An order from MRHP is required for indwelling urinary catheter insertion.

Indications for insertion may include:

- Close monitoring of urinary output
- Obstruction of the urinary tract distal to the bladder e.g. prostate enlargement, significant uterine prolapse
- Protecting an open wound in the sacral/perineal area from urinary incontinence
- Comfort care in the palliative patient
- Continuous bladder irrigation (CBI)
- Chronic urinary retention associated with impaired renal function
- Failed trial of void
- May be indicated for peri-operative and post-operative surgical care
  - In critical care or step down this may include monitoring of post-operative bladder pressure or as a critical tube following surgery involving the genitourinary tract.
- Traumatic injuries e.g. hip fracture, pelvic fracture, unstable thoracic or lumbar spine injury
- Urinary retention
- Medication instillation

Exclusions for insertion are:

- As a substitute for nursing care of the patient with incontinence
- As a substitute for nursing care of the patient who is receiving diuretic therapy
- As a substitute for nursing care of the patient who is immobile
- As a means of obtaining urine for culture when the patient can initiate a voiding stream unless a sterile specimen is required
- For diagnostic tests, unless medically indicated
- Pre-operative patients who are going directly to the operating room without the appropriate indication
- Patients with cognitive deficit without other indications to place urinary catheter
- Blood at the urethral meatus in the neonate population
- Known trauma or stricture of the urethra in the neonate population
- Presence of uncorrected bleeding diathesis in the neonate population
Indwelling Catheter Size Guideline

Patients requiring catheter insertion assisted with guide wires should be inserted by physicians.

If size of the catheter is not specified in the order, use the appropriate size for patient and any underlying conditions which may affect size/type of catheter. Use the smallest diameter catheter to avoid traumatic complications such as bladder irritation/spasms and/or risk of bypassing.

Off label use of products not intended for urinary catheter use should be avoided without an order from an authorized prescriber.

Use the smallest size that will allow drainage and minimizes bypassing and urethral trauma.

<table>
<thead>
<tr>
<th>Indwelling Catheter Sizes Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
</tr>
<tr>
<td>Neonatal:</td>
</tr>
<tr>
<td>Less than 1000 grams</td>
</tr>
<tr>
<td>Greater than 1000 grams</td>
</tr>
<tr>
<td>Greater than 1800 grams</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Infant/Toddler (size dependent)</td>
</tr>
<tr>
<td>Preschool (size dependent)</td>
</tr>
<tr>
<td>School Age</td>
</tr>
<tr>
<td>Adolescent</td>
</tr>
<tr>
<td>Adult population with clear urine</td>
</tr>
<tr>
<td>Adult population with debris or mucus in urine</td>
</tr>
<tr>
<td>Hematuria or post TURP for adult population in acute care</td>
</tr>
</tbody>
</table>
**Indwelling Catheter Balloon**

Pre-inflation of the catheter balloon is not recommended as it can result in deterioration of the balloon and lead to urethral injury.

Caution must be taken to ensure the catheter tip is not in the urethra prior to inflating the balloon.
- If the catheter is springing or bouncing-back as it is being advanced, it is likely in poor position and the balloon should not be inflated.
- Balloons shall not be inflated unless urine is obtained on insertion.
- For males, it is recommended that the catheter be advanced to the hub prior to inflating the balloon. Once the balloon is inflated, very gently pull back until the catheter is in position.

Balloons must be inflated to the volume on the package as per the manufacturer’s recommendations. Do not partially inflate balloons as it can cause the catheter to bend and obstruct urine flow. A partially filled balloon fills asymmetrically which increases the potential for erosion of the bladder mucosa and catheter failure.

Never clamp a catheter lumen with a balloon port because this may damage the lumen preventing deflation of the balloon.

### Length of Insertion for Neonate and Pediatric

<table>
<thead>
<tr>
<th>Age</th>
<th>Male Length of Insertion</th>
<th>Female Length of Insertion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonate</td>
<td>Insert until urine is obtained, then advance 1-2 cm.</td>
<td>If urine is not obtained upon catheter insertion, secure at measured length. The insertion length will be: Term neonates: approximately 6 cm. Preterm neonates - less than 750 grams: up to 5 cm.</td>
</tr>
<tr>
<td>Infant – 3 years</td>
<td>Male catheters should be inserted up to the hub in the catheter and then pulled back gently and anchored after the balloon is inflated to prevent inflation of the balloon in the urethra</td>
<td>5 cm or 2 inches</td>
</tr>
<tr>
<td>4 – 8 years</td>
<td>Male catheters should be inserted up to the hub in the catheter and then pulled back gently and anchored after the</td>
<td>5-6 cm or 2-3 inches</td>
</tr>
</tbody>
</table>
### Documentation of Indwelling Catheter Insertion

Catheter insertion shall be documented on the patient’s health record and shall include, but not limited to:

- Reason for insertion
- Indicate if this is initial insertion or replacement of an existing catheter. If an existing catheter is replaced, describe condition of the catheter upon removal (e.g., encrustations, obstructed).
- Time and date of insertion
- Type and size of catheter, include lot number
- Catheter balloon infill volume
- Type and amount of anesthetic, if used
- Alterations in perineal anatomy and skin integrity
- Difficulty or complications with insertion
- Colour, characteristics, and amount of urine returned
- Type/location of securement device
- Type of drainage collection device
- Patient tolerance/response to catheter insertion
- Patient/family teaching and reinforcement as indicated
- Name and designation of person who inserted the urinary catheter

### Stabilizing the Catheter and Securement Devices

Correct placement of securement devices aids in minimizing bypassing and bladder irritation, prevents dislodgement of the catheter, minimizes movement induced urethral trauma and catheter balloon pressure on the bladder neck and may decrease risk of UTI. Indwelling catheters should be secured to avoid traction on the catheter, which causes irritation and trauma to the urethra and/or the bladder trigone muscle which can cause pain, spasm, and incontinence.

Securement devices include hydrocolloid, leg straps, adhesive or non-adhesive stabilizers and tape.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Description</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepubertal (8 years)</td>
<td>Male catheters should be inserted up to the hub in the catheter and then pulled back gently and anchored after the balloon is inflated to prevent inflation of the balloon in the urethra</td>
<td>6-8 cm or 3-4 inches</td>
</tr>
<tr>
<td>Pubertal</td>
<td>Male catheters should be inserted up to the hub in the catheter and then pulled back gently and anchored after the balloon is inflated to prevent inflation of the balloon in the urethra</td>
<td>6-8 cm or 3-4 inches</td>
</tr>
</tbody>
</table>
- Secure to ensure flow of urine is not obstructed.
- Neonate males should have catheter secured to abdomen.
- The customized locking “swivel clamp” stabilizer positioned on top of adhesive foam pad prevents kinking and provides catheter fixation.
- Follow manufacturer guidance for placement of catheter into the stabilizer.
- The male urinary tract benefits from having the penis and the urethra in a straight position. Ensure securement length allows for erection.
- **Neonate**: place a hydrocolloid dressing under the catheter taping to protect the neonate’s skin

Securement devices should be changed if indicated clinically, or according to manufacturer’s recommendations. Remove adhesive devices gently to avoid skin damage.