

Bloodstream infections: A critical issue for every health care facility.

All IVs are at risk for microbial contamination. Bloodstream infections are associated with significant increases in care and costs. They are more common than you think and, in some cases, they can be deadly.

Nationwide, the annual cost to treat CLABSI exceeds

\$2.3 billion¹



CRBSIs are associated with

higher risk of mortality in critically ill adults²

Short-term PVCs accounted for

of hospital-acquired CRBSIs3

Sources of infection.

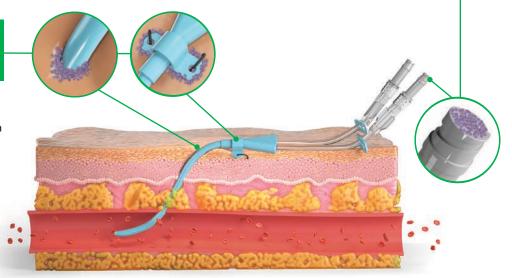
While vascular catheters provide the advantage of prolonged venous access, they present a risk of infectious complications. In fact, 60% of all hospital-acquired bloodstream infections originate from some form of vascular access.4 These infections can be acquired at the time of the initial insertion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

INTRALUMINAL CONTAMINATION

Results when bacteria migrate through the catheter post insertion, typically via contamination of the lumen through the catheter port.

EXTRALUMINAL CONTAMINATION

Results when bacteria originating on the surface of the skin migrate along the outside of the catheter and enter through the insertion site.





 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.
 Siempos II, Kopterides P, Tsangaris I, Dimopoulou I, Armaganidis AE. Impact of catheter-related bloodstream infections on the mortality of critically ill patients: A meta-analysis. Crit Care Med. 2009:37(7):2283-2289.

^{3.} Mermel L. Short-term Peripheral Venous Catheter-Related Bloodstream Infections: A Systematic Review. Clin Infect Dis. 2017:65(10):1757-1762.

Maki D, Mermel L. Infections due to infusion therapy. In Bennett JV, Brachman PS, eds. Hospital Infections.
 4th ed. Philadelphia: Lippincott-Raven; 1998:689–724.

 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.

All you need. All in one. The only one.

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.



The chlorhexidine gluconate (CHG) gel pad provides immediate and continuous antimicrobial protection.

Aligns to standards and guidelines.

Recommendations for use of chlorhexidine-impregnated dressings.



The Food and Drug Administration

Tegaderm CHG I.V. Securement Dressing is intended to reduce vascular catheter colonization and catheter-related bloodstream infections (CRBSI) in patients with central venous or arterial catheters.

Tegaderm CHG I.V. Securement Dressing is the only transparent dressing cleared and proven to reduce CRBSI.6





The Centers for Disease **Control and Prevention**

For patients aged 18 years and older: Chlorhexidine-impregnated dressings with an FDA-cleared label that specifies a clinical indication for CRBSI or CABSI are recommended to protect the insertion site of short-term, non-tunneled CVCs. (Category IA)7

View recommendations



Association for **Professionals in Infection Control and Epidemiology**

If applicable, chlorhexidineimpregnated sponge dressing or chlorhexidine-impregnated dressing can be used. (Level IB)

If a chlorhexidine-sponge dressing is used, [ensure] it is oriented correctly and changed at the same time as the transparent dressing.5

✓ INS

Infusion Nurses Society

Use chlorhexidine-impregnated (CHG) dressings for all patients 18 years and older with short-term, nontunneled central vascular access devices (CVADs). Use for arterial catheters and other CVADs when other catheter associated bloodstream infection (CABSI) prevention strategies are not effective (Level I).

More VAD types: arterial, hemodialysis (short-term and tunneled), epidural, and noncoring needle sites/

Use a transparent, chlorhexidine-impregnated dressing to provide site visibility and antimicrobial protection for patients with an epidural access device.8



Oncology Nursing Society

Use a CHG-impregnated sponge dressing for all catheters, including specialty catheters in patients older than 2 months of age.

Following CHG skin preparation, it is recommended to use a CHG-impregnated dressing for any long-term infusion (defined as exceeding 4-6 hours) or if the port remains accessed for intermittent long-term infusions.9



✓ SHEA

Society for Healthcare Epidemiology of America

Use chlorhexidinecontaining dressings for CVCs in patients over 2 months of age (quality of evidence: Level I).10

^{6.} U.S. Food and Drug Administration, Department of Health & Human Services. 3M™ Tegaderm Chlorhexidine Gluconate I.V. Securement Dressing 510(k) K153410 approval letter, May 15, 2017. Retrieved June 18, 2020 from https://www.accessdata.fda.gov/cdrh_docs/pdf15/K153410.pdf.
7. 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.

Gorski LA, 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.000000000000396. Refer to the document to view verbatim, comprehensive standards and practice recommendations.

 Oncology Nursing Society. Access device standards of practice for oncology nursing. 2017. https://www.ons.org/books/access-device-standards-practice-oncology-nursing.

 Marschall J, Mermel LA, Fakih M, et al. Strategies to Prevent Central Line-Associated Bloodstream Infections in Acute Care Hospitals: 2014 Update. Infect Control Hosp Epidemiol. 2014;35(7)753-771.

Backed by 40 years of IV care science and innovation.

Watch a video to learn more about the science behind the dressing

Large securement tape strip with notch

Promotes consistent application and enhances stabilization. Perforations aid with dressing removal.

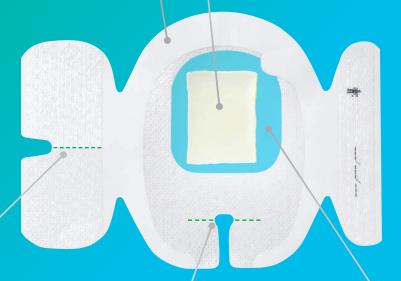
- *3M[™] Tegaderm[™] CHG Chlorhexidine Gluconate I.V. Securement Dressing 1657 only.
- **In vitro testing shows that the film provides a barrier against viruse 27 nm in diameter or larger while the dressing remains intact without leakage.

Conforming edge border

Uses technology designed to reduce edge-lift.

Antimicrobial protection

A chlorhexidine gluconate (CHG) gel pad provides antimicrobial protection for up to 7 days.



Conforming keyhole notch

A notch allows catheter lumens to fit better and stay in place. Perforations allow notch to conform around a wide variety of catheter sizes and types. A waterproof, sterile barrier protects against external contaminants**

Highly breathable, transparent film.

Continuous innovation inspired by you.

Over the last 10+ years, clinicians have come to rely on 3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressings.

Explore milestones that have helped transform patient care.



View the full timeline



· 2010

The breathability of the dressing was improved to manage moisture better.



· 2012

Randomized controlled trial documents lower catheter-related bloodstream infection (CRBSI) rates and catheter colonization with Tegaderm CHG I.V. Securement Dressing versus non-chlorhexidine dressings.¹¹

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.

Infection Reduction

Cleared and clinically proven to reduce catheter-related bloodstream infections (CRBSI).

Meets standards and guidelines including CDC Guidelines recommendation for use of chlorhexidine-impregnated dressing with FDA indication to reduce CRBSI.



in a randomized controlled trial (RCT) of 1,879 subjects with 4,163 catheters.11

Site Visibility

Transparent dressing and gel pad enable early identification of potential complications at IV site and meet Infusion Nurses Society (INS) recommendation to assess VAD site and surrounding area to monitor skin, dressing and securement device integrity by inspection, and use palpation through the intact dressing to assess complications.8 (Level V)

3M[™] Tegaderm[™] CHG **Chlorhexidine Gluconate** I.V. Securement Dressing



BIOPATCH® Disk with CHG



Catheter Securement

Designed to minimize catheter movement and dislodgement and meets the INS definition of an



pull force

3M™ Tegaderm™ CHG Chlorhexidine Gluconate 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.

Ease of Use

Integrated CHG gel pad and dressing design ensures standardized, correct application.13

Tegaderm CHG I.V. **Securement Dressing** Applied

Correctly

100%

n=120

BIOPATCH® Disk with CHG



n=128









··· 2016

Dressing was redesigned with:

- improved breathability for moisture management
- · conforming keyhole notch to allow catheter lumens to fit better and stay in place
- securement tape strip with notch for consistent application and stabilization
- conforming edge border to reduce edge lift.

2017 2017

Tegaderm CHG I.V. Securement Dressing receives U.S. Food & **Drug Administration** (FDA) 510(k) clearance for expanded indication to reduce CRBSIs.6

Tegaderm CHG I.V. Securement Dressing is the only transparent dressing to meet new Centers for Disease Control and Prevention (CDC) recommendation for reducing CRBSIs (Category 1A).7

··· 2019

11-year, real-world study shows sustained reduction of CRBSIs with CHG gel dressings.14

^{12. 3}M data on file: EM-05-014359.

^{13.} Kohan CA, Boyce JM. A Different Experience with Two Different Chlorhexidine Gluconate Dressings for Use on Central Venous Devices. Am J Infect Control. 2013;41(6):S142–S143.

^{14.} Eggimann P, Pagani JL, Dupuis-Lozeron E, et al. Sustained reduction of catheter-associated bloodstream infections with enhancement of catheter ndle by chlorhexidine dressings over 11 years. Intensive Care Med. 2019;45:823-833.

The difference is clear.







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

BIOPATCH® Disk with CHG

	Efficacy	Tegaderm CHG I.V. Securement Dressing	BIOPATCH® Disk with CHG
65. 16. 16. 16. 16. 16. 16. 16. 16. 16. 16	Superior skin flora kill rate Tegaderm CHG I.V. Securement Dressing is proven to be more effective than BIOPATCH® Disk with CHG at each time point tested over the course of 10 days.¹5	•	*
	Superior skin flora regrowth suppression at 7 days Tegaderm CHG I.V. Securement Dressing is more effective at suppressing the regrowth of normal skin flora on prepped skin than BIOPATCH® Disk with CHG. ¹⁶	•	8
	Suture site protection Tegaderm CHG I.V. Securement Dressing has been shown to reduce the number of microorganisms at the catheter insertion site, suture site, sutures and catheter surface.* Total Control of the Co		8
	Safety & Ease of Use	Tegaderm CHG I.V.	BIOPATCH® Disk with
		Securement Dressing	CHG
	Allows for constant site monitoring The 2021 Updates to the Infusion Nurses Society Infusion Therapy Standards of Practice recommends assessing the vascular access device (VAD) site and surrounding area to monitor skin, dressing and securement device integrity by inspection, and use palpation through the intact dressing to assess complications.8		
	Allows for constant site monitoring The 2021 Updates to the Infusion Nurses Society Infusion Therapy Standards of Practice recommends assessing the vascular access device (VAD) site and surrounding area to monitor skin, dressing and securement device integrity by		

^{*}Tegaderm CHG I.V. Securement Dressings are not indicated to reduce bacterial colonization of sutures or suture sites.

 ³M Data on File: #09535.
 Bashir MH, Olson LK, Walters SA. Suppression of regrowth of normal skin flora under chlorhexidine gluconate dressings applied to chlorhexidine gluconate-prepped skin. Am J Infect Control. 2012;40(4):344-348.

^{17.} Karpanen TJ, Casey AL, Das I, Whitehouse T, Nightingale P, Elliott TSJ. Transparent film intravenous line карыпел із, савеу ж., иаз і, vvnitenouse і, кідіптадае ř., Elliott I SJ. Iransparent film intravenous line dressing incorporating a chlorhexidine gluconate gel pad: A clinical staff evaluation. J Assoc Vasc Access. 2016;21(3):133-138.
 Eyberg C, Pyrek J. A Controlled Randomized Prospective Comparative Pilot Study to Evaluate the Ease of Use of a Transparent Chlorhexidine Gel Dressing Versus A Chlorhexidine Disk in Healthy Volunteers. J Vasc Access. 2008;13(3):112-117.

The value is clear.

All-in-one design is cost effective and eliminates the need to manage, store and distribute multiple products. The integrated design also helps ensure compliance and streamlines education and training.



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





BIOPATCH® Disk with CHG

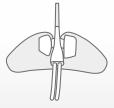


3M™ Tegaderm™ I.V. Advanced Securement Dressing



3M™ PICC/CVC Securement Device + Tegaderm™ CHG **Chlorhexidine Gluconate** I.V. Securement Dressing





Statlock® PICC Plus Stabilization Device



BIOPATCH® Disk with CHG



Tegaderm' I.V. Advanced **Securement Dressing**



Your questions, answered.

Does the gel pad stick? Is it difficult to remove?

The CHG gel pad is designed to conform to the catheter, and the integrated transparent dressing allows for consistent application, site monitoring and catheter stabilization. A CHG sponge does not provide catheter stabilization, and must be used with an additional dressing. The CHG gel pad contains adhesive properties which is sometimes perceived as "sticky". If needed, a few drops of saline or alcohol can be used to facilitate removal of the gel pad.

Does it provide 360 degree coverage?

The aqueous nature of the gel pad and CHG allows for immediate antimicrobial action upon application to skin. It has been shown to provide complete antimicrobial protection on and under a vascular catheter segment. 19-22 Plus, it's been shown that Tegaderm CHG I.V. Securement Dressing provides better antimicrobial protection compared to BIOPATCH® Disk with CHG.^{16,23}

Does the gel pad absorb fluid?

Tegaderm CHG I.V. Securement Dressing absorbs blood, sweat and exudates (8x its weight in saline and 3x its weight in blood*) and still maintains antimicrobial effectiveness.

*As demonstrated in vitro

^{19.} Schwab D, et al. Antimicrobial activity of a CHG impregnated gel pad for I.V. site protection. Poster presented at: the

conference of Infusion Nursing Society; May, 2008.

20. Karpanen TJ, Casey AL, Whitehouse T, Nightlingale P, Das I, Elliott TSJ. Clinical evaluation of a chlorhexidine intravascular catheter gel dressing on short-term central venous catheters. Am J Infect Control. 2016;44(1):54-60.

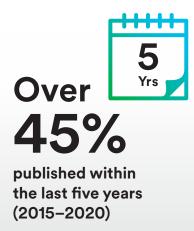
21. Karpanen TJ, Casey AL, Conway BR, Lambert PA, Elliott TSJ. Antimicrobial activity of a chlorhexidine intravascular catheter site gel dressing. J Antimicrob Chemother. 2011;66(8):1777-1784.

^{23.} Maki D. Stahl J. Jacobson C. Pyrek J. A novel integrated chlorhexidine impregnated transparent dressing for prevention of vascular catheter related bloodstream infection: A prospective comparative study in healthy:
Poster presented at: the conference of The Society for Health Care Epidemiology of America; April, 2008.

The evidence is clear.

3M is proud to have a robust body of evidence supporting 3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing.







Catheter Types Studied

- CVC (long-term & short-term)
- Arterial
- External ventricular drain
- Dialysis
- Epidural

Topics Covered



Infection Reduction

Measurable decrease in catheter-related bloodstream infection (CRBSI) rate.



Ease of Use

Product usability and clinician preference.



Antimicrobial Protection

Microbial colonization and in vitro zone of inhibition.*

*No clinical correlation intended.



Health Economics

Cost savings and overall economic impact.



Featured Studies

Randomized controlled trial of chlorhexidine dressing and highly adhesive dressing for preventing catheter-related infections in critically ill adults

Timsit JF, Mimoz O, Mourvillier B, et al. Am J Respir Crit Care Med. 2012;186(12):1272-1278.

Results

A multi-center randomized controlled trial in 12 French ICUs, with a total of 1,879 patients evaluated, compared chlorhexidine to non-chlorhexidine dressings and determined the 3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing decreases catheter colonization and CRBSI rates in CVC and arterial catheters.

View study:

https://www.atsjournals.org/doi/full/10.1164/rccm.201206-1038OC

Suppression of regrowth of normal skin flora under chlorhexidine gluconate dressings applied to chlorhexidine gluconate-prepped skin

Bashir MH, Olson LK, Walters SA. Am J Infect Control. 2012;40:344-348.

Results:

Randomized controlled trial on the backs of 30 healthy subjects compared suppression of microbe regrowth on CHG-prepped skin between control, CHG gel dressings and CHG disks. CHG dressings helped reduce the bacterial count on the skin. CHG gel maintained organism suppression to a greater extent than the CHG disk at 7 days.

View study:

https://www.ajicjournal.org/article/S0196-6553(11)00319-1/fulltext

Sustained reduction of catheter-associated bloodstream infections with enhancement of catheter bundle by chlorhexidine dressings over 11 years

Eggimann P, Pagani JL, Dupuis-Lozeron E, et al. Intensive Care Med. 2019;45:823-833.

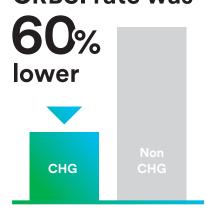
Results:

Real-world data study of 18,286 patients from 2006 to 2014 at a 35-bed mixed adult ICU evaluated the impact of incrementally introducing CHG dressings (sponge or gel) to an ongoing catheter bundle. The incidence density showed a progressive but significant decrease of CRBSI rates when CHG sponge and CHG gel dressings were used. Data indicates the skin reaction rates for CHG gel and CHG sponge were equivalent at 0.3/1,000 device-days.

View study:

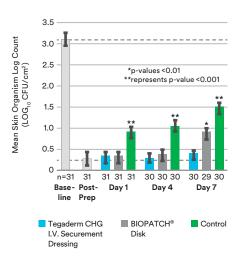
https://link.springer.com/article/10.1007%2Fs00134-019-05617-x

CRBSI rate was



with Tegaderm CHG I.V. Securement Dressing versus non-chlorhexidine dressing.

Maintains lower skin organism counts than BIOPATCH® Disk



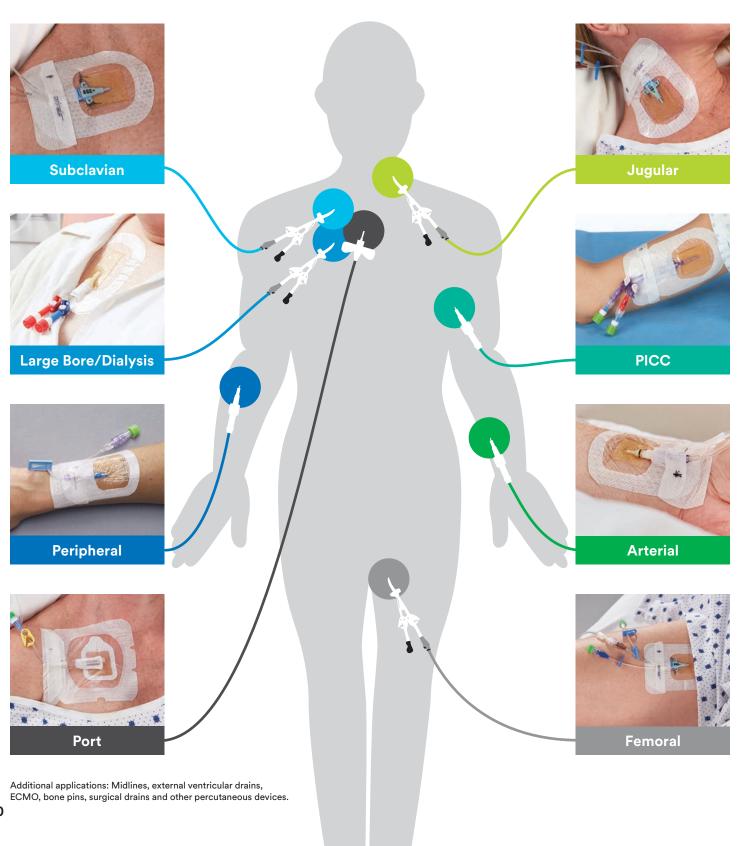


Chlorhexidine dressings were associated with

a sustained 11-year reduction of CRBSIs.

All lines. All the time.

Use the entire family of antimicrobial CHG Tegaderm™ Dressings to help reduce risks across extraluminal access points.



The choice is clear.



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

Integrated all-in-one design ensures consistent application, aligning with evidence-based guidelines and practice standards.

Available in 4 sizes.



3M™ PICC/CVC Securement Device

+ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Securement Dressing

An adhesive securement device (ASD) plus antimicrobial (CHG) dressing designed to secure IVs quickly and effectively – without sutures.

Available in 2 sizes.



3M™ Tegaderm™ CHG Chlorhexidine Gluconate I.V. Port Dressing

Antimicrobial (CHG) gel pad plus I.V. port dressing specifically designed to protect single or double implanted venous ports and non-coring needles.

Available in 1 size.



3M™ Tegaderm™ CHG Chlorhexidine Gluconate Gel Pad

Engineered for versatility and antimicrobial protection, features an easy to use design to protect insertion sites and conform around a wide variety of percutaneous devices.

Available in 1 size.



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.

Available in 1 size.



Dedicated expertise. Customized plans. Ongoing support.

Every IV site presents the potential for infection, dislodgement, skin damage and other complications. That's why we offer the 3M[™] Peak[™] Clinical Outcomes Program, a collaborative approach to successfully implementing and sustaining your clinical outcomes.

How the Peak Program works:



Identify

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



Improve

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



Learn

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



Maintain

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

Get started today at 3M.com/Peak

or connect with your 3M Account Manager to request an audit.

Product	Product Number	CHG Gel Pad Size	Dressing Size	Suggested Devices
3M™ Tegader	m™ CHG Chlorhexidiı	ne Gluconate I.V. Secui	rement Dressing	
10 (1657	1¾6 in x 1½ in 3 cm x 4 cm	3½ in x 4½ in 8,5 cm x 11,5 cm	All CVCs, Arterial, Dialysis, Midline and other percutaneous devices
(D)	1658	1½ in x 1¾6 in 4 cm x 3 cm	4 in x 4 3/4 in 10 cm x 12 cm	Universal, other percutaneous devices
10 1	1659	1¾6 in x 2¾ in 3 cm x 7 cm	4 in x 6½ in 10 cm x 15,5 cm	All CVCs and PICCs
30 i	1660	4/₅ in x 4/₅ in 2 cm x 2 cm	2¾ in x 3¾ in 7 cm x 8,5 cm	PIVs, Midline, Arterial, CVCs and other percutaneous devices
3M™ PICC/C\	/C Securement Devi	ce + Tegaderm™ CHG C	hlorhexidine Glucon	ate I.V. Securement Dressing
	1877-2100	1½ in x 1% in 3 cm x 4 cm	3½ in x 4½ in 8,5 cm x 11,5 cm	PICCs, CVCs and other vascular access devices
*	1879-2100	1½ in x 2⅓ in 3 cm x 7 cm	4 in x 6½ in 10 cm x 15,5 cm	PICCs, CVCs and other vascular access devices
3M™ Tegader	– m™ CHG Chlorhexidir	ne Gluconate I.V. Port [Dressing	
۵	1665	1¾6 in x 1¾6 in 3 cm x 3 cm	4¾ in x 4¾ in 12 cm x 12 cm	Implanted Venous Ports
3M™ Tegader	m™ CHG Chlorhexidir	ne Gluconate Gel Pad		
4	1664	1¾6 in x 1¾6 in 3 cm x 3 cm	2%6 in x 115%6 in 6,2 cm x 4,9 cm	Other Percutaneous Devices (Implanted ports, large bore catheters, surgical drains, bone pins)
3M [™] Tegader	m™ Antimicrobial I.V.	Advanced Securemen	t Dressing	
30 i	9132	-	3% in x 2¾ in 8,5 cm x 7 cm	PIVs
		Visit 3M.com/Te	gadermCHG to le	earn more.

Important Safety Information for Tegaderm CHG I.V. Securement Dressings and Tegaderm CHG Gel Pad. Do not use Tegaderm CHG I.V. Securement Dressings or Tegaderm CHG Gel Pad on premature infants or infants younger than two months of age. Use of these products on premature infants may result in hypersensitivity reactions or necrosis of the skin. The safety and effectiveness of Tegaderm CHG I.V. Securement Dressings and Tegaderm CHG Gel Pad has not been established in children under 18 years of age.

For full prescribing information, see the Instructions for Use (IFU). Rx Only.



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

Phone 1-800-228-3957 Web 3M.com/Medical



© 3M 2011, 2017, 2019, 2020, 2021. All rights reserved. 3M and the other marks shown are marks and/or registered marks. 3M marks used under license in Canada. All other marks are property of their respective owners. Unauthorized use prohibited. US_70-2009-9596-0