



**GUIDELINE**

**Urethral Catheterisation**

<b>Scope (Staff):</b>	Nursing and Medical Staff
<b>Scope (Area):</b>	NICU KEMH, NICU PCH, NETS WA

**Child Safe Organisation Statement of Commitment**

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this [disclaimer](#)

**Contents**

Urethral Catheterisation	1
Aim	2
Risk	2
Key Points	2
Indications for an IDC	2
Contraindications/Precautions	2
Urethral Catheterisation Equipment	3
Female Urethral Catheterisation	3
Procedure	3
Male Urethral Catheterisation	5
Procedure	5
Care of an IDC	6
Flushing of an IDC	6
IDC Specimen Collection	7
IDC Removal	7
Intermittent Catheterisation	8

## Aim

To provide guidance and instruction on the technique for insertion and management of the neonate requiring an indwelling urinary catheter.

## Risk

Insertion of an intermittent or indwelling urinary catheter (IDC) is an invasive procedure that places the patient at risk of complications including trauma to the urethra, pain and infection. Adherence with aseptic technique, handwashing protocols and vigilant assessment and maintenance of an IDC can minimise these risks.

## Key Points

- ONLY Nursing staff who have completed the Neonatal Urethral Catheterisation Learning Package are to perform insertion or removal of an IDC.
- Foleys balloons are generally NOT inflated in neonates. IDC's inserted in theatre may have their balloons inflated. Infants returning from theatre with an IDC insitu should have the balloon checked. The decision to deflate the balloon should be made in consultation with the Neonatal Consultant and Surgical team.
- ALWAYS check the balloon is not inflated prior to removal of IDC.
- Maintain thermoregulation needs when inserting an IDC, particularly for preterm neonates and ensure privacy is maintained throughout.

## Indications for an IDC

Continuous bladder drainage:	Intermittent catheterisation:
<ul style="list-style-type: none"> <li>• Before, during or after some surgical procedures.</li> <li>• Risk of, or demonstrated, urinary retention associated with paralytic agents and opioid infusions.</li> <li>• To accurately monitor urine output in critically unwell infants.</li> </ul>	<ul style="list-style-type: none"> <li>• Immediate relief of bladder distension.</li> <li>• Collection of urine sample for diagnostic purposes.</li> <li>• Patients with nerve-related bladder dysfunction to empty the bladder at frequent intervals throughout the day.</li> <li>• To assess bladder residual volumes.</li> </ul>

## Contraindications/Precautions

- Catheterisation of extreme preterm and VLBW neonates comes with a **HIGH RISK** of complications and should only be performed after consultation with senior medical staff. Bladder ultrasound should be performed to assess whether there is urinary retention or whether there is no urine production. Consider surgical consultation in neonates under 28 week's gestation.
- Nursing staff should seek medical advice before catheterising any patient who has known urinary tract abnormalities or has undergone urological/renal tract surgery. Catheterisation of these babies should be done by the specialist surgical team.

**Table 1- Catheter Size Guide – Male and Female**

Age	Weight	Catheter Size
Neonate	<1200g	5 Fr Uri Cath indwelling catheter
Neonate	1200-1500g	5 Fr Uri Cath indwelling catheter
Neonate	1500-2500g	5 Uri Cath or 6 Fr Foleys indwelling catheter
0-6 months	3.5-7kg	6 Fr Foleys indwelling catheter
Catheter size should be determined based on age, weight, medical condition and the reason for insertion. Feeding tubes are not recommended for urethral catheterisation due to the high risk of bladder perforation.		

## Urethral Catheterisation Equipment

- Dressing trolley, dressing pack, sterile scissors and kidney dish
- Sterile gown, sterile gloves, disposable gloves, plastic drape
- Appropriate sized catheters ([see Table 1](#))
- Sterile lubricating jelly
- 0.1% Chlorhexidine irrigation solution (Chlorhexidine gluconate 30mg/30mL).
- IDC drainage bag and connector
- Slek tape and a safety pin (only if no safety clip on IDC bag drainage tubing).
- Specimen container
- Small Leukostrips for securement at insertion point
- Grip-Lock Device or fixumol to secure tube to thigh.

## Female Urethral Catheterisation

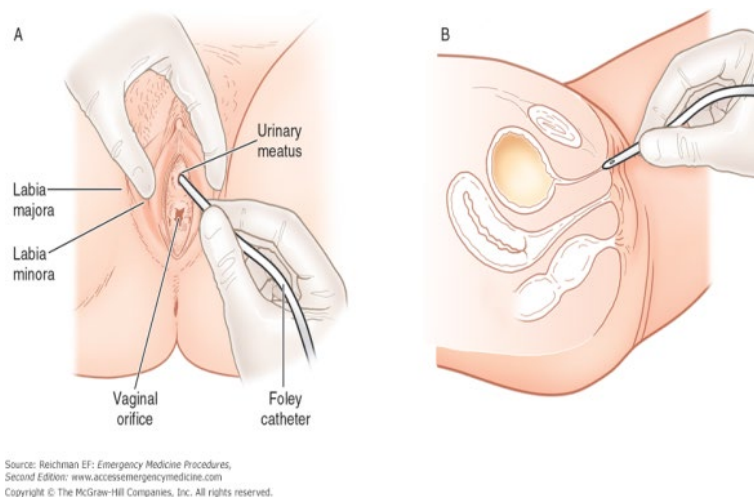
This is a two-person Surgical AT procedure. Refer to:

- [Aseptic Technique](#) Appendix 2: Aseptic Technique for Specific Procedures,
- [Hand Hygiene Practices](#)
- [Standard and Transmission Based Precautions](#)

## Procedure

1. Parents or carers should have the procedure and indication for their infant's IDC explained to them prior to or soon after insertion (if procedure done in an emergency)
2. Prepare [equipment](#) needed.
3. Perform hand hygiene and don gloves as per [Aseptic Technique Policy](#) – see the five essential principles of aseptic technique.
4. Catheter insertion is a potentially painful and upsetting procedure. Sucrose should be considered. Containment/securement techniques used where appropriate.

5. Place infant in supine position with knees bent and hips flexed. Ask for a second person to assist with holding and soothing the infant.
6. Open sterile dressing pack. Pour 0.1% Chlorhexidine irrigation solution into sterile dish. Open Foleys catheter and lubricant onto sterile field.
7. Wash hands and apply sterile gloves. Soak gauze in chlorhexidine wash using sterile forceps in dressing pack.
8. Apply sterile drape/towel over patient lower body.
9. Separate labia majora with non-dominant hand and expose urethral opening. In neonates, the urethral meatus is immediately above the hymeneal fringes.
10. Clean labia majora with gauze soaked in 0.1% Chlorhexidine irrigation solution using dominant hand. Clean each side of the labial fold first and the urethral opening last. Use a downward motion, using a new swab for each downward stroke.
11. Insert catheter with dominant hand into the urethral opening, upward at approximately 30 degree angle until urine begins to flow. Obtain specimen if required and attach drainage bag.



**IF UNABLE TO PASS THE CATHETER AFTER TWO ATTEMPTS, DISCONTINUE PROCEDURE AND SEEK SENIOR MEDICAL TEAM ASSISTANCE**

12. Release labia majora. Secure in place with leukostrips at the point of insertion. Use Grip-lock or fixumol to tape to the thigh. Ensure genital area is clean and dry and make the infant comfortable.
13. Dispose of gloves and equipment in clinical waste. Clean trolley and hand hygiene.
14. Document procedure and outcome in the infant's record including; date and time of insertion, type and size of catheter, name of clinician inserting catheter, any complications or issues, securement and drainage.

## Male Urethral Catheterisation

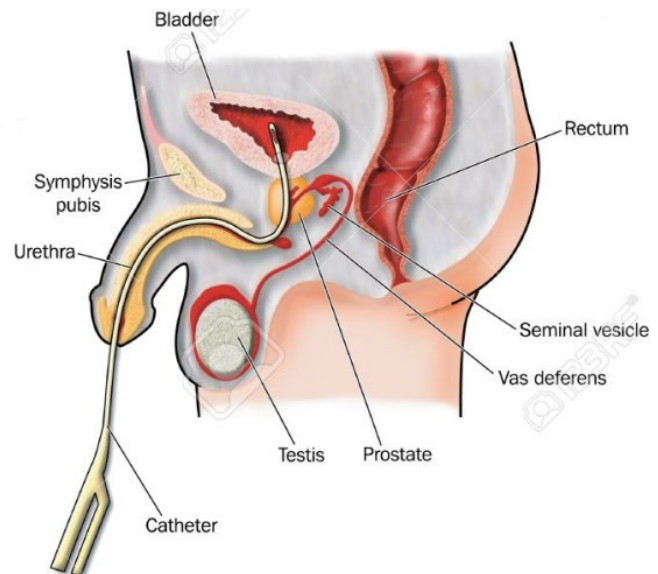
This is a two-person Surgical AT procedure. Refer to:

- [Aseptic Technique](#) Appendix 2: Aseptic Technique for Specific Procedures,
- [Hand Hygiene Practices](#)
- [Standard and Transmission Based Precautions](#)

### Procedure

1. Parents or carers should have the procedure and indication for their infant's IDC explained to them prior to or soon after insertion (if procedure done in an emergency)
2. Prepare [equipment](#) needed.
3. Perform hand hygiene and don gloves as per [Aseptic Technique Policy](#) – see the five essential principles of aseptic technique.
4. Catheter insertion is a potentially painful and upsetting procedure. Sucrose should be considered. Containment/securement techniques used where appropriate.
5. Place infant in supine position with knees bent and hips flexed. Ask for a second person to assist with holding and soothing the infant.
6. Open sterile dressing pack. Pour chlorhexidine wash into sterile dish. Open Foleys catheter and lubricant onto sterile field.
7. Wash hands and apply sterile gloves. Soak gauze in chlorhexidine wash using sterile forceps in dressing pack.
8. Hold the shaft of the penis using sterile gauze in your non-dominant hand.
9. With your non-dominant hand, gently retract the foreskin if necessary (do not force it), until the urethral meatus is just visible.
10. Using the dominant hand, clean the glans penis with 0.1% Chlorhexidine irrigation solution, moving in a circular motion from meatus outwards towards base of penis. clean the urethral opening with swabs held in forceps. Discard swab into waste bag after each single wipe.
11. Hold the penis with slight upward tension and perpendicular to the infant's body. Insert the catheter with the dominant hand into the urethral opening and watch for the flow of urine. Obtain specimen if required and attach drainage bag.

**IF UNABLE TO PASS THE CATHETER  
AFTER TWO ATTEMPTS,  
DISCONTINUE PROCEDURE AND  
SEEK SENIOR MEDICAL TEAM  
ASSISTANCE**



### Care of an IDC

- Urinary drainage should be documented 1-2 hourly. Colour and concentration of urine should be observed and documented. Unless otherwise specified by the treating team, normal urine output is 0.5ml-2ml/kg/hr. Report any variations to the medical team.
- Maintain 24-hour fluid balance record.
- Position drainage bag to prevent backflow of urine or contact with the floor. Gravity is important. Ensure the drainage bag is below the level of the bladder.
- IDC drainage bags should be emptied once per shift at a minimum or once  $\frac{3}{4}$  full.
- IDC site should be observed with nappy changes 3-4hrly. Clean insertion site daily with warm soapy water and more frequently if clinically indicated.
- Observe for leaking at catheter site, tension, redness and discharge. Adherence to a sterile continuously closed urine drainage system is important for reducing the risk of acquiring a catheter associated infection. Report and document any abnormalities to the medical team.
- Replace system and/or catheter using aseptic technique and sterile equipment if indicated for signs of infection, contamination, and obstruction or if system disconnects, is damaged or leaks.
- Remove the IDC when no longer indicated.

### Flushing of an IDC

Flushing of an IDC is rare and should only be performed by a senior medical practitioner deemed competent in catheter care. See PCH IDC irrigation in the [Urethral Catheterisation](#) guideline

## IDC Specimen Collection

IDC specimen collection is a [standard aseptic technique](#). Specimens are needed for investigations and electrolyte management. Urine for urinalysis or culture should be collected fresh from the needleless sampling port of catheter tubing (not the drainage bag). 24hr collections, however, can be collected from the drainage bag.

### Equipment

- Dressing Trolley, dressing pack and specimen container
- PPE - Consider appropriate [Standard and Transmission Based Precautions](#)
- 2mL slip syringe
- 70% Alcohol / 2% Chlorhexidine swabs

### Procedure

1. Explain procedure to parent if present.
2. Perform hand hygiene and put on gloves.
3. Clamp below the sampling point.
4. Scrub sampling point vigorously with alcohol swabs for at least 15 seconds and allow 30 seconds of airing prior to accessing port with a 10ml syringe to collect sample.
5. Attach sterile 2ml syringe to RED access port and slowly aspirate required volume of urine.
6. Remove syringe and transfer contents to specimen container and or urinalysis strip. Discard syringe into clinical waste
7. Re-swab access port with 70% alcohol / 2 % Chlorhexidine swab.
8. Label container, ensure lid is firmly sealed.
9. Remove gloves and perform hand hygiene.
10. Complete documentation.

## IDC Removal

### Equipment

- Dressing Trolley and dressing pack
- PPE and Bluey - Consider appropriate [Standard and Transmission Based Precautions](#)
- 5mL syringe
- Sterile gloves, specimen container and sterile scissors are also required if sending tip for culture.

### Procedure

1. Explain procedure to parent if present
2. Determine balloon inflation status by attaching 5mL syringe and gently drawing back slightly.
3. Position infant for easy access to catheter and place waterproof bluey under infant, be sure to protect infant's privacy during procedure.
4. Wash hands and put on PPE. Prepare equipment.
5. Gently withdraw catheter – if resistance is encountered **DO NOT FORCE**. Seek medical advice immediately.
6. Upon removal, check the catheter and balloon is intact. If any concerns, contact medical team immediately.
7. If catheter tip required for microscopy. Ensure catheter tip does not come in contact with surfaces or hands. Using sterile scissors cut off tip of catheter approximately 1-2cm placing directly into sterile specimen container. Label specimen and send to pathology with request form.
8. Dispose of catheter and drainage system into clinical waste.

### Intermittent Catheterisation

Parents of neonates with a need for intermittent catheterisation should be taught how to carry out the procedure. Consultation with the spinal CNC should be made as soon as possible for ongoing care and discharge planning. E.g. spina bifida.

#### Related CAHS internal policies, procedures and guidelines


[Aseptic Technique \(health.wa.gov.au\)](http://health.wa.gov.au)

[Standard and Transmission Based Precautions \(health.wa.gov.au\)](http://health.wa.gov.au)

[Urinary Catheterisation \(health.wa.gov.au\)](http://health.wa.gov.au) PCH CPM



This document can be made available in alternative formats on request.

Document Owner:	Neonatology		
Reviewer / Team:	Neonatal Coordinating Group		
Date First Issued:	Nov 2019	Last Reviewed:	August 2024
Amendment Dates:		Next Review Date:	August 2027
Approved by:	Neonatal Coordinating Group	Date:	28 <sup>th</sup> August 2024
Endorsed by:	Neonatal Coordinating Group		
Standards Applicable:	NSQHS Standards:  Child Safe Standards: 1,10		

Printed or personally saved electronic copies of this document are considered uncontrolled



**Healthy kids, healthy communities**

Compassion Excellence Collaboration Accountability Equity Respect

Neonatology | Community Health | Mental Health | Perth Children's Hospital