Helping you navigate the 2021 *Infusion Therapy Standards of Practice.*

As practice standards evolve, so does the world of health care. We're here to help you stay up to date so you can help deliver better patient outcomes.

Staying current is critical

Selected highlights of the Infusion Nurses Society 2021 *Infusion Therapy Standards of Practice.**

The Infusion Nurses Society (INS) is the global authority in infusion therapy, setting stringent standards for practice. Every five years, INS releases updated, peer-reviewed standards that reflect the latest evidence to define and develop best practices for all clinical settings.

From this comprehensive document, we've selected a few standards that we believe will help you prevent infection, reduce complications and ultimately deliver better patient outcomes.

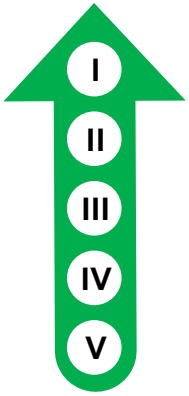
2021 *Infusion Therapy Standards of Practice* at a glance:

66 standards

2,500 cited references

120 reviewers
30 from outside U.S.

14 countries represented



Levels of evidence rated from I to V

Increasing strength of evidence

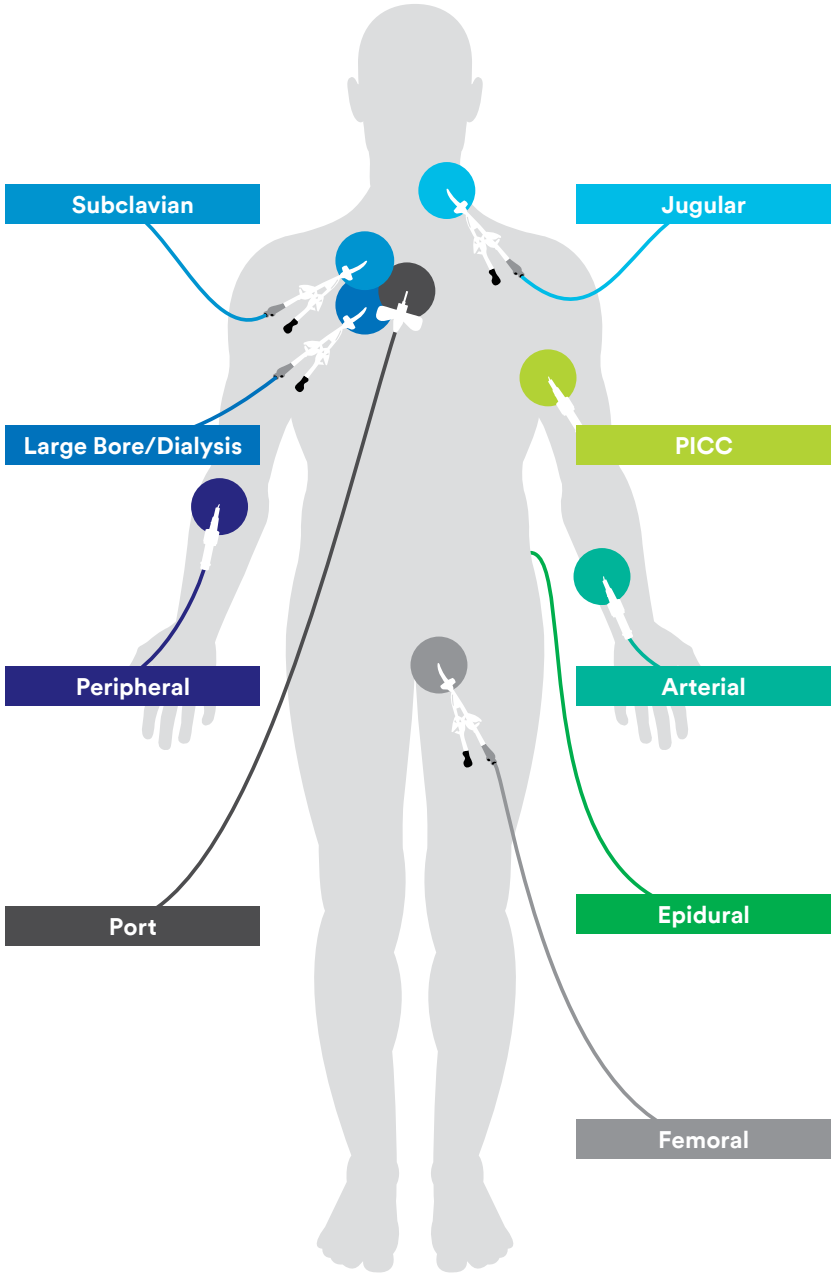
*Gorski, L. A., Hadaway, L., Hagle, M.E., Broadhurst, D., Clare, S., Kleidon, T., Meyer, B.M., Nickel, B., Rowley, S., Sharpe, E., Alexander, M. (2021). Journal of Infusion Nursing, 44(suppl 1):S1-S224. doi:10.1097/NAN.0000000000000396. Refer to the document to view verbatim, comprehensive standards and practice recommendations.

Updates on chlorhexidine-impregnated dressings

Standards 50 pg. S154; 56 pg. S172; 42 pg. S120

The use of chlorhexidine-impregnated dressings to reduce risk of catheter-associated bloodstream infection (CABSI) in adults with short-term central venous access devices (CVAD) has been expanded. Based on Level (I) evidence, recommendations for chlorhexidine-impregnated dressings now include:

- All patients, regardless of care setting (intensive care, medical-surgical, outpatient, etc.) with short-term CVADs. Because of lack of evidence, no recommendation on chlorhexidine-impregnated dressings can be made regarding patients under 18 years of age.
- More VAD types: arterial, hemodialysis (short-term and tunneled), epidural, and noncoring needle sites/implanted ports.
- When CABSI reduction strategies have proven ineffective, use chlorhexidine dressings with arterial catheters and other CVADs.
- Use a transparent, chlorhexidine-impregnated dressing to provide site visibility and antimicrobial protection for patients with an epidural access device.

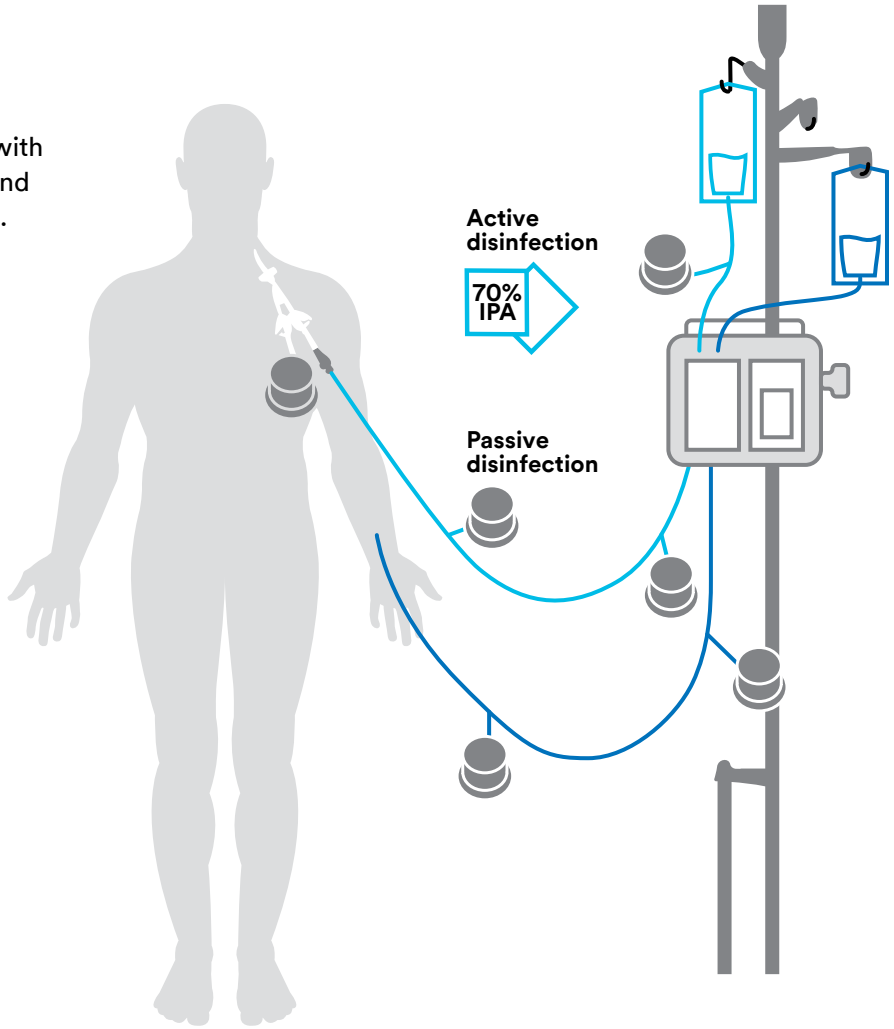


Updated guidance for needleless connector disinfection

Standard 36, pgs. S104-S106

Connect syringes and/or administration set to a vascular access device (VAD) hub with a luer-locking needleless connector. This should help eliminate the use of needles and reduce the instances of needlestick injuries and exposure to bloodborne pathogens.

- Disinfect the needleless connector attached to a VAD to reduce introduction of intraluminal microbes using either active or passive disinfection.
  - Active disinfection with a 70% isopropyl alcohol or alcohol-based chlorhexidine swab pad.
  - Passive disinfection with a disinfecting cap containing a disinfecting agent, such as 70% isopropyl alcohol.
  - Both active disinfection with alcohol-based chlorhexidine gluconate swabs and passive disinfection with disinfecting caps containing 70% isopropyl alcohol were associated with lower rates of catheter-associated bloodstream infection (CABSI), while 70% isopropyl alcohol swabs were found to be least effective based on a meta-analysis of quasi-experimental studies.
- Make disinfecting supplies readily available at the patient bedside to help with staff compliance regarding needleless connector disinfection. (Level IV)
- Monitor clinician compliance to chosen disinfection method to ensure it is applied consistently for needleless connectors on all VADs. (Level II)



Current practice recommendations for vascular access securement.

Standard 38, pg. S108-S111

- Use a securement method such as ISD, ASD, SASS or TA (see accompanying definitions) to stabilize and secure vascular access devices (VADs) in addition to the primary dressing. Inadequately secured devices can cause accidental dislodgement and complications that could require premature removal of the VAD.
- When using an ISD to stabilize a catheter for short peripheral intravenous catheters (PIVCs), evaluate the use of additional securement options such as TA in addition to a primary dressing/ISD. Note that in a small sample size both have shown reduced failure rates in adult and pediatric patients along with prolonged PIVC dwell time. (Level II)
- For peripherally inserted central catheters (PICCs), use an ISD, ASD, SASS or TA as an alternative to sutures to help reduce the risk of complications. (Level I)
- Bundling different securement interventions may help reduce catheter motion at the insertion site, reducing complications and failure that could interrupt infusion therapy, increase pain, fear, and anxiety related to VAD replacement; which can help reduce the overall cost of health care. (Level I)
- When securing a VAD, consider the patient's age and skin integrity, and if they may be at risk for medical adhesive-related skin injury (MARSI).

Definitions of VAD securement methods:

- **Integrated securement device (ISD):** A device that combines a dressing with securement ability; typically includes a transparent window and a built-in securement border.
- **Adhesive securement device (ASD):** An adhesive-backed device that adheres to the skin with a mechanism to hold the VAD in place; a separate dressing is placed over the ASD.
- **Subcutaneous anchor securement system (SASS):** A device that anchors a VAD in place via anchors just beneath the skin and helps stabilize the catheter at the point of insertion.
- **Tissue adhesive (TA):** A medical-grade cyanoacrylate glue used to temporarily bond the catheter to the skin at the VAD site. Tissue adhesive should be reapplied at each dressing change.

Site prep and skin protection

Vascular access site prep and skin antisepsis

Standard 33, pg. S96

- Perform skin antisepsis before any vascular access device (VAD) placement using preferred skin antisepsis agent of alcohol-based chlorhexidine solution or other recommended solutions depending on age or sensitivity. (Level I)
- Use single-patient-use scissors or disposable head surgical clippers to remove excess hair around the VAD insertion site. (Level I)
- Refer to the manufacturers' directions for guidance on product application and dry times. It's important to always allow the product to air dry on its own. Don't attempt to speed up drying time by wiping, fanning or blowing on skin. (Level V)

New 2021

Catheter-associated skin injury (CASI)

Standard 55, pg. S168

CASI is localized skin damage around the vascular access site and encompasses more than medical adhesive-related skin injury (MARSI), including factors such as drainage and erythema under a dressing. CASI is not a new condition, but has been added as a new 2021 standard to reflect the growing focus on patient-centered infusion care.

Assess the patient

- Check VAD sites for signs of skin injury. (Level V)
- Check color, texture, uniformity of appearance, and integrity of skin.
- Identify and promptly avoid suspected irritant/allergens.

Protect skin to reduce CASI

Standard 42, pg. S120

- Use a sterile, alcohol-free skin barrier that is compatible with antiseptic solution to protect at-risk skin when using an adhesive-based securement method. (Level III)

Catheter-Associated Skin Impairment (CASI) Algorithm

For a detailed and thorough guide on assessing patients for CASI, as well as the steps you can take to protect skin and provide comfort, see the full standards for the Catheter-Associated Skin Impairment (CASI) Algorithm. *(Appendix C, pg. S201)*

Increased focus on the importance of hand hygiene and PPE

While hand hygiene has always been a cornerstone practice for infection prevention, the COVID-19 pandemic has made maintaining hand hygiene more important than ever. Similarly, there has been increased emphasis on respiratory protection for all healthcare workers.

Selected hand hygiene practice recommendations

Standard 16, pg. S53

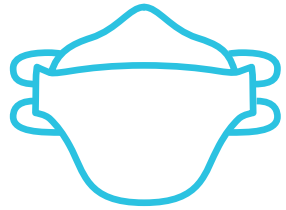
Hand hygiene should be second-nature for all healthcare professionals and performed regularly during all patient care activities to help limit microorganism transfer, including:

- Immediately before and after having direct physical contact with patients.
- Immediately after contact with body fluids, mucous membranes, and wound dressings.
- After touching the area around a patient, and anything they've touched.
- Before and after donning or doffing gloves and PPE.
- Before, after and even during clinical procedures as part of aseptic non-touch technique. (Level I)

Use soap and water, or as an alternative, routinely use an alcohol-based hand rub that contains at least 60% alcohol or 70% isopropyl alcohol for hand hygiene.

Wearing proper PPE as part of transmission-based precautions

Standard 19, pg. S58



- To help reduce the potential exposure to infectious agents wear a fit-tested, certified, N95-or-higher respirator and observe Airborne Precautions, in addition to Standard Precautions, during aerosol-generating procedures and/or if an infection spread by airborne route is suspected or confirmed.* (Level III)
- Choose PPE for transmission-based precautions based on the type of patient interaction which could include exposure to blood, body fluids, or other infectious agents. (Level III)
  - Take precautions for droplets and consider wearing a face mask, eye protection, and fluid repellent gown.
- Perform fit testing before the first use of a respirator. Repeat fit test annually, or in response to significant changes in facial structure, i.e. weight loss or gain.* (Level III)

*In the U.S. the employer shall be responsible for the establishment and maintenance of a respiratory protection program per U.S. OSHA Respiratory Protection Standard 29 CFR 1910.134. As part of that program, before an employee may be required to use any tight-fitting respirator, fit testing with the same make, model, style, and size of respirator that will be used is required.

A higher standard of care

Now that you've seen some examples of new and expanded standards from the INS 2021 *Infusion Therapy Standards of Practice*, we encourage you to review the full document and explore additional ways to help deliver the highest level of care to your patients.

To learn more, visit **go.3M.com/FightBSISG** or connect with your 3M Account Manager.

3M Healthcare
10 Ang Mo Kio Street 65, #01-01 Techpoint
Singapore 569059

Phone +65-6450-8888
Web www.3M.com.sg

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