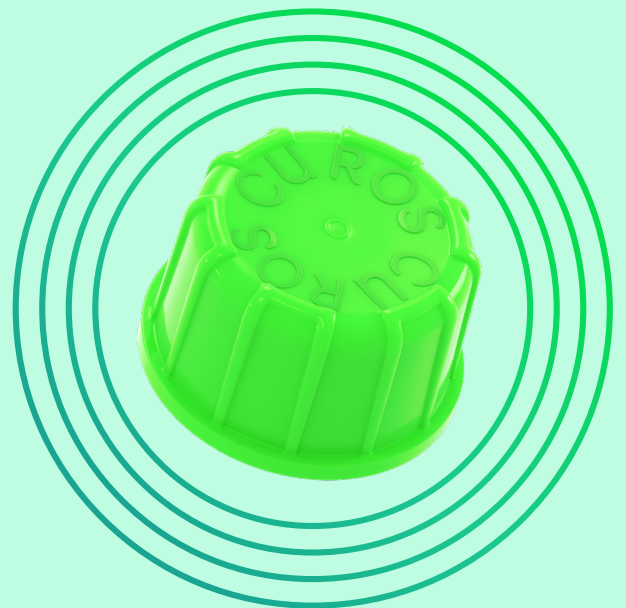




Protect your
patient's IV
access points
and your peace
of mind

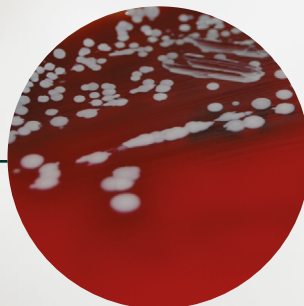
3M™ Curos™ Disinfecting Port Protectors





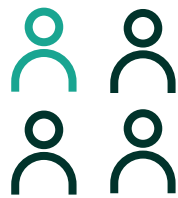
Are all of your IV access points protected?

Below is a picture of a culture taken from an unprotected IV access point. Unprotected IV access points can touch floors, armpits, bed linens and other unsterile surfaces, adding to their bioburden.¹





Every IV catheter presents potential for catheter-associated bloodstream infections (CABSIs)



CRBSIs are associated with

1.57 times higher risk

of mortality in critically ill adults.²



Cost to treat CRBSI

£10,199.68

per infection.³



Hospital acquired infections cost the NHS

£2.7 billion

per year.^{4,5,6}



A literature review found short-term peripheral intravenous catheters (PIVCs)

accounted for 22%

of hospital-acquired catheter-related bloodstream infections (CRBSIs).⁴





When staff decreased, healthcare-associated infections increased

Staffing shortages have had startling effects on healthcare-associated infections (HAIs). Despite years of progress in lowering the rate of HAIs, rising patient caseloads and poor staffing have made it difficult for dedicated clinicians to uphold infection control policies. Significant increases were seen in national infection rates in 2020; CLABSIs had the largest increase.⁵

The average medical-surgical patient-to-nurse staffing ratio among 116 surveyed hospitals was **6.3 patients per nurse**. If a vascular access device (VAD) is accessed 3x/shift/patient, that would equate to almost **10 minutes per shift** scrubbing the hub and does not include scrubbing for sequential accesses.⁶



The World Health Organisation estimates a shortage of

4.5 million nurses

by the year 2030.⁷

Challenges with scrub the hub

For more than two decades, the standard of care in IV access point disinfection has been a thorough 15–30 second (plus drying time) manual scrub of the IV access point with 70% isopropyl alcohol (IPA), often referred to as ‘scrubbing the hub.’ This method’s effectiveness is compromised by its lack of intuitiveness,¹⁰ low compliance, inconsistent results and absence of a clear visual signal that the access point has been properly disinfected.

Did you know?



Scrub the hub effectiveness varies with technique

Laboratory simulation demonstrated greatest bacterial elimination rates associated with scrubbing in a straight line (compared with rotational scrubbing), using a force equal to that when applying arterial compression and when the connector is scrubbed twice with a new swab each time.⁸



Scrub the hub effectiveness varies with scrub time


Recent studies showed varied effectiveness of scrub times between five and fifteen seconds. If clinicians aren’t scrubbing long enough, it may not be effective.⁹



Compliance to ‘scrub the hub’ protocol can be as low as:
only 10%–27%.^{10,11}



31% of clinicians didn’t attempt to disinfect needless connectors at all, even under active observation.¹⁰



A simple solution that provides protection and peace of mind

The family of 3M™ Curo™ Disinfecting Port Protectors consists of caps that twist onto IV access points. These caps enable effective passive disinfection and protection – a method of decontamination that is simple, intuitive and quick. IPA bathes the surface of the IV access point and disinfects it in just one minute.



Consistent use of 3M™ Curo™ Disinfecting Caps for Needleless Connectors is associated with decreased CLABSI.*

*See clinical evidence summary on page 13.

CLABSI is common, but it doesn't have to be

Studies identified passive disinfection with an antiseptic barrier cap as a solution to lower the occurrence of CLABSIs.^{12,13,14} Curoso disinfecting port protectors provide several advantages over the 'scrub the hub' protocol.



Save time

Curoso disinfecting port protectors are alcohol-impregnated, providing fast passive disinfection, saving nurses valuable time compared with most 'scrub the hub' protocols. In addition, no drying time is required to achieve disinfection.



Provide a physical barrier

They provide a physical barrier to contamination between accesses, for up to seven days.



Remove user-technique variation

They remove the user-technique variation found in manual 'scrub the hub' procedures.



Provide visual compliance confirmation

Their bright colour also provides quick visual confirmation that an IV access point is clean, giving nurses peace of mind and empowering facilities to audit and improve disinfection compliance.

3M™ Curoso™ Disinfecting Port Protectors can be dispensed as individual caps or on strips.* Strips can be hung from IV poles for easy access, greater compliance and reduced waste.

*Varies by product.



Every line, every time

The Curoso disinfecting port protector difference

Use the entire family of 3M™ Curoso™ Disinfecting Port Protectors to simplify disinfection, standardise protocols and help reduce risks across all intraluminal access points.

Curoso disinfecting port protectors are the only disinfection solution that has offerings to help reduce risks across all IV access points.



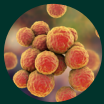
Compliance is critical

One study showed a significant reduction in CLABSIs when compliance rates reached 85% with use of disinfecting caps.¹⁵

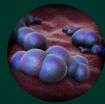


Curos disinfecting port protectors achieved a 99.99% reduction in six microbes commonly associated with CLABSI^{16,17}

The effectiveness of Curos disinfecting port protectors was tested *in-vitro* against:



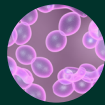
Staphylococcus aureus



Staphylococcus epidermidis



Escherichia coli



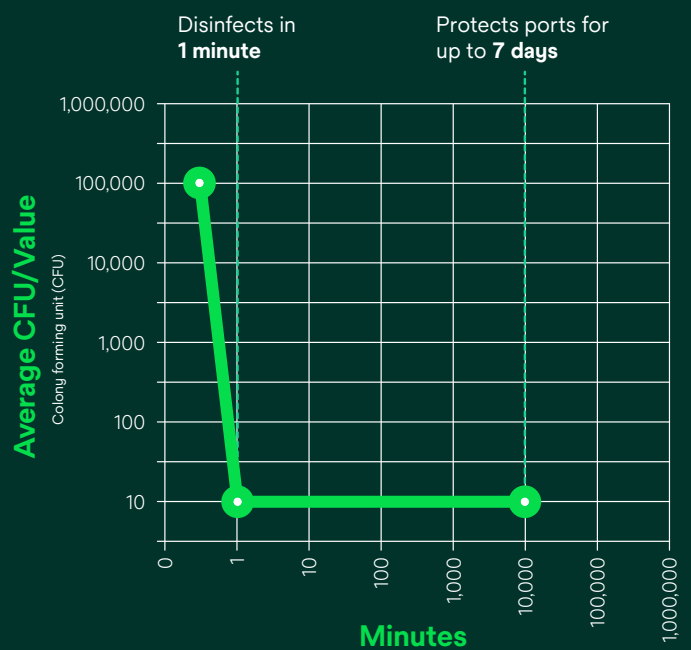
Candida albicans



Pseudomonas aeruginosa



Candida glabrata



Study conclusion

All test samples exceeded the minimum four-log reduction after one minute.*

*Solventum data on file.

The 3M™ Curoso™ Disinfecting Port Protectors family

Protect every line, every time

Because there is only one bloodstream, every vascular access device can put the patient at risk for developing an infection. Curoso disinfecting port protectors are the only solution on the market that has offerings to help reduce risks across all IV access points.





3M™ Curoso™ Disinfecting Cap for Needleless Connectors

Effective protection

Curoso disinfecting caps are used as a disinfecting device for needleless connectors.

Reliable protection

The caps acts as a barrier to contamination while in place.

Convenience and availability

Curoso disinfecting cap strips can be hung from IV poles for easy access, greater compliance and reduced waste.

Dispensing options: Individual caps, Strips (10 count)



3M™ Curoso™ Stopper Disinfecting Cap for Open Female Luers

Functional design

Curoso stopper disinfecting caps are designed to luer lock onto a wide range of stopcocks and catheter hubs. They utilise 70% IPA to disinfect the critical surfaces of open female luers prior to line access.

The unique cap design will hold pressure to maintain a closed system.

Dispensing options: Individual caps, Strips (5 count)



3M™ Curoso™ Tips™ Disinfecting Cap for Male Luers

Targeted protection

Curoso Tips disinfecting caps disinfect critical surfaces and protect the distal end of IV tubing and other male luer devices.

Precise alcohol application

A unique design shields excess alcohol from entering the lumen while providing sufficient flow of alcohol precisely where it is needed: on the exposed exterior male luer.

Dispensing options: Strips (5 count)



3M™ Curoso™ Disinfecting Cap for Tego® Haemodialysis Connectors

Compatible

This specially designed Curoso disinfecting cap is compatible* with the Tego® Needlefree Haemodialysis Connector.**

Custom colour

White Curoso caps are easily distinguished from green caps for dedicated use on the Tego haemodialysis connectors.

Dispensing options: Individual caps

*Tego Swab Recommendations and Compatibility with Disinfecting Caps, October 2012.
**ICU Medical Tego® Haemodialysis Connector catalogue code D1000.

Protocol for successful IV access point disinfection

The use of Curox Disinfecting Port Protectors aligns with the Infusion Nurses Society 2024 Infusion Therapy Standards of Practice.¹⁸ Following their guideline recommendations can help reduce the risk of contamination and support a safer, more effective IV disinfection process.



1

Consider passive disinfection by applying a cap or covering containing a disinfection agent. A systematic review (of randomised and non-randomised studies) has demonstrated high level of decontamination compliance and reductions in CLABSI rates and related healthcare costs associated with avoided harm. (II)¹⁸



2

Ensure that disinfecting supplies are readily available at the bedside to facilitate staff compliance with needleless connector disinfection.¹⁸



3

Monitor clinician compliance to ensure that the chosen method for disinfection is applied consistently for needleless connectors on all peripheral intravenous catheters (PIVCs) and central venous access devices (CVADs), as this is a critical element for reduction of intraluminal contamination and subsequent bloodstream infection (sBSI). (V)¹⁸

Curos disinfecting port protectors are backed by research

View full clinical evidence summary



ClinicoEconomics and Outcomes Research (no. 15) 2023

Effectiveness of disinfecting caps for intravenous access points in reducing central line-associated bloodstream infections, clinical utilisation and cost of care during COVID-19¹⁹

Compared with patients who received the 'scrub the hub' protocol, patients with a disinfecting cap experienced:



73% fewer
incidences
of CLABSI



1/2 day
reduction
in hospital stay



\$6,703 less
in cost per
hospital stay (USD)

The Journal of the Association for Vascular Access (vol. 23, no. 1) 2018

A bundled approach to decrease the rate of primary bloodstream infections related to peripheral intravenous catheters²⁰

Compared with patients who received the 'scrub the hub' protocol, patients with a disinfecting cap experienced:



Compliance protecting all
needleless connectors was near
90%



Compliance protecting male ends
of disconnected IV tubing was near
90%

Burns (vol. 43, no. 5) 2017

Efforts of a unit practice council to implement practice change utilising alcohol-impregnated port protectors in a burn ICU²¹

Compared with patients who received the 'scrub the hub' protocol, patients with a disinfecting cap experienced:



CLABSI rates were reduced by near
68%

“...ease of use with the caps simplified daily tasks, leading to higher compliance.”

Improving outcomes together

Our aim is to partner with clinicians through an evidence-based, multidisciplinary and collaborative approach that enables successful change implementation and sustainable clinical outcomes.



On-site training and education



Auditing and assessment support



Robust training and compliance tools







Working together to improve outcomes through the following steps:

- 1 Identify**
Identify the areas where you have the biggest opportunity to drive impact at your facility.
- 2 Learn**
Learn about industry best practice, clinical evidence and new ways to improve outcomes.
- 3 Improve**
Improve or implement new work processes and protocols through a variety of tools and approaches.
- 4 Maintain**
Maintain the progress you've made and continue to keep staff educated and engaged.

Visit [Go.Solventum.com/IVTraining](https://www.solventum.com/IVTraining) to access resources and videos on how to use CuroTM Disinfecting Caps →

1. Wendy Kaler, Making It Easy for Nurses to Reduce the Risk of CLABSI, *Patient Safety & Quality Healthcare* 11, no. 6 (2014): 46–49, <https://www.psqh.com/analysis/making-it-easy-for-nurses-to-reduce-the-risk-of-clabsi/>.
2. 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. *Critical care medicine*. 2009 Jul 1;37(7):2283–9.
3. Medical technologies guidance [MTG25] Published date: September 2019. The 3M Tegaderm CHG IV securement dressing for central venous and arterial catheter insertion sites www.nice.org.uk/guidance/mtg25.
4. www.hscic.gov.uk/hospital-care – accessed on 17/04/14).
5. www.nhs.uk/news/2012/05may/pages/mrsa-hospital-acquired-infection-rates.aspx – accessed on 17/04/14).
6. Reducing Healthcare Associated Infections in Hospitals in England: Report by the Comptroller and Auditor General; HC 560 Session 2008–2009. 12 June 2009.
7. ‘Nursing and Midwifery.’ World Health Organization. Accessed October 28, 2024. <https://www.who.int/news-room/fact-sheets/detail/nursing-and-midwifery#:~:text=There%20are%20an%20estimated%2029%20million%20nurses%20worldwide,0.31%20million%20midwives%20by%20the%20year%202030%20%281%29>.
8. Kenichi Satou *et al.*, ‘Scrubbing technique for needleless connectors to minimize contamination risk,’ *Journal of Hospital Infection* 100, no. 3 (2018): e200–e203, <https://doi.org/10.1016/j.jhin.2018.03.015>.
9. Barbara Nickel *et al.*, ‘Infusion Therapy Standards of Practice, 9th Edition,’ *Journal of Infusion Nursing* 47, no. 1S (January/February 2024): S28–S32, <https://doi.org/10.1097/nan.0000000000000532>.
10. Nancy L. Moureau and Julie Flynn, ‘Disinfection of Needleless Connector Hubs: Clinical Evidence Systematic Review,’ *Nursing Research and Practice* 2015, no. 1 (January 2015): 1–20, <https://doi.org/10.1155/2015/796762>.
11. Corinne Cameron-Watson, ‘Port Protectors in Clinical Practice: An Audit,’ *British Journal of Nursing* 25, no. 8 (2016): S25–S31, <https://doi.org/10.12968/bjon.2016.25.8.s25>.
12. Sofía Tejada *et al.*, ‘Antiseptic Barrier Caps in Central Line-Associated Bloodstream Infections: A Systematic Review and Meta-analysis,’ *European Journal of Internal Medicine* 99 (2022): 70–81, <https://doi.org/10.1016/j.ejim.2022.01.040>.
13. Veerle E.L.M. Gillis *et al.*, ‘Antiseptic Barrier Caps to Prevent Central Line-Associated Bloodstream Infections: A Systematic Review and Meta-analysis,’ *American Journal of Infection Control* 51, no. 7 (2023): 827–835, <https://doi.org/10.1016/j.ajic.2022.09.005>.
14. Anne F. Voor In ’t Holt *et al.*, ‘Antiseptic Barrier Cap Effective in Reducing Central Line-Associated Bloodstream Infections: A Systematic Review and Meta-analysis,’ *International Journal of Nursing Studies* 69 (2017): 34–40, <https://doi.org/10.1016/j.ijnurstu.2017.01.007>.
15. Michael A. Sweet *et al.*, ‘Impact of Alcohol-Impregnated Port Protectors and Needleless Neutral Pressure Connectors on Central Line-Associated Bloodstream Infections and Contamination of Blood Cultures in an Inpatient Oncology Unit,’ *American Journal of Infection Control* 40, no. 10 (2012): 931–934, <https://doi.org/10.1016/j.ajic.2012.01.025>.
16. Lindsey M. Weiner *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,’ *Infection Control & Hospital Epidemiology* 37, no. 11 (2016): 1288–1301, <https://doi.org/10.1017/ice.2016.174>.
17. Jayne Lee, ‘Disinfection Cap Makes Critical Difference in Central Line Bundle for Reducing CLABSIs,’ *American Journal of Infection Control*, 39, no. 5, (2011): E64, <https://doi.org/10.1016/j.ajic.2011.04.124>.
18. Lisa A. Gorski *et al.*, ‘Infusion Therapy Standards of Practice, 8th Edition,’ *Journal of Infusion Nursing* 44, no. 1S (2021): S1–S224, <https://doi.org/10.1097/nan.0000000000000396>.
19. Yuefeng Hou *et al.*, ‘Effectiveness of Disinfecting Caps for Intravenous Access Points in Reducing Central Line-Associated Bloodstream Infections, Clinical Utilization, and Cost of Care During COVID-19,’ *ClinicoEconomics and Outcomes Research* 2023, no. 15 (2023): 477–486, <https://doi.org/10.2147/ceor.s404823>.
20. Mary Duncan *et al.*, ‘A Bundled Approach to Decrease the Rate of Primary Bloodstream Infections Related to Peripheral Intravenous Catheters,’ *The Journal of the Association for Vascular Access* 23, no. 1 (2018): 15–22, <https://doi.org/10.1016/j.java.2017.07.004>.
21. Amy Martino *et al.*, ‘Efforts of a Unit Practice Council to Implement Practice Change Utilizing Alcohol Impregnated Port Protectors in a Burn ICU,’ *Burns* 43, no. 5 (2017): 956–964, <https://doi.org/10.1016/j.burns.2017.01.010>.

Ordering information

Product	Dispenser	Product order number	Boxes per case	Units per box	Total caps or tips per case
 3M™ Curoso™ Disinfecting Cap for Needleless Connectors	Individuals	CFF1-270R	10	270	2,700
	Strips (10 count)	CFF10-250R	10	50 strips	2,500
 3M™ Curoso Tips™ Disinfecting Cap for Male Luers	Strips (5 count)	CM5-200R	10	40 strips	2,000
 3M™ Curoso™ Stopper Disinfecting Cap for Open Female Luers	Individuals	CSV1-270R	8	270	2,160
	Strips (5 count)	CSV5-250R	8	50 strips	2,000
 3M™ Curoso™ Disinfecting Cap for Tego® Hemodialysis Connectors	Individuals	CTG1-270R	8	270	2,160

[Go.Solventum.com/IV-CRBSI-Solutions](https://www.solventum.com/IV-CRBSI-Solutions)

Refer to product IFU for other important information.

Device is single use only. Once device is opened per instructions, it cannot be reclosed.



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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. This material is intended for healthcare professionals.

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