

**SHEA/IDSA Practice Recommendation
Strategies to Prevent Central Line-Associated Bloodstream Infections (CLABSI)
in Acute Care Hospitals**

Basic Practices for Prevention and Monitoring of CLABSI: Recommended for All Acute Care Hospitals Checklist

Before Insertion

All healthcare personnel involved in the insertion, care, and maintenance of central venous catheters (CVCs) are educated about CLABSI, and general infection prevention strategies.

Education

Includes the indications for catheter use, appropriate insertion and maintenance, the risk of CLABSI, and general infection prevention strategies.

All healthcare personnel involved in catheter insertion and maintenance complete an educational program regarding basic practices to prevent CLABSI before performing these duties.

Periodically assess healthcare personnel knowledge of and adherence to preventive measures.

Ensure that any healthcare professional who inserts a CVC undergoes a credentialing process (as established by the individual healthcare institution) to ensure their competency before they independently insert a CVC.

At insertion

Use a catheter checklist to ensure adherence to infection prevention practices at the time of CVC insertion.

- Use a checklist to ensure and document compliance with aseptic technique.
- CVC insertion is observed by a nurse, physician, or other healthcare personnel who has received appropriate education, to ensure that aseptic technique is maintained.
- Healthcare personnel are empowered to stop the procedure if breaches in aseptic technique are observed.
- Hand hygiene is performed before catheter insertion or manipulation.
- Use an alcohol-based waterless product or antiseptic soap and water.
- Avoid using the femoral vein for central venous access in adult patients.
- A catheter cart or kit that contains all necessary components for aseptic catheter insertion is available and easily accessible in all units where CVCs are inserted.
- All healthcare personnel involved in the catheter insertion procedure use maximal sterile barrier precautions during CVC insertion including a mask, cap, sterile gown, and sterile gloves.
- The patient is covered with a large sterile drape during catheter insertion.
- Maximal sterile barrier precautions are used when exchanging a catheter over a guidewire.
- Use a chlorhexidine-based antiseptic for skin preparation in patients older than 2 months of age.
- Before catheter insertion, apply an alcoholic chlorhexidine solution containing a concentration of chlorhexidine gluconate greater than 0.5% to the insertion site.
- The antiseptic solution is allowed to dry before making the skin puncture.
- Chlorhexidine products are not approved by the US FDA for children younger than 2 months of age; povidone-iodine is used for this age group.

After Insertion

- Disinfect catheter hubs, needleless connectors, and injection ports before accessing the catheter.
- Before accessing catheter hubs or injection ports, clean them with an alcoholic chlorhexidine preparation or 70% alcohol to reduce contamination.
- Remove nonessential catheters.
- Assess the need for continued intravascular access on a daily basis during Multidisciplinary rounds.
- For notunneled CVCs in adults and adolescents, change transparent dressings and perform site care with a chlorhexidine-based antiseptic every 5-7 days or more frequently if the dressing is soiled, loose, or damp; change gauze dressings every 2 days or more frequently if the dressing is soiled, loose, or damp.
- Replace administration sets not used for blood, blood products, or lipids at intervals not longer than 96 hours.
- Perform surveillance for CLABSI.
- Measure unit-specific incidence of CLABSI (CLABSIs per 1,000 catheter-days) and report the data on a regular basis to the units, physician and nursing leadership, and hospital administrators overseeing the units.
- Compare CLABSI incidence with historical data for individual units and with national rates (i.e. data from NHSN).