

# SOP Template: Central Line and Catheter Care Protocols

This SOP details **central line and catheter care protocols** to ensure the prevention of infection, maintain catheter patency, and promote patient safety. The protocol includes guidelines on insertion site maintenance, dressing changes, flushing techniques, infection surveillance, and proper handling in order to reduce complications associated with central venous catheters and other indwelling catheters. The goal is to standardize care practices to minimize catheter-related bloodstream infections and enhance overall clinical outcomes.

## 1. Purpose

To provide standardized procedures for the care and maintenance of central lines and indwelling catheters, aiming to prevent infection, maintain device function, and promote patient safety.

## 2. Scope

Applies to all healthcare professionals involved in the care of patients with central venous catheters (CVC), peripherally-inserted central catheters (PICC), and other prolonged indwelling catheters.

## 3. Responsibilities

- All staff must adhere to this protocol and maintain aseptic technique at all times.
- Nursing staff are responsible for daily maintenance and documentation.
- Medical staff are responsible for insertion and addressing complications.

## 4. Protocol

- 1. Insertion Site Maintenance**
  - Inspect site daily for signs of infection (redness, swelling, discharge).
  - Assess catheter necessity daily; remove promptly if no longer required.
- 2. Dressing Changes**
  - Use sterile technique for all dressing changes.
  - Change transparent dressings at least every 7 days, or immediately if soiled or loose.
  - Change gauze dressings every 48 hours or sooner if wet or soiled.
- 3. Flushing Techniques**
  - Use 10 mL pre-filled saline syringes to flush lumens.
  - Flush before and after medication administration or blood draws using the push-pause method.
  - Follow facility protocol for heparin use if indicated.
- 4. Infection Surveillance**
  - Monitor and document catheter site and patient temperature daily.
  - Report any suspicion of catheter-related bloodstream infection per facility reporting policy.
- 5. Device Handling and Access**
  - Perform hand hygiene and wear gloves before handling catheters.
  - Disinfect catheter hubs with alcohol chlorhexidine swabs for 15 seconds before every access.
  - Use aseptic technique for medication administration and line access.
- 6. Documentation**
  - Document all catheter care activities, assessments, and observations in the patient record.

## 5. Complication Management

Complication	Signs	Action
Infection	Redness, swelling, fever, purulent discharge	Notify provider, obtain cultures, anticipate catheter removal if needed
Occlusion	Resistance on flushing, inability to infuse or withdraw	Follow protocol for declotting; consult provider if unresolved
Dislodgement	Catheter position change, visible movement	Secure catheter, notify provider promptly

## 6. References

- CDC Guidelines for the Prevention of Intravascular Catheter-Related Infections
- Facility-specific Infection Control Policies
- INS Infusion Therapy Standards of Practice

## 7. Review/Revision History

- Date: \_\_\_\_\_
- Revision #: \_\_\_\_\_
- Reviewed by: \_\_\_\_\_