# There Are Four Fundamental Steps For CLABSI Prevention5-6

Pathogens, including MRSA, can reach the bloodstream by entering through the central line catheter hub or at the skin exit site. These central line-associated bloodstream infections (CLABSI) cause significant harm to patients and add costs to the healthcare system.1-4

# A diagram of key steps for CLABSI prevention during the central line catheter life cycle. Step 0 is to avoid catheter placement. Step 1 is to ensure aseptic placement. Step 2 is to maintain awareness and proper care of catheters in place. Step 3 is the prompt removal of unnecessary catheters.Step 0: Avoid Catheter Placement5

**The best way to prevent CLABSI is to avoid central line catheter placement.5**

Before inserting a central line, ask yourself and the clinical team if the line is necessary. Review appropriate clinical indications for a central line and consider if alternatives are available.6-8

Access AHRQ’s educational module on **Central Venous Catheter Indications & Alternatives:**

* [**Slides (.pptx)**](https://www.ahrq.gov/sites/default/files/wysiwyg/hai/tools/clabsi-cauti-icu/central-catheter-indications.pptx)**7 •** [**Guide (.docx)**](https://www.ahrq.gov/sites/default/files/wysiwyg/hai/tools/clabsi-cauti-icu/central-catheter-indications-notes.docx)**8**

## When a central line is necessary…

* Follow evidence-based best practices at every stage of central line care (placement, maintenance, and removal).9
* Bundles of best practices result in better outcomes than if each practice is implemented alone. 10

# Step 1: Ensure Aseptic Placement5

* Implement a **central line insertion bundle.6,9-13**
* Central line insertion bundle components include**:**
  + Optimal site selection ○ Hand hygiene
  + Chlorhexidine skin preparation ○ Maximal sterile barrier precautions
  + Use of a central line insertion checklist ○ Use of a central line insertion cart or kit

Access AHRQ’s educational module on **Central Venous Catheter Insertion:**

* [**Slides (.pptx)**](https://www.ahrq.gov/sites/default/files/wysiwyg/hai/tools/clabsi-cauti-icu/central-catheter-insertion.pptx)**12 •** [**Guide (.docx)**](https://www.ahrq.gov/sites/default/files/wysiwyg/hai/tools/clabsi-cauti-icu/central-catheter-insertion-notes.docx)**13**

# Step 2: Maintain Awareness & Proper Care of Catheters in Place5

* Implement a **central line maintenance bundle** to establish best practices for routine care.6,9-11,14-15
* Central line maintenance bundle components include**:**
  + Central line site care ○ Central line dressing changes
  + Hub disinfection ○ Daily chlorhexidine skin treatment

Access AHRQ’s educational module on **Central Venous Catheter Maintenance:**

* [**Slides (.pptx)**](https://www.ahrq.gov/sites/default/files/wysiwyg/hai/tools/clabsi-cauti-icu/central-catheter-maintenance.pptx)**14  •** [**Guide (.docx)**](https://www.ahrq.gov/sites/default/files/wysiwyg/hai/tools/clabsi-cauti-icu/central-catheter-maintenance-notes.docx)**15**

# Step 3: Promptly Remove Unnecessary Catheters5-6,16-17

* Central line maintenance includes daily review of central line necessity.
* Conduct daily evaluation of each patient’s need for the central line and remove the line as soon as possible.

Access AHRQ’s educational module on **Central Venous Catheter Removal:**

* [**Slides (.pptx)**](https://www.ahrq.gov/sites/default/files/wysiwyg/hai/tools/clabsi-cauti-icu/central-catheter-removal.pptx)**16 •** [**Guide (.docx)**](https://www.ahrq.gov/sites/default/files/wysiwyg/hai/tools/clabsi-cauti-icu/central-catheter-removal-notes.docx)**17**

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AHRQ Pub. No. 25-0007 | October 2024