

Indwelling urinary catheter (Foley) removal



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■ Introduction

Removal of an indwelling urinary catheter should occur when bladder decompression is no longer necessary, when the patient can resume voiding, or when catheter obstruction occurs.^[1] A review of the need for a urinary catheter should occur daily. Catheter removal should occur as soon as the catheter is no longer clinically indicated to reduce the risk of catheter-associated urinary tract infection (CAUTI).^{[1][2][3][4][5]}

♦ **Hospital-acquired condition alert:** Keep in mind that the Centers for Medicare and Medicaid Services considers CAUTI a hospital-acquired condition *because it can be reasonably prevented using a variety of best practices*. When caring for a patient with an indwelling urinary catheter, be sure to follow evidence-based CAUTI prevention practices—such as performing hand hygiene before and after any urinary catheter manipulation; maintaining a sterile, continuously closed drainage system; maintaining unobstructed urine flow; emptying the drainage collection bag regularly; replacing the catheter and drainage system using sterile technique when breaks in sterile technique, disconnection, or leakage occurs; and discontinuing the urinary catheter as soon as it's no longer clinically indicated—to *reduce the risk of CAUTI*.^{[1][2][3][6][7]} ♦

■ Equipment

- 10-mL luer-lock syringe
- Drape
- Fluid-impermeable pad
- Gloves
- Graduated container
- Perineal care supplies
- Optional: adhesive remover, cotton-tipped applicator, gauze pads, oral fluids, other personal protective equipment, scissors

■ Preparation of Equipment

Inspect all equipment and supplies. If a product is expired, is defective, or has compromised integrity, remove it from patient use, label it as expired or defective, and report the expiration or defect as directed by your facility.

■ Implementation

- Verify the practitioner's order, if needed, or follow your facility's guidelines for indwelling urinary catheter removal.
- Gather and prepare the necessary equipment and supplies.
- Perform hand hygiene.^{[1][8][9][10][11][12][13]}

- Confirm the patient's identity using at least two patient identifiers.^[14]
- Provide privacy.^{[15] [16] [17] [18]}
- Explain the procedure to the patient and family (if appropriate) according to their individual communication and learning needs *to increase their understanding, allay their fears, and enhance cooperation.*^[19] Tell the patient to expect to feel slight discomfort.
- Raise the bed to waist level before providing care *to prevent caregiver back strain.*^[20]
- Perform hand hygiene.^{[1] [8] [9] [10] [11] [12] [13]}
- Put on gloves and, as needed, other personal protective equipment *to comply with standard precautions.*^{[21] [22] [23]}
- Place a fluid-impermeable pad under the patient *to protect the bed linens.*
- Position the patient for easy access to the urinary catheter.
- Drape the patient for privacy.
- Remove the urinary catheter securement device gently according to the manufacturer's directions, or remove the tape that secures the catheter and catheter tubing. Apply adhesive remover with a cotton-tipped applicator or gauze pad, if needed, *to assist with removal and prevent skin tearing or shearing.*
- Assess the patient's perineum and meatus for redness, irritation, and discharge.
- Trace the tubing from the patient to the point of origin *to make sure that you're accessing the proper port.*^[24] Attach a 10-mL luer-lock syringe to the balloon valve luer-lock mechanism on the urinary catheter. 
- Allow the pressure in the urinary catheter's balloon to force the plunger back and fill the syringe with all the sterile water in the balloon *to deflate the balloon.* The amount of sterile water injected is usually indicated on the tip of the catheter's balloon lumen and in the patient's medical record. If needed, use gentle aspiration to encourage deflation; *vigorous aspiration can cause the balloon inflation lumen to collapse.* Allow adequate time (about 30 seconds) for the pressure in the balloon to fill the syringe. If the balloon doesn't deflate or if deflation is slow, remove and reapply the syringe to the luer-lock mechanism. If the balloon still doesn't deflate, use a syringe and needle to aspirate the fluid from the balloon valve arm or sever the balloon valve arm with scissors if permitted by your facility.^{[25] [26]} If needed, contact the practitioner or another specially trained professional for assistance, as indicated by your facility.^[26] 
- Instruct the patient to breathe in deeply and then to exhale, *which helps relax the pelvic floor muscles.* As the patient exhales, remove the urinary catheter gently by withdrawing it slowly and evenly. If you meet resistance while withdrawing the catheter, stop and notify the practitioner. Explain to the patient with a prostate that discomfort will occur as the deflated balloon passes through the prostatic urethra.^[25] 
- If the patient can perform perineal self-care, provide the necessary supplies. If not, provide perineal care.^{[25] [27]} (See the "[Perineal care of the patient assigned male at birth](#)" or "[Perineal care of the patient assigned female at birth](#)" procedure.)
- Remove and discard the fluid-impermeable pad.^[23]
- Position the patient for comfort.
- Measure and record the amount of urine in the drainage collection bag before discarding it.
- If the patient's condition allows, encourage oral fluid intake of 30 mL/kg/day *to flush the bladder of microorganisms that may be present due to indwelling urinary catheter use.*^{[25] [27]}
- Return the bed to the lowest position *to prevent falls and maintain the patient's safety.*^[28]
- Discard used supplies in appropriate receptacles.^[23]
- Remove and discard your gloves and, if worn, other personal protective equipment.^[23]
- Perform hand hygiene.^{[1] [8] [9] [10] [11] [12] [13]}

- Monitor the patient for the first voiding after indwelling urinary catheter removal. Assess the volume and characteristics of the voided urine.^[27]
- Perform hand hygiene.^{[1][8][9][10][11][12][13]}
- Document the procedure.^{[29][30][31][32]}

■ Special Considerations

- After performing indwelling urinary catheter removal, assess the patient for incontinence, dribbling, urgency, persistent dysuria or bladder spasms, fever, chills, and palpable bladder distention. Report these conditions to the practitioner.
- The Joint Commission issued a sentinel event alert related to managing risk during transition to new International Organization for Standardization tubing standards that were designed to prevent dangerous tubing misconnections, which can lead to serious patient injury and death. During the transition, make sure to trace the tubing and catheter from the patient to the point of origin before connecting or reconnecting any device or infusion, at any care transition (such as a new setting or service), and as part of the handoff process; route tubes and catheters having different purposes in different standardized directions; when there are different access sites or several bags hanging, label the tubing at both the distal and proximal ends; use tubing and equipment only as intended; and store medications for different delivery routes in separate locations.^[24]

■ Patient Teaching

Inform the patient that transient incontinence, urinary urgency and frequency, dysuria, discomfort, and urine retention can occur after indwelling urinary catheter removal. Advise the patient to notify the practitioner if these signs and symptoms persist for more than 48 hours.^[25]

■ Complications

Complications associated with indwelling urinary catheter removal may include:

- balloon rupture^[26]
- trauma
- bleeding
- scar tissue formation which can lead to urethral stricture.

■ Documentation

Documentation associated with indwelling urinary catheter removal includes:

- date and time
- amount of sterile water removed from the urinary catheter balloon
- perineal assessment findings
- patient's tolerance of the procedure
- any complications
 - name of the practitioner notified
 - date and time of notification
 - any prescribed interventions
 - patient's response to those interventions
- time, volume, and characteristics of the patient's first voiding
- teaching provided to the patient and family (if applicable)
 - understanding of that teaching
 - follow-up teaching needed.

This procedure has been reviewed by the Academy of Medical-Surgical Nurses.



■ Related Procedures

- [Indwelling urinary catheter \(Foley\) insertion, assigned female at birth, home care](#)

■ Related UpToDate Patient Teaching Handouts

- [How to remove a urinary catheter](#)

■ References

([Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions](#))

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Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions

The following leveling system is adapted from *Evidence-Based practice in nursing & healthcare: A guide to best practice*, Fifth edition, by Bernadette Mazurek Melnyk and Ellen Fineout-Overholt (2023).

Level I	Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials (RCTs)
Level II	Evidence from well-designed single RCTs (experimental)
Level III	Evidence from well-designed nonrandomized controlled trials (quasi-experimental), systematic reviews of a complete body of evidence, and intervention studies using mixed methods
Level IV	Evidence from well-designed case-control and cohort studies (observational)
Level V	Evidence from systematic reviews of qualitative and descriptive studies
Level VI	Evidence from single descriptive and qualitative studies, evidence-based practice implementation, and quality improvement projects
Level VII	Evidence from expert opinion, expert committee reports, and literature reviews

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