

3M Science.
Applied to Life.™

Science
is on your side to
help you prevent
bloodstream
infections.



Bloodstream infections: A critical issue for patients and healthcare facilities.

Every IV catheter poses potential for serious and costly complications, including bloodstream infections (BSIs) which are associated with significant increases in care and costs. They are more common than you think and, in some cases, they can be deadly.¹

Nationwide, the annual cost to treat central line-associated bloodstream infection (CLABSI) exceeds

\$2.3 billion²



Catheter-related bloodstream infections (CRBSIs) are associated with

1.57x
higher risk of mortality in critically ill adults¹



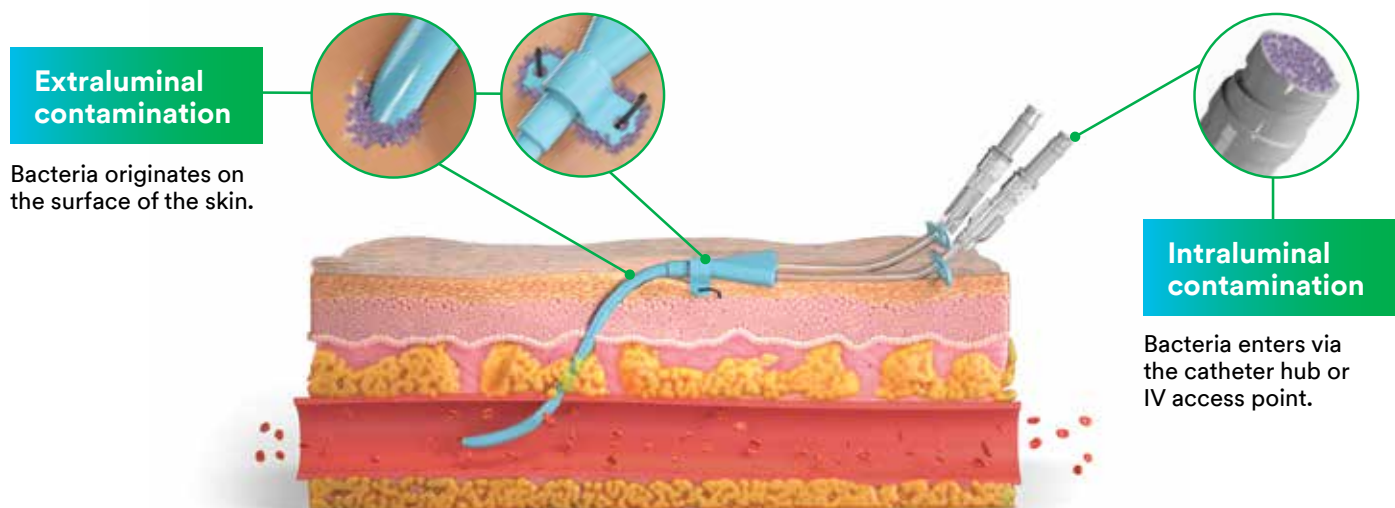
Short-term peripheral venous catheters (PVCs) accounted for

22%
of hospital-acquired CRBSIs³



Sources of infection. Taking a closer look at points of access.

While vascular catheters provide the advantage of prolonged venous access, they present a risk of infectious complications. In fact, 60% of all hospital-acquired bloodstream infections originate from some form of vascular access.⁴ These infections can be acquired at the time of the initial insertion or anytime throughout the duration of the venous access, with the majority of infections happening after insertion.⁵

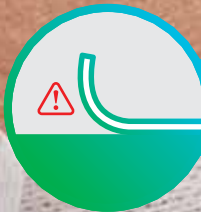




Nasal
decolonization



Hand
hygiene



Skin
protection



Extraluminal
protection



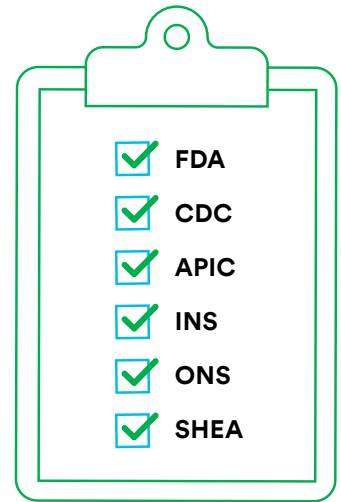
Intraluminal
protection

Factors to consider to help reduce the risk of BSIs.

In addition to the risk of extraluminal and intraluminal contamination, BSIs can be introduced anytime during patient care. That's why it's important to consider additional solutions that meet best practices and help reduce risk throughout patient care.

Best practices for helping prevent BSIs.

Many well-regarded organizations have studied how to help prevent bloodstream infections. Following established evidence-based standards and best practice guidelines can aid you in your mission to help protect patients from BSIs.



Organizations include: The Food and Drug Administration (FDA), The Centers for Disease Control and Prevention (CDC), Association for Professionals in Infection Control and Epidemiology (APIC), The Infusion Nurses Society (INS), Oncology Nursing Society (ONS) and The Society for Healthcare Epidemiology of America (SHEA).

Prepare



CDC: Recommends nasal decolonization as part of a core strategy for high risk patients during high risk procedures to help reduce the risk of CLABSIs and SSIs.⁶



CDC: Unless hands are visibly soiled, an alcohol-based hand rub is preferred over soap and water in most clinical situations due to evidence of better compliance compared to soap and water. Hand rubs are generally less irritating to hands and, in the absence of a sink, are an effective method of cleaning hands.⁷

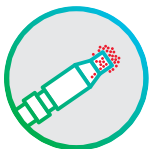


INS: Protect at-risk skin from irritation and breakdown with a sterile, alcohol-free skin barrier that is compatible with the antiseptic solution and when using an adhesive-based securement method. *Std. 42, pg. S120 (Level II)*⁸

Secure and protect



CDC: Chlorhexidine-impregnated dressings with an FDA-cleared label that specifies a clinical indication for CRBSI or CABSIs are recommended to protect the insertion site of short-term, non-tunneled CVCs. *(Category IA)*⁹



INS: Perform passive disinfection by applying a cap or covering containing a disinfection agent. Disinfection caps create a physical barrier to contamination between uses. *Std. 36, pg. S105 (Level I)*⁸

Where science meets best practices.

When it comes to reducing the risk of BSIs, adhering to best practice guidelines is simpler when you have access to the solutions that align with them. From hand hygiene to securement devices and more, 3M can help you deliver the best possible patient care.



3M™ Skin and Nasal Antiseptic (Povidone-Iodine Solution 5% w/w [0.5% available iodine] USP) Patient Preoperative Skin Preparation effectively provides broad spectrum antimicrobial activity in the nose. (*in vitro*)*

*The clinical significance of *in vitro* data is unknown.



3M™ Avagard™ D (Ethyl Alcohol 61% w/w) Instant Hand Antiseptic with Moisturizers provides fast-acting microbe reduction.



3M™ Cavilon™ No Sting Barrier Film

A sterile*, alcohol-free skin barrier film is designed to protect skin.

*Wipes and swabs only.



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

A chlorhexidine gluconate gel pad provides antimicrobial protection for up to 7 days.¹⁰



3M™ Curoc™ Disinfecting Port Protectors

Caps contain 70% isopropyl alcohol to disinfect and protect ports.

Prepare

Secure and protect

Prepare:

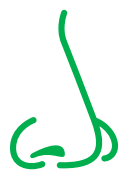
Nasal decolonization



A key component of an infection prevention protocol.

3M™ Skin and Nasal Antiseptic is designed to reduce bacteria on the patient's skin which is a potential risk factor of surgical site infections (SSIs) and BSIs. It effectively provides broad spectrum antimicrobial activity in the nose.* A one-time application provides persistent antiseptic activity for up to 12 hours¹¹ and reduces nasal bacteria, including *Staphylococcus aureus* by 99.5% in one hour.¹¹

**in vivo* data



80%

of BSIs and SSIs from *S. aureus* come from the patient's own nasal flora.¹²⁻¹⁶



Safe for repetitive use*

*Repetitive use: 2x a day, 5 days on, 5 days off, for up to 3 months.¹⁷

Its effectiveness is backed by



20

investigator-initiated clinical studies.



Prepare:

Hand hygiene

Clean hands. Protected patients.

3M™ Avagard™ D (Ethyl Alcohol 61% w/w) Instant Hand Antiseptic with Moisturizers provides fast, effective bacterial kill without being hard on your hands. It's uniquely formulated to be non-drying and non-irritating to skin, even with multiple daily uses. The problem of cracked hands may affect hand hygiene compliance.^{18,19} This emollient-rich formulation helps prevent skin break down and maintains moisture for more comfortable, prolonged use.^{18,20}



Kills

99%

of bacteria in 15 seconds (*in vitro*)²¹

Prepare:

Skin protection

Make clinically-supported skin protection part of your protocols.

Adding **3M™ Cavilon™ No Sting Barrier Film** to catheter insertion sites and dressing changes provides a unique terpolymer barrier solution to help promote skin protection. Be confident knowing it's the only barrier film supported by vascular access-specific data.²²⁻²⁴



In a study of patients with Peripherally Inserted Central Catheter (PICC) lines:²²

62%

of patients experienced skin complications when gauze or tape was applied (n=50)

While only

6%

of patients experienced skin complications with Cavilon No Sting Barrier Film applied before gauze and tape protocol (n=50)



Aligns to best practices



- ▶ CHG chemically compatible²⁵
- ▶ Sterile wands and wipes
- ▶ Unique easy-to-open, peel-down packaging allows aseptic delivery to the area that will be covered by the adhesive dressing/device



Effective yet gentle

- ▶ Waterproof barrier
- ▶ Breathable
- ▶ Fast-drying²⁶
- ▶ Alcohol-free²⁷
- ▶ Sting-free²⁷

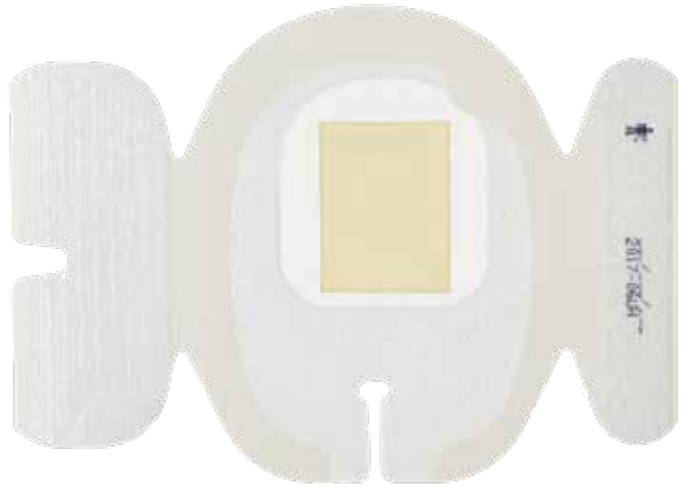


Secure and protect:

Extraluminal protection

Antimicrobial protection. Innovative securement. All in one.

Extraluminal contamination, a potential cause of catheter-associated bloodstream infections (CABSI), happens when skin bacteria at the catheter insertion site migrates along the outside surface of the catheter and enters the bloodstream. **3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing** is the *only* transparent dressing cleared by the Food and Drug Administration (FDA) to reduce catheter-related bloodstream infections and vascular catheter colonization that aligns with evidence-based guidelines and practice standards.²⁸



Infection reduction

3M™ Tegaderm™ CHG Dressing is cleared and clinically proven to reduce catheter-related bloodstream infections (CRBSI).²⁸

60% reduction of CRBSIs

in a randomized controlled trial (RCT) of 1,879 critically ill adult subjects with 4,163 catheters.²⁹



Site visibility

Transparent dressing and gel pad enable early identification of potential complications at IV site and meet INS recommendation to assess the IV site and surrounding area by visual inspection.⁸

Tegaderm CHG I.V. Securement Dressing



BioPatch® Disk with CHG



Catheter securement

Designed to minimize catheter movement and dislodgement and meets the INS definition of an integrated securement device (ISD) or adhesive securement device (ASD).²⁸



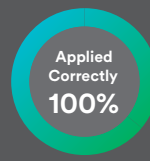
Greater pull force

Tegaderm™ CHG I.V. Securement Dressing 1657 can withstand 7.90 lb pull force on average, which is an average 1.09 lb greater pull force vs. SorbaView® SHIELD + BIOPATCH® 7 days after application.³⁰

Ease of use

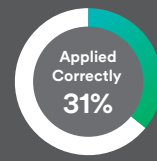
Integrated CHG gel pad and dressing design ensures standardized, correct application.³¹

Tegaderm CHG I.V. Securement Dressing



n=120

BioPatch® Disk with CHG



n=128

Important Safety Information for 3M™ Tegaderm™ CHG Dressings. Do not use 3M™ Tegaderm™ CHG Dressings 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 Dressings has not been established in children under 18 years of age. For full prescribing information, see the Instructions for Use (IFU). Rx only.

Secure and protect:

Intraluminal protection

Small, yet mighty to help in the fight against BSIs.

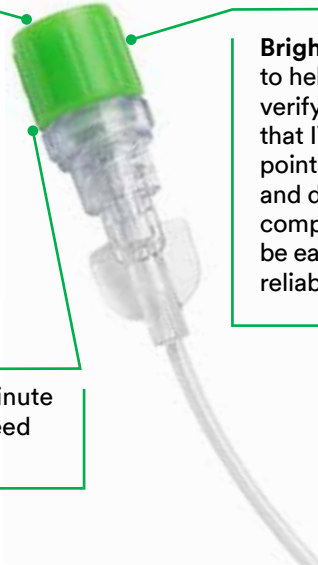
Intraluminal contamination occurs when bacteria migrate through the catheter post insertion, typically via contamination of the lumen through the catheter port. The family of **3M™ Curoc™ Disinfecting Port Protectors** contain isopropyl alcohol and twist onto IV access points for effective passive disinfection and protection.

Can be dispensed as individual caps or on strips* that can be hung from IV poles for easy access and greater compliance

*Varies by product



Brightly colored to help visually verify at a glance that IV access points are covered and disinfection compliance can be easily and reliably measured



Save valuable time with fast 1-minute disinfection that eliminates the need for “scrub the hub” protocols

Antimicrobial protection

3M™ Curoc™ Disinfecting Port Protectors achieved



99.99%

reduction in six microbes commonly associated with CLABSI (*in vitro*).^{32,33}

Disinfecting caps provide effective disinfection. When part of a peripheral line bundle, effective disinfection of needleless connectors and male luers on peripheral lines has been associated with a significant decrease in peripheral line-associated bloodstream infections (PLABSI).³⁴

1-minute disinfection

Cap contains

70%

isopropyl alcohol (IPA)

which bathes the surface of the IV access point and disinfects in 1 minute.



Long lasting protection

Protects IV access points for up to 7 days if not removed. Passive disinfection removes human technique variance, providing consistent disinfection every time.



Protects up to
7 days
if not removed

Stays securely in place

Twists on easily and stays in place on commonly used IV access points — meeting INS standards for add-on devices. 3M™ Curoc™ Stopper Disinfecting Cap for Open Female Luers works with a wide range of open female luers.



Education and training to stay ahead of the curve.

The 3M™ Peak™ Clinical Outcomes Program

As we work to help prevent bloodstream infections, providing innovative product portfolios are just part of the story. Ongoing education, training and support is just as important. The 3M™ Peak™ Clinical Outcomes Program is a unique opportunity to help your facility reduce the risk of catheter-related complications, even as many are faced with limited time, resources and staff. The program provides a wide range of tools, both print and digital, as well as onsite training by experienced 3M clinical specialists who will work with your care teams to provide customized plans, protocols and best practices for patient protection.

How the Peak Program works:



Identify

Identify the areas where you have the biggest opportunity to drive impact at your facility.



Learn

Learn about industry best practices, clinical evidence, and new ways to improve outcomes.



Improve

Improve or implement new work processes and protocols through a variety of tools and approaches.



Maintain

Maintain the progress you've made and continue to keep staff educated and engaged.

3MSM Health Care Academy

3M also offers free ongoing education for healthcare professionals through the 3MSM Health Care Academy. Designed to help you advance your knowledge through a variety of online courses, you'll find live events and webinars, all that enable you to earn continuing education credits (CEUs).






For more information,
contact your 3M
representative or go
to [3M.com/IVProtect](https://www.3m.com/IVProtect)

1. Siempos I, Kopterides P, Tsangaris I, Dimopoulou I, Armaganidis A. Impact of catheter-related bloodstream infections on the mortality of critically ill patients: A meta-analysis. *Crit Care Med*. 2009;37(7):2283-2289.
2. Pronovost P, Needham D, Berenholtz S, et al. An intervention to decrease catheter-related bloodstream infections in the ICU. *N Engl J Med*. 2006;355(26):2725-2732.
3. Mermel L. Short-term Peripheral Venous Catheter-Related Bloodstream Infections: A Systematic Review. *Clin Infect Dis*. 2017;65(10):1757-1762.
4. Scheithauer S, Lewalter K, Schröder J, et al. Reduction of central venous line-associated bloodstream infection rates by using a chlorhexidine-containing dressing. *Infection*. 2014;42(1):155-159.
5. Association for Professionals in Infection Control and Epidemiology, Inc. APIC Implementation Guide: Guide to Preventing Central Line-Associated Bloodstream Infections, 2015. https://apic.org/Resource_/TinyMceFileManager/2015/APIC_CLABSI_WEB.pdf.
6. Centers for Disease Control. Strategies to Prevent Hospital-onset Staphylococcus aureus Bloodstream Infections in Acute Care Facilities. <https://www.cdc.gov/hai/prevent/staph-prevention-strategies.html> Accessed October 7, 2019.
7. <https://www.cdc.gov/handhygiene/providers/guideline.html>
8. Gorski L, Hadaway L, Hagle ME, et al. Infusion Therapy Standards of Practice, 8th Edition. *J Infus Nurs*. 2021;44 (suppl 1):S1-S224. doi:10.1097/NAN.0000000000000396. Refer to the document to view verbatim, comprehensive standards and practice recommendations.
9. Centers for Disease Control and Prevention (CDC): O'Grady NP, Alexander M, Burns LA, et al. Guidelines for the prevention of intravascular catheter-related infections. *Clin Infect Dis*. 2011;52(9):e162-e193.
10. Rupp ME, Cavalieri J, Delaney K, Lundgren K, Stammers L, Beach S. Prospective, randomized, controlled trial assessing the clinical performance of a transparent chlorhexidine gel pad intravascular catheter dressing. Poster presented at 18th Annual Scientific Meeting of the Society for Healthcare Epidemiology of America (SHEA); April 2008; Orlando, FL.
11. 3M Study-05-011100.
12. Perl T, Cullen J, Wenzel R, et al. Intranasal mupirocin to prevent postoperative Staphylococcus aureus infections. *N Engl J Med*. 2002;346:1871-1877.
13. Kalmeijer M, van Nieuwland-Bollen E, Bogaers-Hofman D, deBaere G. Nasal carriage of Staphylococcus aureus is a major risk factor for surgical-site infections in orthopedic surgery. *Infect Control Hosp Epidemiol*. 2000;21:319-323.
14. Kluytmans J, Mouton J, Ijzerman E, et al. Nasal carriage of Staphylococcus aureus as a major risk factor for wound infections after cardiac surgery. *J Infect Dis*. 1995;171:216-219.
15. von Eiff C, Becker K, Machka K, Stammer H, Peters G. Nasal carriage as a source of Staphylococcus aureus bacteremia. *N Engl J Med* 2001; 344: 1116.
16. Wertheim H, Vos M, Ott A. Risk and outcome of nosocomial Staphylococcus aureus bacteraemia in nasal carriers versus non-carriers. *Lancet*. 2004;364(9435):703-705. doi:10.1016/S0140-6736(04)16897-9.
17. Miller L, McKinnell J, Singh R, et al. Reduction of MDRO colonization in nursing home residents with routine use of chlorhexidine bathing and nasal iodophor (Project PROTECT). Presented at IDWeek 2016, New Orleans, LA, October 2016.
18. 3M data on file. LIMS 7772.
19. Miller L, McKinnell JA, Singh R et al. Reduction of MDRO Colonization in Nursing Home Residents with Routine Use of Chlorhexidine Bathing and Nasal Iodophor (Project PROTECT), *Open Forum Infectious Diseases*, 3(1), December 2016, 1386, <https://doi.org/10.1093/ofid/ofw172.1089>.
20. 3M data on file. LIMS 7771.
21. 3M data on file.
22. George M, Ujwala P, Guduri, V, Smith G. Use of a barrier film (3M™ Cavilon™ No Sting Barrier Film) to reduce local skin complications around peripherally inserted central catheter lines: A randomised prospective controlled study. *WCET Journal*. 2016; 36(4):8-13.
23. Pivkina A, Gusarov V, Blot S, et al. Effect of an acrylic terpolymer barrier film beneath transparent catheter dressings on skin integrity, risk of dressing disruption, catheter colonisation and infection. *Intensive Crit Care Nurs*. 2018; 46: 17-23.
24. Chen Y-H, Hsieh H-L, Shih W-M. Applying skin barrier film for skin tear management in patients with central venous catheterization. *Adv Skin Wound Care*. 2020; 33(11): 582-586.
25. 3M data on file. EM-05-005732 and EM-05-002049.
26. 3M data on file. EM-05-001563, EM-05-289804 (dry time).
27. Campbell K, Woodbury M, Whittle H, Labate T, Hoskin A. A clinical evaluation of 3M™ Cavilon™ No Sting Barrier Film. *Ostomy Wound Management*. 2000;46(1):24-30.
28. U.S. Food and Drug Administration, Department of Health & Human Services. 3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing 510(k) K153410 approval letter, May 15, 2017. Retrieved September 1, 2021 from https://www.accessdata.fda.gov/cdrh_docs/pdf15/K153410.pdf
29. Timsit JF, Mimoz O, Mourvillier B, et al. Randomized controlled trial of chlorhexidine dressing and highly adhesive dressing for preventing catheter-related infections in critically ill adults. *Am J Respir Crit Care Med*. 2012;186(12):1272-1278.
30. 3M data on file. EM-05-014359.
31. Kohan C, Boyce J. A Different Experience with Two Different Chlorhexidine Gluconate Dressings for Use on Central Venous Devices. *Am J Infect Control*. 2013;41(6):S142-S143.
32. Data reflects *in vitro* findings on 3M™ Curosurf™ Disinfecting Port Protectors.
33. Weiner L, Webb A, Limbago B, et al. Antimicrobial-Resistant Pathogens Associated With Healthcare-Associated Infections: Summary of Data Reported to the National Healthcare Safety Network at the Centers for Disease Control and Prevention, 2011–2014. *Infect Control Hosp Epidemiol* 2016;1–14.
34. Duncan M, Warden P, Bernatchez B, Morse D. A Bundled Approach to Decrease Primary Bloodstream Infections Related to Peripheral Intravenous Catheters. 2018, *Journal of the Association of Vascular Access*, 23(1), 15–22.


Ordering information

Prepare


Nasal decolonization

	3M™ Skin and Nasal Antiseptic (Povidone-Iodine Solution 5% w/w [0.5% available iodine] USP)	192401	4 mL (0.14 fl. oz.) Bottle and 4 Sterile Swabs
---	---	--------	---

Hand Hygiene






3M™ Avagard™ D Instant Hand Antiseptic			
	Personal size	9221	88 mL (3 fl. oz.)
	Pump bottle	9222	500 mL (16.9 fl. oz.)
	Wall mount bottle	9223	1000 mL (33.8 fl. oz.)

Skin protection

3M™ Cavilon™ No Sting Barrier Film			
	Wand	3343	1 mL
	Wipe	3344	1 mL
	Wand	3345	3 mL


Secure and protect

Extraluminal protection









	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	1657	CHG pad: 1 3/16 in x 1 1/2 in 3 cm x 4 cm Dressing: 3 1/2 in x 4 1/2 in 8,5 cm x 11,5 cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	1658	CHG pad: 1 1/2 in x 1 3/16 in 4 cm x 3 cm Dressing: 4 in x 4 3/4 in 10 cm x 12 cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	1659	CHG pad: 1 3/16 in x 2 3/4 in 3 cm x 7 cm Dressing: 4 in x 6 1/8 in 10 cm x 15,5 cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	1660	CHG pad: 4/5 in x 4/5 in 2 cm x 2 cm Dressing: 2 3/4 in x 3 3/8 in 7 cm x 8,5 cm
	3M™ PICC/CVC Securement Device + Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	1877-2100	CHG pad: 1 1/2 in x 1 3/8 in 3 cm x 4 cm Dressing: 3 1/2 in x 4 1/2 in 8,5 cm x 11,5 cm

Secure and protect

Extraluminal protection

	3M™ PICC/CVC Securement Device + Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing	1879-2100	CHG pad: 1 1/2 in x 2 4/5 in 3 cm x 7 cm Dressing: 4 in x 6 1/8 in 10 cm x 15,5 cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Port Dressing	1665	CHG pad: 1 3/16 in x 1 3/16 in 3 cm x 3 cm Dressing: 4 3/4 in x 4 3/4 in 12 cm x 12 cm
	3M™ Tegaderm™ CHG Chlorhexidine Gluconate Gel Pad	1664	CHG pad: 1 3/16 in x 1 3/16 in 3 cm x 3 cm Dressing: 2 7/8 in x 1 15/16 in 6,2 cm x 4,9 cm
	3M™ Tegaderm™ Antimicrobial I.V. Advanced Securement Dressing	9132	3 3/8 in x 2 3/4 in 8,5 cm x 7 cm

Intraluminal protection

	3M™ Curo Jet™ Disinfecting Caps for Needleless Connectors	CFJ1-270	Individuals
	3M™ Curo Jet™ Disinfecting Caps for Needleless Connectors	CFJ5-250	Strips (5 count)
	3M™ Curo™ Disinfecting Caps for Needleless Connectors	CFF1-270	Individuals
	3M™ Curo™ Disinfecting Caps for Needleless Connectors	CFF10-250	Strips (5 count)
	3M™ Curo Tips™ Disinfecting Cap for Male Luers	CM5-200	Strips (5 count)
	3M™ Curo™ Stopper Disinfecting Cap for Open Female Luers	CSA1-270	Individuals
	3M™ Curo™ Stopper Disinfecting Cap for Open Female Luers	CSA5-250	Strips (5 count)
	3M™ Curo™ Disinfecting Caps for Tego® Hemodialysis Connectors	CTG1-270	Individuals



3M Company
2510 Conway Ave.
St. Paul, MN 55144 USA

Phone 1-800-275-4524 (NPWT products)
1-800-228-3957
Web 3M.com/medical

NOTE: Specific indications, contraindications, warnings, precautions and safety information exist for these products and therapies. Please consult a clinician and product instructions for use prior to application.

© 2022 3M. All rights reserved. 3M and the other marks shown are marks and/or registered marks. All other marks are property of their respective owners. Unauthorized use prohibited. 3M marks used under license in Canada. 70-2011-6973-0