

Help prevent infection and reduce risk with the most proven tools available

SHEA/IDSA Practices and the Arrow Maximal Barrier Kit

Multiple factors cause bloodstream infections: from environmental contaminants to harmful breaks in procedure. Arrow's Maximal Barrier Precautions Tray helps your hospital outwit many of them. We include essential tools needed to access patients, protect them from costly bloodstream infections and comply with the latest guidelines from SHEA/IDSA, CDC, OSHA and IHI.

21-step insertion checklist

CDC1A, IHI and INS recommendations

Suture set

OSHA Bloodborne Pathogens Standard

Pressure injectable

ARROWgard Blue PLUS® catheter

Chlorhexidine/silver sulfadiazine catheter is a SHEA/ISDA 1A recommendation for prevention of catheter-related infection²

THE BEST OFFENSE: A PROVEN DEFENSE

The Arrow Maximal Barrier Precautions Tray is an integrated system combating the five sources of CRBSI:

- ▶ Environmental contamination
- ▶ Skin flora
- ▶ Post-placement subcutaneous tract infection
- ▶ Intraluminal contamination
- ▶ Hematogenous seeding



Mask with eye shield, surgical cap, surgical gown, head-to-toe drape
SHEA/IDSA, CDC1A, IHI and INS recommendations

EXCLUSIVE: SharpsAway II® Locking Disposal Cup
OSHA Bloodborne Pathogens Standard

Echogenic needle
CDC recommended to reduce complications⁸

Luer-activated valve
OSHA Bloodborne Pathogens Standard

EXCLUSIVE: Hi-Lite Orange® ChloraPrep®
SHEA/IDSA 1A, CDC1A, IHI and INS recommendations

Safety scalpel
OSHA Bloodborne Pathogens Standard

SafetyGlide® injection needles
OSHA Bloodborne Pathogens Standard

Strategies to Prevent Deadly Central-Line Associated Bloodstream Infections



SHEA - Society for Healthcare Epidemiology in America, IDSA - Infection Diseases Society of America, AHA - American Hospital Association, APIC - Association for Professionals in Infection Control and Epidemiology, and Joint Commission have worked together to develop strategies to prevent healthcare-associated infections (HAIs), including Central-Line Associated Bloodstream Infections in Acute Care Hospitals.

Purpose

"Previously published guidelines are available that provide comprehensive recommendations for detecting and preventing healthcare-associated infections. The intent of this document is to highlight practical recommendations in a concise format designed to assist acute care hospitals in implementing and prioritizing their central-line-associated bloodstream infection (CLABSI) prevention efforts."¹

SHEA/IDSA Practice Recommendation Strength of Recommendation and Quality of Evidence

| Category/Grade Strength of Recommendation | Definition |
|--|---|
| A | Good evidence to support a recommendation for use |
| B | Moderate evidence to support a recommendation for use |
| C | Poor evidence to support a recommendation for use |
| Quality of Evidence | |
| I | Evidence from ≥ 1 properly randomized, controlled trial. |
| II | Evidence from ≥ 1 well-designed clinical trial, without randomization; from a cohort or case control analytic studies (preferably from > 1 center); from multiple time series; or from dramatic results of uncontrolled experiments |
| III | Evidence from opinions of respected authorities, based on clinical experience, descriptive studies, or reports from expert committees. |

In the SHEA/IDSA practice recommendations an antiseptic-impregnated CVC** has received a Category A recommendation and the highest possible rating for the Quality of Evidence (A-1). ARROWgard's patented silver sulfadiazine and chlorhexidine impregnated into the catheter surface saves lives and reduces costs by reducing infection — results that are supported by more than 30 studies.^{3,4} Hospitals can order the Maximal Barrier Precautions Tray with next-generation ARROWgard Blue PLUS® multi-lumen catheters, which features chlorhexidine along the entire intraluminal path, plus increased levels of chlorhexidine on the catheter's external surface for even better full spectrum protection.



The Maximal Barrier Precautions Tray with next-generation ARROWgard Blue PLUS, multi-lumen catheters, features chlorhexidine along the entire intraluminal path, plus increased levels of chlorhexidine on the catheter's external surface for even better protection.

SHEA/IDSA Practice Recommendations BASIC PRACTICES

| Before Insertion | | Shaded items included in the Arrow Maximal Barrier Precautions Tray | |
|---|----------------|--|--|
| Action | Recommendation | Full Description | Implemented |
| Educate healthcare personnel | A-II | Educate healthcare personnel involved in the insertion, care, and maintenance of CVCs about CLABSI prevention. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| At Insertion | | | |
| Action | Recommendation | Full Description | Implemented |
| Use a checklist | B-II | Use a catheter checklist to ensure adherence to infection prevention practices at the time of CVC insertion. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Perform hand hygiene | B-II | Perform hand hygiene before catheter insertion or manipulation. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Avoid using femoral vein | A-I | Avoid using femoral vein for central venous access in adult patients. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Use catheter kit or cart | B-II | Use an all-inclusive catheter kit or cart. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Use maximal barrier precautions* | A-I | Use maximal sterile barrier precautions during CVC insertion. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Use CHG skin prep | A-I | Use a chlorhexidine-based antiseptic for skin preparation in patients older than 2 months of age. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| After Insertion | | | |
| Action | Recommendation | Full Description | Implemented |
| Disinfect hubs, connectors, ports | B-II | Disinfect catheter hubs, needle-less connectors, and injection ports before accessing the catheter | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Remove nonessential catheters | A-II | Remove nonessential catheters | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Change transparent dressing every 5-7 days | A-I | For non-tunneled 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. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Replace administration sets every 96 hours | A-II | Replace administration sets not used for blood products or lipids at intervals not longer than 96 hours. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Perform CLABSI surveillance | B-II | Perform surveillance for CLABSI | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Use antimicrobial ointments on dialysis catheters | A-I | Use antimicrobial ointments for hemodialysis catheter insertion sites. | <input type="checkbox"/> Yes <input type="checkbox"/> No |

If CLABSI Rates are Higher Than Institutional Goals SPECIAL APPROACHES

| Action | Recommendation | Full Description | Implemented |
|----------------------------|----------------|---|--|
| Bathe ICU patient with CHG | B-II | Bathe ICU patients older than 2 months of age with a chlorhexidine preparation on a daily basis | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Use coated catheters* | A-I | Use antiseptic- or antimicrobial-impregnated CVCs for adult patients | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Use CHG sponge dressing** | B-I | Use chlorhexidine-containing sponge dressings for CVCs in patients older than 2 months of age. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Use antimicrobial locks | A-I | Use antimicrobial locks for CVCs | <input type="checkbox"/> Yes <input type="checkbox"/> No |

* ARROWgard Blue PLUS® (AGB+®) ** BioPatch® Protective Disk available in select Arrow Maximal Barrier Kits.

¹ Infection Control and Hospital Epidemiology Web Site. <http://www.shea-online.org/publications/iche.cfm>. Accessed May 19, 2009. October 28, Vol 29, supplement 1, page S22.

² Canadian Task Force on the Periodic Health Examination. The periodic health examination. *Can Med Assoc J* 1979; 121:1193-1254.

³ O'Grady NP, Alexander M, Dellinger EP, Gerberding JL, Heard SO, Maki DG, Masur H, McCormick RD, Mermel LA, Pearson ML, Raad II, Randolph A, Weinstein RA. Guidelines for the Prevention of Intravascular Catheter-Related Infections. *The Centers for Disease Control*. August 9, 2002; Vol 51, No RR10, pp 7-8.

⁴References include but are not limited to Maki 1997, Sampath 1995, and Bach 1994.