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## Promoting Patient Outcomes: CLABSI Prevention

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# Promoting Patient Outcomes: CLABSI Prevention

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## What is a CLABSI?

"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" (CDC, 2021).

## What is a Central Line?

A central line, also known as a central venous catheter (CVC), is a long, flexible catheter that is placed in the neck, chest, groin, or arm that empties out in or near the heart. These CVCs can be tunneled or non-tunneled.

Some common types of central lines include:

- Peripherally inserted central catheter (PICC) - inserted in the upper arm or near the elbow.
- Subclavian line - inserted into a vein behind the collar bone.
- Internal jugular line - placed in a large vein of the neck.
- Femoral line - inserted into a large vein in the groin area.

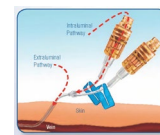
## Common Organisms

**Gram-positive organisms** (coagulase-negative staphylococci - 34.1%; enterococci - 16%; **Staphylococcus aureus** - 9.9%) are the most common (Haddadin, Annamaraju, & Regunath, 2021).

## Sources of CLABSIs for Our Patients

### Extraluminal

- Pathogens migrate along external surface of catheter from skin entry site. Often occurs within 7 days of insertion.



### Intraluminal

- Hub contamination, migration along internal surface of catheter. More commonly occurs >7 days, intraluminal colonization.

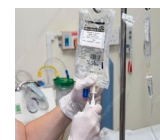


### Secondary Blood Stream Infection

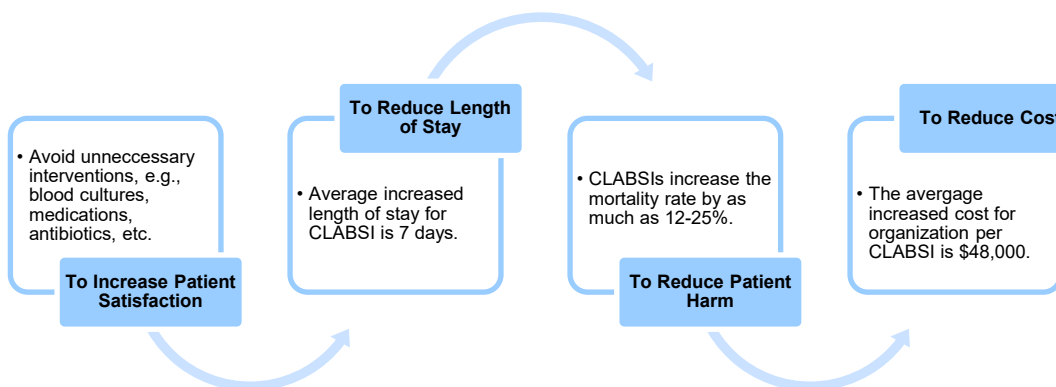
- Pathogen from another source in the body infects the blood, e.g., pneumonia, urine tract infection, etc.

### Infusate Contamination

- Introduction of pathogens from fluids infused through the catheter system.



## Why Prevent CLABSIs Anyway?



## CLABSI Prevention

Best practices for preventing CLABSIs:

- Perform hand hygiene
- Don proper PPE
- Sterile/aseptic technique during insertion
- Prioritize for cares related to central line first
- Daily assessment for need of central line
- Daily chlorhexidine gluconate bathing
- Remove catheters that are unnecessary
- "Scrub the hub" **BEFORE EVERY** access
- Change dressings every 7 days or as needed
- Assessment of site/dressing condition
- Change purple Ultrasite caps with dressings
- Tubing changes per CentraCare policy
- Discard piggyback tubing after disconnection
- Patient education regarding central line
- Staff education and audits

## References

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