solventum

Raising care standards together

Navigating new recommendations 2024 Prepare • Protect • Secure

Selected highlights from the 2024 Canadian Vascular Access Association (CVAA) Guidelines & 2024 Infusion Nurses Society (INS) Infusion Therapy Standards of Practice

Highlights

Canadian Vascular Access Association (CVAA) 2024

2024 Canadian Vascular Access & Infusion Therapy Guidelines[1]

The Canadian Vascular Access Association (CVAA) guidelines establish an evidence-informed framework for practice standardization and advocacy for excellence in vascular access and infusion therapy in Canada.

The following is a curated selection of standards we believe will help you prevent infection, reduce complications and ultimately deliver better patient outcomes.

Catheter-Related Infection (CRI): Systemic, exit site, and pocket/tunnel infection

1. Catheter-Associated Bloodstream Infection (CABSI): Bloodstream infection (BSI) casued by a peripheral intravenous catheter (PIVC) or central venous access device (CVAD)

2. Central-Line Bloodstream Infection: A laboratory-confirmed primary BSI related to the presence of a CVAD in a patient at the time of infection or within 48 hours before development of an infection; a surveillance definition used to determine rate of infection, measured in catheter days.

Core principles *(selections from CVAA 2024)*

- Use infection prevention strategies to reduce health care-associated infection (pg 17, D1). [IA]
- Integrate ANTT® Clinical Practice Framework for all vascular access and/or infusion therapy procedures to standardize and evaluate aseptic technique and audit guideline adherence (pg 17, D2). [IA]
- Use CVAD [IA] and PIVC [IB] insertion and maintenance bundles (pg 17, D5,D6)

VAD securement

- Securement shall refer to both securement and stabilization and must be removed and replaced as specific intervals in accordance with organizational and regulatory guidance (exception subcutaneous anchor securment systems)
- Use sutureless securement on all VADs to limit VAD movement and reduce risk of complications (e.g., reinsertion, infection, skin damage, delay in treatment) that includes, but is not limited to: [IA] (Ch 15.1, pg 43)
  - Transparent dressing with securement properties
  - Adhesive securement device
  - Subcutaneous securement device
  - Medical-grade cyanoacrylate tissue adhesive
  - Integrated stabilization platform on PIVC
- Use a sterile dressing (transparent, semi-permeable dressing preferred), either combined or integrated with sutureless securement to protect the site, reduce risk of dislodgement, and provide a barrier against microbes (exception: when tunnel of cuffed catheter is healed) (ch 16.11, pg 44) [IA]
- Avoid using non-bordered transparent dressing, tape, rolled bandage, skin-closure adhesive strip, or gauze as method of securement (ch 16.11a, pg 44) [IB]
- Standardize practice on the use and types of securement devices within an organization to encourage usage and minimize confusion (ch 15.6, pg 43) [IB]
- Change transparent VAD dressing every 7 days and immediately if dressing integrity is compromised (e.g., loose, wet, soiled) (ch 16.14, pg 44) [IB]

Infection prevention

- Use chlorhexidine-impregnated disc/dressing for patient 2 months and older (ch 22.15, pg 57) [IA]
  - For short-term non-tunneled CVAD
  - For other CVADs, when all other CLABSI prevention strategies have proven ineffective or where extraluminal route is primary source of infection [IA]
  - For arterial catheter when all other CABSI prevention strategies have proven ineffective [IA]
  - Consider risks, benefits, and manufacturer's instructions for use for pediatric patient, immunosuppressed patient, and for fragile skin, high exudate and/or complicated skin conditions [IIB]
- Consider use of disinfecting cap (cap or covering containing a disinfectant agent [e.g., 70% isopropyl alcohol]) to reduce risk of microbial contamination and infection between uses (ch 18.9, pg 47) [IIB]
- Use VAD insertion and maintenance bundles and quality improvement measures [IB]

Skin antisepsis

- Use 2% chlorhexidine in 70% isopropyl alcohol for patient older than 2 months of age as the preferred skin antiseptic solution [IA]
  - Use alternative skin antiseptic (e.g., chlorhexidine without alcohol, povidone-iodine, 70% isopropyl alcohol) if there is contraindication, allergy, or sensitivity to chlorhexidine in alcohol [IA] (Ch 14.3, pg 42)
- Apply skin antiseptic solution using Aseptic Non Touch Technique (ANTT®) prior to VAD insertion and dressing application [IA] (ch 14.5, pg 42)

Skin protection & CASI prevention

- Protect skin integrity at VAD site and maintain dressing integrity to reduce risk of skin injury and related patient discomfort, burden of care, increased costs, and length of hospitalization (INS, 2024) [IC] (ch 27.3, pg 64)
- Apply sterile skin barrier to skin exposed to adhesive to reduce risk of skin injury when using an adhesive securement device [IA] (ch 27.3f, pg 65)

Canadian Vascular Access Association (CVAA). (2024). CVAA Guidelines Revision 2024. Canadian Vascular Access Association.

Highlights

Infusion Nurses Society (INS)

The Infusion Therapy Standards of Practice provide evidence-based recommendations for infusion and access device related care in any healthcare setting. The Standards are revised in a 3-year cycle to deliver the most updated and current practice recommendations.

The following is a curated selection of standards we believe will help you prevent infection, reduce complications and ultimately deliver better patient outcomes.

Catheter-Associated Bloodstream Infection (CABSI):

Bloodstream infections (BSIs) originating from either peripheral intravenous catheters (PIVCs) and/or central vascular access devices (CVADs). Both are equally injurious and can occur from four possible sources:

1. During catheter insertion through transfer of microbes down the catheter tract.
2. Via the catheter hub/lumen during routine administration and manipulation at the hub/lumen.
3. Due to endogenous microorganisms within the bloodstream.
4. From contaminated infusates.

Standards *(selections from INS 2024)*

- Infection prevention measures are implemented with the goal of preventing infusion-and vascular access device-(VAD) related infections. (Std 37)
- VADs are secured to prevent complications associated with VAD dislodgement and VAD motion at the insertion site. (Std 36)
- VADs are removed when clinically indicated (eg, unresolved complication, discontinuation of infusion therapy, or when no longer necessary for the plan of care) (Std 42)
- VAD site, dressing and securement status are routinely assessed for signs and symptoms of skin injury (Std 52)

VAD securement

- **Integrated Securement Device (ISD):** A device that combines a dressing with securement functions; includes transparent semipermeable window and a bordered fabric collar with built-in securement technology
- **Adhesive Securement Device (ASD):** An adhesive-backed device that adheres to the skin with a mechanism to hold the vascular access device in place; a separate dressing is placed over the ASD. Both the dressing and the ASD must be removed and replaced at specific intervals during VAD dwell time.
- Use a securement method, such as adhesive securement device (ASD), integrated securement device (ISD), subcutaneous anchor securement system (SASS), or tissue adhesive (TA), in addition to the primary dressing, to stabilize and secure VADs. Inadequate securement can cause dislodgement and complications requiring premature removal. [I]
- Avoid the use of sutures, as they are not an effective alternative to a securement method; sutures are associated with needlestick injury, support the growth of biofilm, and increase the risk of catheter-associated bloodstream infection (CABSI) [III]

Adjunct securement

- If using medical tape for additional securement of add-on devices or portions of catheter beyond the dressing, select the type of tape based on the intended use and patient's skin condition; use a roll of sterile tape dedicated to a single-patient use [IV]

Infection prevention

- Use chlorhexidine gluconate (CHG)-containing dressings to prevent CLABSIs in patients greater than 2 months of age with short-term CVADs, unless contraindicated (eg, sensitivity or allergy to CHG), including patients with oncohematological disease [I]
- Guidelines for oncology patients suggest use of a chlorhexidine-containing dressing around the needle insertion site based on duration of infusions exceeding 4 to 6 hours [V]
- Catheter-related infection reduction has also been observed in both inpatient and outpatient hemodialysis patients with the addition of a CHG containing dressing [III]
- For patients receiving outpatient dialysis through a central venous catheter, consider the use of an antimicrobial barrier cap as a strategy to reduce bloodstream infection [II]
- Consider passive disinfection by applying a cap or covering containing a disinfectant agent (eg, 70% isopropyl alcohol, iodinated alcohol, chlorhexidine gluconate) over the needleless connector. A systematic review (of randomized and nonrandomized studies) has demonstrated high level of decontamination compliance and reductions in central line associated bloodstream infection (CLABSI) rates and related health care costs associated with avoided harm. [II]
- Ensure that disinfecting supplies are readily available at the bedside to facilitate staff compliance with needleless connector disinfection

Skin antisepsis

- Adhere to Aseptic Non Touch Technique (ANTT®) while performing skin antisepsis
- Perform skin antisepsis using alcoholic chlorhexidine gluconate (CHG) as the preferred antiseptic solution [I]
- Use an alcoholic CHG solution containing at least 2% chlorhexidine gluconate [I]
- Use a single-use applicator containing an antiseptic solution [V]

Skin protection & CASI prevention

- Aseptically, apply an alcohol-free skin barrier product that is compatible with the antiseptic solution, enhancing protection for the skin around the VAD insertion site [II]
- Consider use of skin barrier film prior to application of liquid adhesive and ensure correct technique in dressing removal to prevent catheter-associated skin injury due to increased bonding of adhesive to skin [III]

2024 Infusion Therapy Standards of Practice, 9th Edition
Infusion Nurses Society. Infusion therapy standards of practice, 9th edition. J Infus Nurs. 2024;47(1S):S1-S224. doi:10.1097/NAN.0000000000000496

Preventive. Effective. Imperative.

Where evidence-based practice standards meet proven solutions

Prepare

Protect

Secure

Skin antisepsis

3M™ Soluprep™ Skin Antiseptics

Available in multiple formulations and delivery formats (including chlorhexidine gluconate and isopropyl alcohol), including wipes, swabs and applicators, 3M™ Soluprep™ Skin Antiseptics are designed for use on intact skin prior to medically invasive procedures to help protect patients against the risk of infection.

Skin protection

For all patients

3M™ Cavilon™ No Sting Barrier Film

A CHG-compatible[3] alcohol-free skin barrier proven to help protect skin from adhesive skin damage. Easy-to-open peel-down packaging allows for aseptic delivery.

For patients who already have skin damage

3M™ Cavilon™ Advanced Skin Protectant

A long-lasting barrier that protects the skin for up to 7 days and is breathable, allowing for moisture-vapor transmission that helps keep skin comfortable.

Shown to increase the adhesion of acrylic-based adhesive dressings.[3,4]

CHG-containing dressings and securement

3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressings*

Comprehensively designed to combine the most critical elements of IV site care into a single, easy-to-use product that delivers exceptional patient care through antimicrobial protection, advanced catheter securement, and gentle removal.

3M™ Tegaderm™ Antimicrobial I.V. Advanced Securement Dressing

Integrated design with CHG formulated into the dressing adhesive combines antimicrobial protection with site visibility, catheter securement, and consistent application for peripheral IVs.

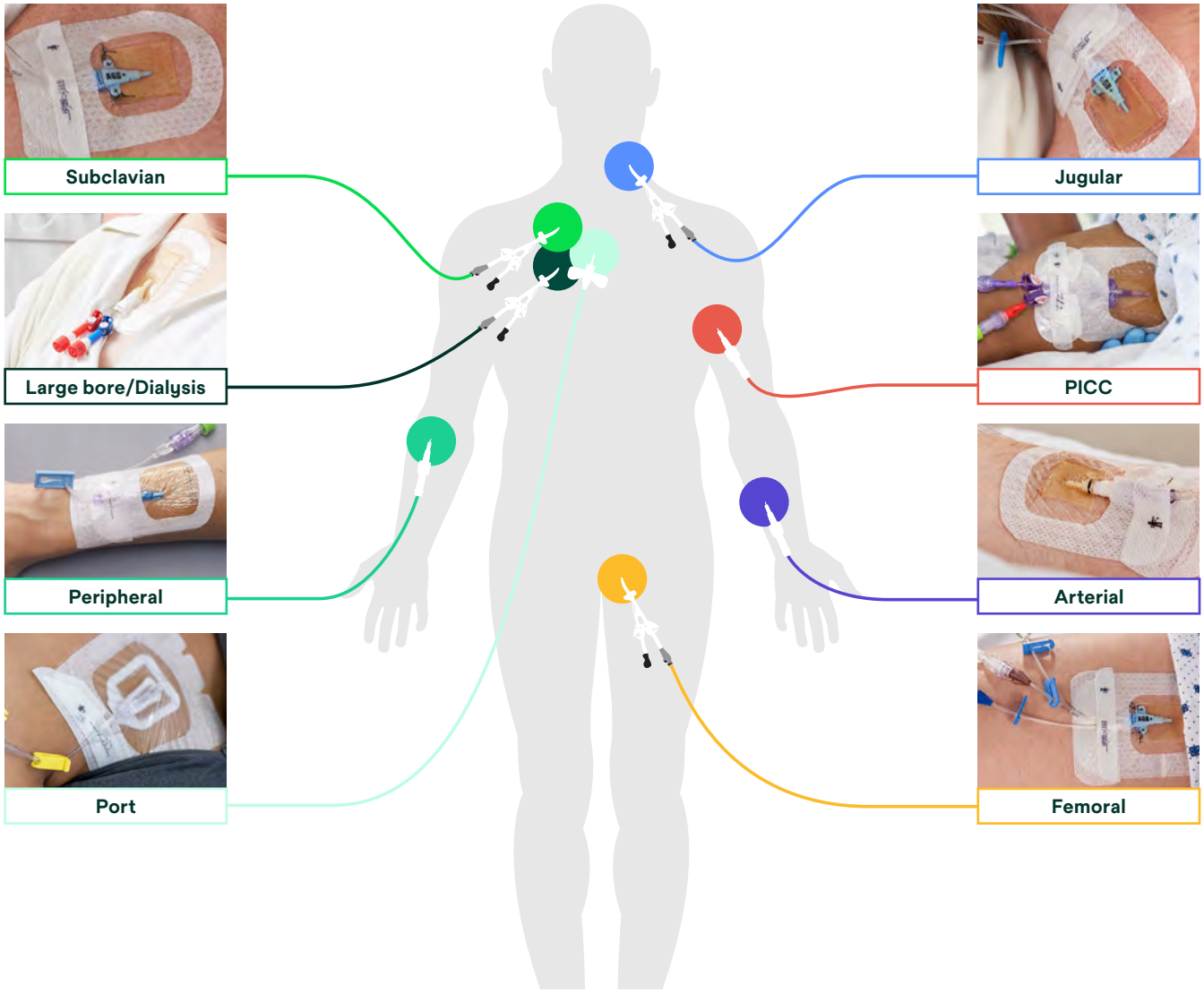
Disinfection and protection of IV access points

3M™ Curos™ Disinfecting Port Protectors[5]

Consistent disinfection and protection for all intraluminal access points. A proven solution that disinfects in 1 minute and protects for up to 7 days. Consistent use of Curos disinfecting caps on IV needleless connectors is associated with decreased CLABSIs.

Protecting all lines, is the bottom line

Help reduce the risk of complications at all IV access points



3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressings* and 3M™ Curos™ Disinfecting Port Protectors** help protect and secure all lines, all the time from extraluminal and intraluminal contamination risk.

Adjunct securement

3M™ Tube Securement Device

Designed for securement power and skin performance in an easy-to-use solution. Intended to support medical adhesive–related skin injury (MARSI) and pressure injury prevention practices.

3M™ Micropore™ S Surgical Tape

An effective yet gentle multipurpose tape that is suitable for secondary securement on all patients, including those with at-risk skin. Available in single-use-length rolls.

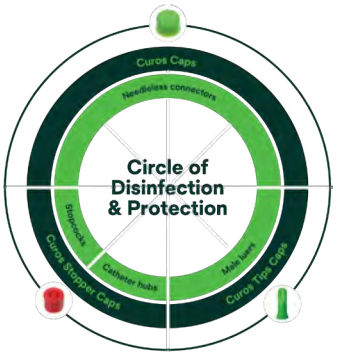
From CLABSI to CABSI
Protect every line, every time

Extraluminal protection

	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	**1660R** 7cm x 8.5cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	**1657R** 8.5cm x 11.5cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	**1659R** 10cm x 15.5cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	**1664R** 6.2cm x 4.9cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Port Dressing	**1665R** Dressing: 2cm x 12cm CHG Gel Pad: 6.2cm x 4.9cm
	3M™ PICC/CVC Securement Device + Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	**1877R-2100** Dressing: 8.5cm x 11.5cm Device: 5.1cm x 5.4cm
	3M™ PICC/CVC Securement Device + Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	**1879R-2100** Dressing: 10cm x 15.5cm Device: 5.1cm x 5.4cm

Intraluminal protection

	3M™ Curos™ Disinfecting Caps for Needleless Connectors	**CFF1-270R** Singles	270ea/bx 10bx/case 2700ea/case
	3M™ Curos™ Disinfecting Caps for Needleless Connectors	**CFF10-250R** 10-strips	50-strips/bx 10bx/case 2500ea/case
	3M™ Curos™ Disinfecting Tips for Male Luers	**CM5-200R** Singles	200ea/bx 10bx/case 2000ea/case
	3M™ Curos™ Disinfecting Stopper Caps for Open Female Luers	**CSA1-270R** Singles	270ea/bx 8bx/case 2160ea/case
	3M™ Curos™ Disinfecting Stoppers Caps for Open Female Luers	**CSA5-250R** Singles	50-strips/bx 8bx/case 2000ea/case



***Important safety information for 3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing.** Do not use 3M™ Tegaderm™ CHG I.V. Securement Dressing on premature infants or infants younger than two months of age. Use of this product on premature infants may result in hypersensitivity reactions or necrosis of the skin. The safety and effectiveness of 3M™ Tegaderm™ CHG I.V. Securement Dressing has not been established in children under 18 years of age. For full prescribing information, see the Instructions for Use (IFU).
**For full prescribing information, see the Instructions for Use (IFU). Rx only.

1. Guidelines Development Group on Behalf of Canadian Vascular Access Association. (2024). Canadian Vascular Access and Infusion Therapy Guidelines, 2nd Edition. Pappin Communications, 2024.
2. Nickel B, Gorski LA, Kleidon TM, et al. Infusion therapy standards of practice. J Infus Nurs. 2024; 47(suppl1):S1-S285. doi:10.1097/NAN.0000000000000532
3. Based on data from ex vivo porcine model.
4. When product is used under adhesive tapes, dressings, or devices, allow it to dry for 1 minute before covering with adhesive products. Use an adhesive remover containing HMDS to remove an adhesive product that has been placed over the film. This is especially important for patients with fragile skin.
5. Solventum data on file: EM-05-005732 and EM-05-002049.

solventum

3M Healthcare Canada
Company Limited
75 Courtneypark Drive W.
Mississauga
ON L5W 0E3

Phone 800-364-3577
Web solventum.com/en-ca

CA-EN 70-2013-1935-0