



Healthcare-Associated Infections (HAIs)

Central Line-associated Bloodstream Infections: Resources for Patients and Healthcare Providers

Central line-associated bloodstream infections (CLABSIs) result in thousands of deaths each year and billions of dollars in added costs to the U.S. healthcare system, yet these infections are preventable. CDC is providing guidelines and tools to the healthcare community to help end CLABSIs.



What is a central line?

A central line (also known as a central venous catheter) is a catheter (tube) that doctors often place in a large vein in the neck, chest, or groin to give medication or fluids or to collect blood for medical tests. You may be familiar with intravenous catheters (also known as IVs) that are used frequently to give medicine or fluids into a vein near the skin's surface (usually on the arm or hand), for short periods of time. Central lines are different from IVs because central lines access a major vein that is close to the heart and can remain in place for weeks or months and be much more likely to cause serious infection. Central lines are commonly used in intensive care units.

What is a central line-associated bloodstream infection?

A central line-associated bloodstream infection (CLABSI) is a serious infection that occurs when germs (usually bacteria or viruses) enter the bloodstream through the central line. Healthcare providers must follow a strict protocol when inserting the line to make sure the line remains sterile and a CLABSI does not occur. In addition to inserting the central line properly, healthcare providers must use stringent infection control practices each time they check the line or change the dressing. Patients who get a CLABSI have a fever, and might also have red skin and soreness around the central line. If this happens, healthcare providers can do tests to learn if there is an infection present.

What are some of the things that healthcare providers are doing to prevent CLABSI?

Healthcare providers can take the following steps to help prevent CLABSIs:

- Follow recommended central line insertion practices to prevent infection when the central line is placed, including:
 - Perform hand hygiene
 - Apply appropriate skin antiseptic
 - Ensure that the skin prep agent has completely dried before inserting the central line
 - Use all five maximal sterile barrier precautions:
 - Sterile gloves
 - Sterile gown
 - Cap
 - Mask
 - Large sterile drape
- Once the central line is in place:
 - Follow recommended central line maintenance practices
 - Wash their hands with soap and water or an alcohol-based handrub before and after touching the line

- Remove a central line as soon as it is no longer needed. The sooner a catheter is removed, the less likely the chance of infection.

What can patients do to help prevent CLABSI?

Here are some ways patients can protect themselves from CLABSI:

- Research the hospital, if possible, to learn about its CLABSI rate.
- Speak up about any concerns so that healthcare personnel are reminded to follow the best infection prevention practices.
- Ask a healthcare provider if the central line is absolutely necessary. If so, ask them to help you understand the need for it and how long it will be in place.
- Pay attention to the bandage and the area around it. If the bandage comes off or if the bandage or area around it is wet or dirty, tell a healthcare worker right away.
- Don't get the central line or the central line insertion site wet.
- Tell a healthcare worker if the area around the catheter is sore or red or if the patient has a fever or chills.
- Do not let any visitors touch the catheter or tubing.
- The patient should avoid touching the tubing as much as possible.
- In addition, everyone visiting the patient must wash their hands—before and after they visit.

For more information

- [CDC Vital Signs: Making Healthcare Safer Reducing Bloodstream Infections](#)  [PDF 2.44 MB]
- [Guidelines for the Prevention of Intravascular Catheter-Related Infections, 2011](#)
- [National Healthcare Safety Network \(NHSN\)](#)

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[Infection Control Guidelines](#)