintained through the entire procedure; sterile gloves, gowns and surgical drapes are used by clinicians trained in aseptic non touch technique. |  |
| **Critical Micro Aseptic Fields**<br><br>A smaller subset of a critical aseptic field, these commonly used fields protect a single key part or site. A micro aseptic field is created when a needle is protected by a sterile cap, or when a sterile bung is secured to protect an intravenous access device. Aseptic non-touch technique is used to maintain asepsis when creating these fields. |  |

*Reference: My Health Learning, Aseptic Technique Module (40027445)*
*Images: Infection Prevention and Control, The Sutherland Hospital (2025)*

### 6.5 Principle 5: Personal Protective Equipment

**6.5.1** When to wear Clean or Sterile Gloves

- Nonsterile gloves may be used where it is possible to undertake the procedure without touching any key parts or key sites, using a non-touch technique e.g. IV drug administration, using forceps for basic dressings
- Sterile gloves must be worn for when a non-touch technique cannot be used to maintain the aseptic technique i.e. key parts or key sites require touching/handling.

**6.5.2** Standard and Transmission Based Precautions contained in Infection Prevention and Control Practice Handbook - Clinical Excellence Commission.

**6.5.3** Perioperative attire – See Australian College of Operating Room Nurses (ACORN) Standards (latest edition).

## 7. ANTISEPTICS AND WOUND CLEANSERS

- Good skin preparation assists in the reduction of infection by reducing the risk that the patient's own skin flora will not enter the wound
- For basic wound cleaning 0.9% sodium chloride is to be used unless an antiseptic wound dressing is in use
- When insertion of an indwelling catheter is required, 1 x 30mL 0.9% sodium chloride solution is recommended for cleaning the site
- For insertion of PIVC's, 0.5-2% chlorhexidine gluconate (CHG) and 70% alcohol should be used, for all other device insertions 2% CHG is recommended. If there is a contraindication to CHG povidone iodine 10% in 70% alcohol can be used. i.e. NSW Health Policy Directive PD2019_040 - Intravascular Access (IVAD) – Infection Prevention and Control.

## 8. OPERATING THEATRES

The Perioperative Suite members of the multidisciplinary team participating in surgical procedures are to comply with current version of the Australian College of Operating Room Nurses (ACORN) Standards in:

- S2 - Aseptic Technique
- S7 - Infection Prevention
- S11 - Perioperative attire
- S18 - Skin Preparation of the patient
- S21 - Surgical scrubbing, gowning and gloving
- S26 - Specimen Identification, Collection and Handling

## 9. WASTE MANAGEMENT

Waste management is simpler if segregation occurs during the procedure. Consider using two bags for waste segregation e.g. plastic packaging (from dressing packs) can be recycled for clinical waste and a bag to be used for general waste.
Refer to NSW Health Policy Directive PD2020_049 - Clinical and Related Waste Management for Health Services.

## 10. STAFF TRAINING

- Clinical training and competency assessment of aseptic technique is procedure specific and assessed in the hospital environment.
- Completion of NSW My Health Learning module: Aseptic Technique (Course Code: 40027445)
- Completion of My Health Learning module: Hand hygiene for clinical healthcare workers (Course Code: 526958944)

## 11. CLINICAL HANDOVER

Handover includes:

- Describing the way a procedure has been performed, i.e. using aseptic technique
- Possible or known breaches of aseptic technique e.g. tear in glove noted post procedure
- Any difficulties with the procedure, e.g. “multiple attempts made for IV cannulation, difficult patient behavior, asepsis maintained”
- Relevant pathology results e.g. “IDC change, ESBL detected in urine”
- Allergies to products or antiseptics used for aseptic procedures.

Refer to SESLHD Procedure SESLHDPR/303 - Clinical Handover: Implementation of ISBAR Framework and Key Standard Principles.

## 12. COMPETENCY

Use local and CEC guidelines/Competency/Clinical Assessments/Learning Packages that include Aseptic Technique within the healthcare facility. Training is procedure specific and usually provided in a workshop format followed by clinical supervision based practical assessment in the healthcare environment. Workshops are available for booking in My Health Learning.

Procedures requiring competency assessment and training include:

- Administration of IV medication
- Basic and complex dressings
- Venepuncture
- Peripheral intravenous cannulation, DIVA insertion, PICC and CVC insertion
- Access of central venous access devices
- Collection of blood cultures
- Insertion of indwelling urinary catheters (male and female).

## 13. DOCUMENTATION

Documentation of all procedures that involve aseptic technique in:

- Patient’s healthcare record, e.g. Progress Notes, Wound Care Chart, Patient Care Plan and/or
- Electronic Medical Record, e.g. PowerChart, SurgiNet, FirstNet, Anaesthetic Record, eRIC.

## 14. AUDIT

- Based on local facility requirements in response to incident/s, and to comply with National Standards. Audit tools available on QARS, hospital wide and unit specific.

## 15. REFERENCES

### 15.1 Internal References

- NSW Health Policy Directive PD2023_025 - Infection Prevention and Control in Healthcare Settings
- NSW Health Policy Directive PD2023_018 - Cleaning of the Healthcare Environment
- NSW Health Policy Directive PD2012_069 - Health Care Records - Documentation and Management
- NSW Health Policy Directive PD2020_049 - Clinical and Related Waste Management for Health Services
- NSW Health Policy Directive PD2019_040 - Intravascular Access (IVAD) – Infection Prevention and Control
- Infection Prevention and Control Practice Handbook - Clinical Excellence Commission
- SESLHDPR/303 - Clinical Handover: Implementation of ISBAR Framework and Key Standard Principles

### 15.2 External References

- Australian Guidelines for the Prevention and Control of Infection in Healthcare (2024)
- The Australian College of Operating Room Nurse's (ACORN) Standards
- © 2013 Aseptic Non-Touch Technique (ANTT) ® Adapted from ANTT.org The international standard for safe aseptic technique Program purchased by SESLHD Clinical Governance Unit for usage across the SESLHD hospitals
- Australian Commission on Safety and Quality in Healthcare's National Standard 3.11 - Aseptic Technique
- The Sutherland Hospital (2025) Aseptic Technique Images. Retrieved from Infection Prevention and Control
- My Health Learning, Aseptic Technique Module (40027445), accessed July 2025.

## 16. VERSION AND APPROVAL HISTORY

| Date | Version No. | Author and approval notes |
|---|---|---|
| Jan 2014 | 0 | Developed by Joe-Anne Bendall, CNC Infection Control |
| Feb – Mar 2014 | 1 | Re-formatted by District Policy Officer |
| Apr 2014 | 1 | Finalised by Author. Approved by Executive Clinical Sponsor, Prof. George Rubin.<br>Submitted to CQC for approval for meeting to be held in May 2014 |
| Jun 2014 | 1 | Approved by CQC |

| | | |
|---|---|---|
| July 2015 | 2 | Review of references<br>Addition of HETI Online Module course codes<br>Change to author and responsibility<br>Endorsed by Executive Sponsor |
| August 2018 | 3 | Minor review and update of references<br>Endorsed by Executive Sponsor |
| May 2021 | 4 | Minor review: Referencing updates |
| June 2021 | 4 | Endorsed by SESLHD Infection Prevention and Control Committee and Executive Sponsor |
| 30 July 2025 | 4.1 | Minor review. Updated references. CHG 0.5%-2% as preferred skin preparation for insertion of PIVC's. Training or aseptic technique is MHL modules and procedure specific practical training in the healthcare environment. Endorsed by SESLHD Infection Prevention and Control Committee. |