

Aseptic Technique Policy

Policy Number 1.246

Policy Function Continuum of Care

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Summary This policy outlines key principles for aseptic technique which protect patients during clinical procedures utilising infection prevention measures that minimise the risk of introducing harmful infectious agents. Aseptic technique is required with specific clinical procedures including simple and complex dressings, insertion and management of urinary catheterisation (indwelling and suprapubic), insertion and maintenance of vascular access devices such as peripherally inserted devices and intravenous therapy maintenance and oral health surgical procedures.

Responsible Officer Executive Director Clinical Operations

Applicable Sites

- Administration Centres
- Community Sites (e.g. Court Liaison Service, Community Integration Team, etc.)
- Health Centres (Adult Correctional Centres or Police Cells)
- Health Centres (Juvenile Justice Centres)
- Long Bay Hospital
- Forensic Hospital

Previous Issue(s) Policy 1.246 (May 2017)

Change Summary

- *Updated NSW Ministry of Health Policy Directives*
- *Updated position titling*

HPRM Reference POLJH/1246

Authorised by Chief Executive, Justice Health & Forensic Mental Health Network

1. Preface

This policy outlines the key principles for aseptic technique which is a framework for aseptic practice in Justice Health & Forensic Mental Health Network (the Network). In aseptic technique, asepsis is ensured by identifying and protecting key parts and key sites from contamination thereby protecting patients during clinical procedures utilising infection prevention measures that minimise the risk of introducing harmful infectious agents.

This policy defines the terminology used for aseptic technique and provides information about minimising the risk to the patient from acquiring a healthcare associated infection (HAI). Invasive devices (e.g. venous access devices or urinary catheters) are a common risk associated with HAIs.

Aseptic technique is required for a range of specific clinical procedures. These include simple, complex or large dressings, urinary catheterisation, insertion and maintenance of vascular access devices such as peripherally inserted devices (including lines), intravenous (IV) therapy maintenance and oral health surgical procedures.

2. Policy Content

2.1 Mandatory Requirements

All clinical staff that perform aseptic procedures are responsible for ensuring compliance with the requirements of this policy.

2.2 Implementation - Roles & Responsibilities

Executive Director Clinical Operations, Network Director Nursing & Midwifery Services and Clinical Director Oral Health

- Responsible for strategic oversight for ensuring aseptic technique compliance is met.
- Responsible for reviewing compliance rates of aseptic technique audits to identify any possible factors and plan appropriate actions that will assist in improving compliance.

Clinical Nurse Consultant Infection Prevention & Communicable Diseases

- Responsible for providing expert clinical advice and support on aseptic technique and related clinical practice/s to managers and staff.

Education & Training Unit

- Responsible for providing reports on mandatory My Health Learning Aseptic Technique eLearning and Hand Hygiene eLearning.

Nurse Managers and Nursing Unit Managers

- Responsible for ensuring staff are compliant with the required aseptic technique training.
- Responsible for ensuring the appropriate clinical practice of staff.
- Responsible for auditing and reviewing compliance of aseptic technique audits to identify appropriate actions that will assist in improving compliance in their respective areas.

All clinical staff that perform procedures which require an aseptic technique

- Responsible for completing all related mandatory training prescribed by the NSW Ministry of Health and any locally identified training and education requirements. This includes but is not limited to: Aseptic Technique, Hand Hygiene, Infection Prevention and Control Practices, Invasive Device Protocols, Sharps Injury, Waste Management and Personal Protective Equipment.
- Responsible for maintaining aseptic technique clinical practice and proficiency.

3. Procedure Content

3.1 Aseptic Technique Terminology

The following table provides definitions for aseptic technique terms.

Term	Definition	Example
Aseptic / Asepsis	Free from pathogenic microorganisms.	<ul style="list-style-type: none"> • Using a non-touch technique • Using sterile gauze • Using sterile forceps • Using sterile gloves
Aseptic Fields	Are important in providing a controlled aseptic work space to help maintain the integrity of key parts and key sites during clinical procedures.	Sterile dressing trays Sterile procedure packs
Aseptic Technique	<p>Protects patients during clinical procedures by utilising infection prevention measures that minimise the presence of microorganisms.</p> <p>Primary aim of aseptic technique is to prevent pathogenic microorganisms, in sufficient quantity to cause infection and/or contamination, from being introduced to susceptible sites by hands, surfaces and equipment.</p> <p>While the principles of aseptic technique remain constant for all procedures, the level of practice will change depending upon a standard risk assessment.</p> <p>Aseptic technique must be performed for appropriate procedures in both inpatient (hospital) and outpatient (custodial) settings.</p>	<p>Procedures include (but not limited to):</p> <ul style="list-style-type: none"> • IV therapy maintenance • Simple or large dressings • Complex dressings • Urinary catheterisation • Venepuncture • IV cannulation • Insertion and maintenance of vascular access devices including peripheral lines (Dialysis Unit Long Bay Hospital) • Surgical procedures performed by Dentists and minor procedures (e.g. removal of skin lesion/s) by Doctor/Nurse Practitioner
Hand Hygiene	Effective hand hygiene is an essential part of aseptic technique.	<ul style="list-style-type: none"> • Wound dressings • Urinary catheterisation
Key Parts	<p>Are the sterile components of the equipment utilised during procedures.</p> <p>Key parts must be identified and protected at all times.</p> <p>Key parts must only come into contact with other key</p>	<p>Examples include (but are not limited to):</p> <ul style="list-style-type: none"> • Tips of forceps, scissors • Dressing packs • Dressings to be applied over

Term	Definition	Example
	parts and / or key sites.	the wound <ul style="list-style-type: none"> • Scalpel blades • Syringe tips • Invasive devices such as IV cannulas or urinary catheters
Key Site	Any insertion or access site or wound that is connected to, or is part of the patient. Key sites must be identified and protected at all times.	<ul style="list-style-type: none"> • Open wounds • Insertion / access sites for IV devices
Non-touch technique	Is a technique where the clinician’s hands do not touch, and thereby contaminate key parts and key sites; this is critical for maintaining asepsis.	-
Personal Protective Equipment (PPE)	Refers to a variety of barriers, used alone or in combination, to protect mucous membranes, airways, skin and clothing from, or transmission of, infectious agents. Prior to any clinical procedure being undertaken, staff must consider the type and use of PPE required and ensure adherence with the correct sequence for donning and removing PPE.	<ul style="list-style-type: none"> • Gloves • Gowns/aprons • Masks • Eye protection • Face shields
Risk Assessment	Should be performed prior to commencing a clinical procedure requiring aseptic technique, using the following steps: <ul style="list-style-type: none"> • Sequencing • Environmental control • Hand hygiene • Maintenance of aseptic fields • Personal protective equipment 	-
Risk Matrix	An approach to assist in identifying areas where aseptic technique is required and prioritise how the Network will respond to the risks identified.	<ul style="list-style-type: none"> • How frequently aseptic technique is used in the clinical context? • How frequently and what treatment is being provided? • How recently have skills in aseptic technique been assessed in the workforce undertaking the procedure?
Standard Aseptic Technique	<ul style="list-style-type: none"> • Typically short duration procedures (approx 20 minutes) • Technically simple procedures • Involve relatively few and small key sites and key parts • Require main general aseptic field and non-sterile gloves • Use of critical micro aseptic fields and non-touch 	<ul style="list-style-type: none"> • IV therapy maintenance • Simple, complex or large dressings • Urinary catheterisation • Venepuncture • IV cannulation • Insertion and maintenance of vascular access devices

Term	Definition	Example
	technique is essential to protect key parts and key sites.	including peripheral and central lines (Dialysis Unit, Long Bay Hospital)
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 developing a HAI.	-
Sterile	Free from microorganisms	-
Surgical Aseptic Technique	<ul style="list-style-type: none"> • Technically complex procedures • Involve extended period of time • Large open key sites or large or numerous key parts • Require main critical aseptic field and sterile gloves and all precautions 	<ul style="list-style-type: none"> • Oral Health surgical procedures • Minor surgical procedures performed by Doctor/Nurse Practitioner

3.2 Principles of Aseptic Technique

Clinical practices are based on the five essential principles of aseptic technique. These are:

1. Sequencing:

- Performing a risk assessment
- Pre-procedure preparation
- Performing the procedure
- Post procedure practices, handover and documentation

2. Environmental control:

- Aseptic technique procedures should be performed in an area where environmental contamination will not occur with equipment, key sites and sterile consumables.
- Reducing risk in the environment should include, but not be limited to:
 1. Not using bedside/clinic table or bed as a procedure trolley
 2. Cleaning dressing and procedure trolleys with detergent/disinfectant wipes (including top and bottom shelves and drawers) before use to prevent contamination of equipment
 3. Reducing patient and staff movements in the immediate vicinity occurring at the time of the procedure
- There is recognition that in the Network’s clinical environment there may be emergency situations where staff will be operating outside the controlled clinical environment. Staff should make all reasonable efforts to ensure compliance with aseptic technique during emergency procedures as much as clinically possible.

3. Hand hygiene:

Hand hygiene must be performed according to the 5 Moments for Hand Hygiene which are:

- 1) Before touching a patient
- 2) Before a procedure
- 3) After a procedure or body fluid exposure
- 4) After touching a patient
- 5) After touching a patient’s surroundings

4. Maintenance of aseptic fields:

- Cleaning and/or disinfecting key site(s) and key part(s) prior to appropriate procedure(s)
- Establishment of an aseptic field
- Use of sterile equipment
- Maintenance of aseptic field, including protecting the key sites and key parts
- Use of non-touch technique

5. Personal protective equipment:

- Correct selection and use of sterile and non-sterile PPE

3.3 Aseptic Procedures

In the Network aseptic procedures include (but are not limited to):

- IV therapy maintenance
- Simple, complex or large wound dressings
- Urinary catheterisation
- Venepuncture
- IV cannulation
- Insertion and maintenance of vascular access devices including peripheral lines - Dialysis Unit, Long Bay Hospital
- Surgical and minor procedures - Oral Health, Doctor/Nurse Practitioner
- Oral surgery (e.g. removal of erupted teeth, enucleation of radicular cysts)

Table: Aseptic procedures, hand hygiene and glove type

Aseptic Procedure	Performing Hand Hygiene		Gloves	
	Alcohol free hand rub OR neutral liquid hand wash & water	Antimicrobial hand wash & water (2% chlorhexidine)	Non sterile	Sterile
Complex or large wound dressings e.g. negative pressure wound therapy	N/A	✓	N/A	✓
Dialysis Unit – Long Bay Hospital Insertion and maintenance of vascular access devices including peripheral lines	N/A	✓	N/A	✓

Aseptic Procedure	Performing Hand Hygiene		Gloves	
	Alcohol free hand rub OR neutral liquid hand wash & water	Antimicrobial hand wash & water (2% chlorhexidine)	Non sterile	Sterile
IV cannulation	✓	N/A	✓	N/A
IV therapy maintenance	✓	N/A	✓	N/A
Surgical procedures – Oral Health, Minor surgical procedures - Doctor/Nurse Practitioner	N/A	✓	N/A	✓
Simple wound dressings	✓	N/A	✓	N/A
Urinary catheterisation	N/A	✓	N/A	✓
Venepuncture	✓	N/A	✓	N/A

3.4 Oral Health - Surgical Procedures and Aseptic Technique

The five essential principles for aseptic technique (i.e. sequencing, environmental control, hand hygiene, maintenance of aseptic technique and PPE) are to be used for chair-side procedures in oral health. The patient’s submucosal oral tissues are the key sites that should be protected from microorganisms on hands, gloves, surfaces and equipment.

Most of the instruments and equipment used routinely in oral health, such as probes and scalers, are classified as invasive devices, and therefore should be handled aseptically. The key parts of those instruments are, for example, the tip of a probe or the tip of a scaler.

The aseptic field for a routine dental procedure can be prepared by placing a clean single-use cloth on the clean bracket table.

Sterile gloves must be used when surgical aseptic techniques are undertaken such as incision into mucosal soft tissues, surgical penetration of bone or elevation of a muco-periosteal flap. Sterile gloves are required for the surgical removal of unerupted teeth and for minor oral surgical procedures. Sterile gloves must be worn when a non-touch aseptic technique cannot be used to maintain asepsis (i.e. the key parts or key sites require touching and handling). In addition the requirements for oral surgical procedures including using appropriate sterile drapes, sterile instruments and performing surgical hand hygiene (using an antimicrobial handwash solution). Long hair must be tied back and covered and beards must also be covered.

3.5 Aseptic Technique Training Requirements by Professional Groups

The following professional groups have been targeted and must undertake the mandatory My Health Learning Aseptic Technique and Hand Hygiene eLearning education - Registered Nurses, Enrolled Nurses, Assistant Nurses, Nurse Practitioners, all Medical Officers who are involved in clinical patient care (except for Psychiatrists), Visiting Medical Officers and/ or Staff Specialist designations, Allied Health, Physiotherapists, Dentists and Dental Assistants.

3.6 Auditing Aseptic Technique Compliance

An audit of aseptic technique compliance using the Network Aseptic Technique Audit Tool will be scheduled in all areas including Custodial Health, Forensic Hospital, Long Bay Hospital, Oral Health and Adolescent Health once every 12 months on an annual basis. Compliance assessment target is 100%.

Each site must audit 50% of their full time employees in all professional groups as outlined in Section 3.5. Audits may be completed over a 2 month period. Audit results will be monitored by the Directorates and Clinical Governance Committees for compliance rates. Managers are responsible for auditing and reviewing compliance of aseptic technique audits to identify appropriate actions that will assist in improving compliance in their respective areas.

4. Definitions

Must

Indicates a mandatory action required that must be complied with.

Should

Indicates a recommended action that should be followed unless there are sound reasons for taking a different course of action.

5. Legislation and Related Documents

Legislation	Health Practitioner Regulation (Adoption of National Law) Act 2009 Health Practitioner Regulation (New South Wales) Regulation 2016
The Network Policies and Procedures	5.070 Infection Prevention & Control
The Network Audit Tool	JH&FMHN Aseptic Technique Audit Tool
NSW Policy Directives, and Guidelines	GL2013 013 Peripheral Intravenous Cannula (PIVC) Insertion and Post Insertion Care in Adult Patients PD2017 013 Infection Prevention & Control Policy PD2013 024 Oral Health: Cleaning, Disinfecting and Sterilizing
Others	Australian Dental Association Guidelines for Infection Control 2016 Infection Prevention & Control Practice Handbook 2016 Revised 2017 NH&MRC Australian Guidelines for the Prevention and Control of Infection in Healthcare 2010