Central Line Maintenance

*A comprehensive approach to daily central line maintenance is essential to prevent central line-associated bloodstream infections (CLABSIs).*

|  |
| --- |
| **Hands and Hub**   * **Clean your hands** and wear clean gloves before accessing the central line * **Scrub the hub** for at least 10 seconds and allow to air dry EACH time you access the line * **Sterile technique** to administer medications * Check connections, patency, and blood return |
| **Assess & Dress**   * **Assess the line site** daily for signs of infection * **Assess the dressing** daily and change as needed to keep it:   + Clean (free of blood and debris)   + Dry (free of drainage and fluid)   + Fully occlusive (intact and adherent on all borders) * **Use a standardized dressing kit** to replace dressings |
| **Chlorhexidine Gluconate (CHG) Treatment**   * Perform CHG treatment (bath) daily * Change the bed linens at the time of the CHG treatment (bath) |
| **Lines and Labels**   * IV tubing stabilized and secured * **Label and date** dressings, infusions, and IV tubing * **Change tubing** per guidelines and policies |
| **Reevaluate Daily**   * Ask every day if the central line can be removed * Consider alternatives to the central line and/or IV medications * Remove the central line as soon as possible to remove CLABSI risk |
| **Documentation**   * Date of insertion * Site of insertion/location of catheter * Type of catheter (tunneled, non-tunneled, number of lumens, other) * Line placement confirmation * Dressing date documented * Type of dressing line securement type (stat-lock, sutures, other) |

**References**

* Gorski LA, Hadaway L, Hagle ME, et. al. Infusion therapy standards of practice, 8th edition. J Infus Nurs. 2021 Jan-Feb 01;44(1S Suppl 1):S1-224. PMID: 33394637.
* Quinn M, Ameling JM, Forman J, et. al. Persistent barriers to timely catheter removal identified from clinical observations and interviews. Jt Comm J Qual Patient Saf. 2020 Feb;46(2):99-108. PMID: 31879072.
* Wei AE, Markert RJ, Connelly C, et. al. Reduction of central line-associated bloodstream infections in a large acute care hospital in Midwest United States following implementation of a comprehensive central line insertion and maintenance bundle. J Infect Prev. 2021 Sep;22(5):186-93. PMID: 34659456.
* Xiong Z, Chen H. Interventions to reduce unnecessary central venous catheter use to prevent central-line-associated bloodstream infections in adults: A systematic review. Infect Control Hosp Epidemiol. 2018 Dec;39(12):1442-8. PMID: 30305194.
* The Joint Commission. Preventing Central Line-Associated Bloodstream Infections: Useful Tools, An International Perspective. Jan 11, 2017. <http://www.jointcommission.org/CLABSIToolkit>. Accessed July 14, 2024.

AHRQ Pub. No. 25-0007

October 2024