


3M

curos™

Disinfecting Port
Protectors



**When their ports are
protected, so is your
peace of mind.**

3M™ Curoc™ Disinfecting Port Protectors

CRBSI

is a serious threat.

Every I.V. catheter presents potential for Catheter Related Bloodstream Infections (CRBSI).



Nearly

One in three hospital acquired infections are related to central venous access devices.¹

One CRBSI increases length of stay by more than 11 days.²

21%

of patients with a Central Venous Access Device (CVAD) acquire at least one healthcare associated infection.³

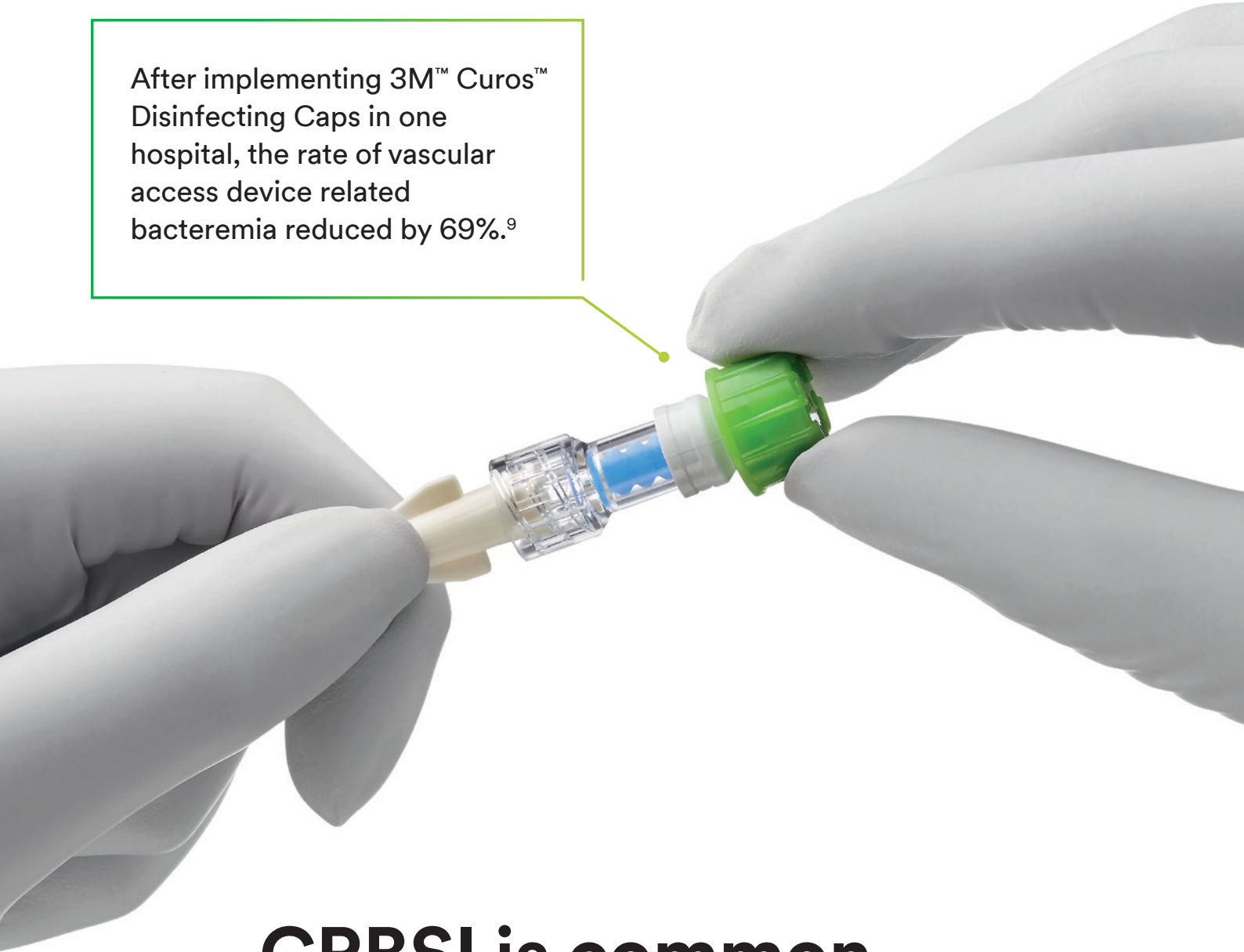
Hospital acquired
infections cost the NHS
£2.7 billion
per year.^{4,5,6}

Cost to treat CRBSI
£10,199.68
per infection.⁷

Are all of your ports protected?

This is a picture of a culture taken from an unprotected port. Unprotected ports can touch floors, armpits, bed linens and other unsterile surfaces, adding to their bioburden⁸.





After implementing 3M™ Curoso™
Disinfecting Caps in one
hospital, the rate of vascular
access device related
bacteremia reduced by 69%.⁹

CRBSI is common, but it doesn't have to be.

Consistent use of 3M™ Curoso™ Disinfecting Caps on ports is associated with decreased VAD related bacteremia. Curoso disinfecting port protectors are alcohol-impregnated caps that twist onto ports for disinfection and protection. They disinfect prior to line access and act as a physical barrier to contamination between accesses.

Each Curoso disinfecting port protector contains 70% isopropyl alcohol (IPA). The IPA bathes the surface of the port and disinfects it in one minute.

3M™ Curoso™ Disinfecting Port Protectors achieved a 99.99% reduction in six microbes commonly associated with CLABSI.^{10,11}

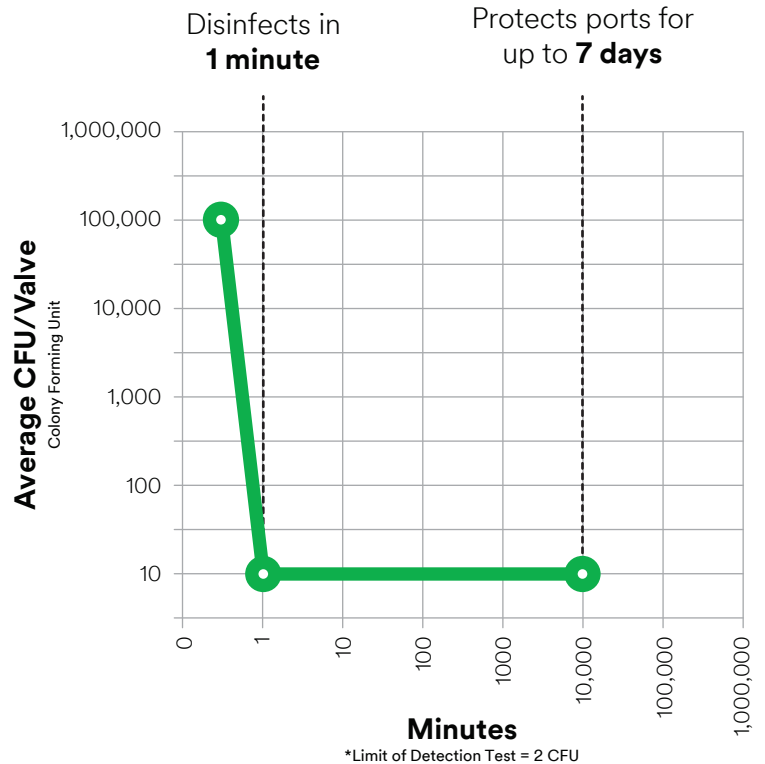
The effectiveness of Curoso products was tested in vitro against:

-  Staphylococcus aureus
-  Staphylococcus epidermidis
-  Escherichia coli
-  Candida albicans
-  Pseudomonas aeruginosa
-  Candida glabrata

Study conclusion

All test samples exceeded the minimum 4-log reduction after one minute.

3M data on file.



? How do Curoso disinfecting port protectors compare with the ‘scrub the hub’ method?

For more than a decade, the standard of care in port disinfection has been a thorough 15–30 second (plus drying time) manual scrub of the port with an alcohol pad, often referred to as scrubbing the hub. Curoso disinfecting port protectors provide several advantages over the scrub the hub protocol.

In a UK hospital observational study 77% scrubbed the hub for less than the recommended time.¹²

1 Save time

Curoso alcohol-impregnated caps provide fast passive disinfection, saving nurses valuable time compared to most scrub the hub protocols. In addition, no drying time is required to achieve disinfection.

3 Remove user technique variation

They remove the user technique variation found in manual scrubbing the hub procedure.

2 Provide a physical barrier

They provide a physical barrier to contamination between accesses, for up to 7 days.

4 Provide visual compliance confirmation

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

All patients, all access points, all the time.

Use the entire family of Curoso disinfecting port protector products to reduce risks across intraluminal access points.

According to the Royal College of Nursing Standards for Infusion Therapy "Use of passive disinfection caps containing disinfecting agents (such as isopropyl alcohol) should be in line with local policies."¹³



3M™ Curoso™
Disinfecting Cap for
Needleless Connectors



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



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



Where you need them, when you need them.

Curots products can be dispensed as individual caps or on strips. Strips of Curots products can be hung from I.V. poles for easy access, greater compliance and reduced waste.

Powerful one minute disinfection

3M™ Curots™ Disinfecting Port Protectors contain 70% isopropyl alcohol (IPA). The IPA disinfects the surface of the port in one minute. They're proven to disinfect against *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Candida glabrata*, and *Candida albicans*.

Protects for up to seven days

Curots disinfecting port protectors can also be left in place to keep ports clean and protected for up to seven days. Passive disinfection removes human technique variance, providing consistent disinfection every time.

Coloured bright to disinfect right

Brightly coloured Curots products verify that a port is clean at a glance and disinfection compliance can be easily and reliably measured.

Protection that stays put

Curots disinfecting port protectors twist on easily and stay securely in place on commonly used ports – meeting Infusion Nurses Society guidelines for add-on devices.¹⁴

Strips are consistent
with the INS guideline:

“Ensure disinfecting
supplies are readily available
at bedside to facilitate
staff compliance with
port disinfection.”¹⁵



Peer-reviewed articles

Clinical studies back us up

Several hospitals have implemented the use of 3M™ Curoc™ Disinfecting Caps and achieved impressive results.

10% increase in nurse compliance resulted in a statistically significant

7% decrease in infection rates

American Journal of Infection Control: Volume 40 Number 12; December 2014

Impact of Universal Disinfectant Cap Implementation on Central Line-Associated Bloodstream Infections

Katreena Collette Merrill RN, PhD, Sharon Sumner RN, BS, Lorraine Linford RN, BS, CNSC, Carrie Taylor RN, MS, CIC, Christopher Macintosh RN, BS.

- ▶ The rate of CLABSI infections decreased by >40% following implementation of the 3M™ Curoc™ Disinfecting Strip for Needleless Connectors (IRR = .557, P = .004).
- ▶ Curoc Cap use was associated with an estimated savings of almost £235 per year in the hospital studied.
- ▶ Weekly audits of compliance demonstrated that a 10% increase in nurse compliance resulted in a statistically significant 7% drop in infection rate.

Implementation of the strip version of Curoc caps during the trial increased compliance rates from

63% to 80%

The Journal of the Association for Vascular Access: Volume 17 Number 4; December 2012

Central Venous Catheter Protective Connector Caps Reduce Intraluminal Catheter-Related Infection

Chuck Ramirez, BA, RRT, VA-BC, Antonina M. Lee, MEd, MPH, RN, CIC, Ken Welch, MD Banner Estrella Medical Center, Phoenix, AZ

- ▶ During 2010, the CLABSI rate reduced from 1.9 in 2010 to 0.5 during the one-year trial period.
- ▶ The implementation of 3M™ Curoc™ Disinfecting Strip for Needleless Connectors during month five of the trial increased compliance rates from 63% to 80%.

Curo caps were estimated to provide a potential clinical time saving of

82.4
working
days per year

This infection reduction could translate to an annual saving of approximately

£2.9 million

32-bed study showed annual savings of

£390,000

British Journal of Nursing: (IV Therapy Supplement) Vol 25, No 8, 2016

Port Protectors in Clinical Practice: an Audit

Corinne Cameron-Watson. Barking Havering and RedBridge NHS Trust

- ▶ The study measured the effect on compliance and incidence of vascular access device (VAD)-related bacteremia following the introduction of a passive disinfection device (Curo) for 6 months.
- ▶ As compared to data collected in a benchmark “scrub the hub” audit, data post Curo cap implementation showed VAD-related bacteremia rates reduced by 69% when staff compliance with Curo cap placement onto VADs was 80% or more.
- ▶ The use of Curo caps was estimated to provide a potential clinical-time saving of 659.4 hours per year, which equates to 82.4 working days per year (based on an 8-hour day).
- ▶ Of the 86 staff trained to use a port protector, 70% returned completed questionnaire, and of these 100% preferred the port protectors to manual scrubbing.

American Journal of Critical Care, Vol. 25, No. 2: 165-172, March 2016

Use of a Central Catheter Maintenance Bundle in Long-term Care Hospitals

Anthony M. Grigonis, PhD, Amanda M. Dawson, PhD, Mary Burkett, DNP, CNS, Arthur Dylag, MA, MBA, Matthew Sears, BS, Betty Helber, RN, MS, ANE-BC, and Lisa K. Snyder, MN, MPH

- ▶ A central catheter maintenance bundle was implemented in 30 LTACHs, and compliance with the bundle was tracked for six months. CLABSI rates were monitored for 14 months before and 14 months after the bundle was implemented.
- ▶ In addition to the CDC guidelines, the bundle protocol included education on the protocol, mandatory use of alcohol-based central catheter caps, chlorhexidine gluconate dressings, and formation of a central catheter team of nurses.
- ▶ A mean reduction of 4.5 CLABSIs per LTACH occurred for the LTACHs studied for 14 months after the bundle was implemented. This infection reduction could translate to a savings of approximately £2.9 million annually for the 30 LTACHs studied and could have potentially saved 20 patients’ lives, assuming a 15% mortality rate from CLABSIs.

American Journal of Infection Control: Volume 40 Number 10; December 2012

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

Michael A. Sweet, PharmD; Aaron Cumpston, PharmD; Frank Briggs, PharmD; MPH, Michael Craig MD and Mehdi Hamadani, MD

- ▶ A total of 6,851 central line-days and 16 CLABSIs (2.3 infections/1,000 central line days) were documented during the control period, compared with 3,005 central line days and one CLABSI (a rate of 0.3 infections/1,000 central line days) during the intervention period (relative risk, 0.14; 95% confidence interval [CI], 0.02-1.07; P = .03).
- ▶ This 32-bed study showed £390,000 in annual savings (Sweet MA, et al. SHEA ProductEvaluation 2011).
- ▶ The rate of contaminated blood cultures from central lines was 2.5% (17 of 692) during the control period, but only 0.2% (1 of 470) during the intervention period (relative risk, 0.09; 95% CI, 0.01-0.65; P = .002).
- ▶ The rate of adherence to the intervention was 85.2% (228 of 269 patients with catheter protectors).

The entire family of 3M™ Curoso™ Disinfecting Port Protectors

Disinfects in one minute

Protects ports for
up to seven days

Twists on, stays on

Brightly coloured
for visual verification
and auditing

Single use only



3M™ Curoso™ Disinfecting Cap for Needleless Connectors

Disinfects

Disinfects needleless connectors in one minute.

Protects

Acts as a barrier to contamination while in place.

Where you need them, when you need them

Strips of Curoso products can be hung from I.V. poles for easy access, greater compliance and reduced waste.

Dispensing options

- ▶ Individual caps
- ▶ Strips (10 count)



3M™ Curos™ Stopper

Disinfecting Cap for Open Female Luers

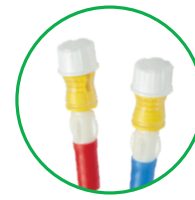
Thoughtful design

Curos Stopper disinfecting caps are designed to luer lock onto a wide range of stopcocks and catheter hubs. They utilize 70% isopropyl alcohol (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™ Curos™

Disinfecting Cap For Tego® Hemodialysis Connectors

Compatible

This specially designed Curos disinfecting cap has been tested to fit and maintain the integrity of the Tego® Hemodialysis Connector. *ICU Medical. "Tego Swab Recommendations and Compatibility with Disinfecting Caps," October, 2012.

Custom coloured

White Curos caps for Tego hemodialysis connectors are easily distinguished from green caps for dedicated use on the Tego connectors.

Dispensing options

- ▶ Individual caps

3M leads the way in antimicrobial protection of central vascular access devices. Reducing infection risk at all access points, including the insertion site, sutures and catheter ports.



Product	Dispenser	3M code	Boxes per case	Units per box	Total caps or tips per case
3M™ Curoso™ Disinfecting Caps for Needleless Connectors	Individuals	CFF1-270R	10	270	2,700
	Strips (10 count)	CFF10-250R	10	25 strips	2,500
3M™ Curoso™ Tips™ Disinfecting Caps	Strips (5 count)	CM5-200R	10	40 Strips	2,000
3M™ Curoso™ Disinfecting Caps for Tego® Hemodialysis Connectors	Individuals	CTG1-270R	8	270	2,160
3M™ Curoso™ Stopper Disinfecting Caps for Open Female Luers	Individuals	CSV1-270R	8	270	2,160
	Strips (5 count)	CSV5-250R	8	50 strips	2,000

To learn more about how 3M can help you and your facility protect clinician and patient safety, prevent costly I.V. site complications, and improve patient satisfaction, contact your 3M Medical Solutions representative or call the 3M Customer Helpline at 08705 360036.

For more information, go to www.3M.co.uk/medical

References

- 1 Surveillance of hospital acquired bacteraemia in 61 English Hospitals 1997-1999: PHLS (2000).
- 2 H.P. Loveday et al. epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England, *Journal of Hospital Infection* 86S1 (2014) S1-S70.
- 3 European acute care hospitals 2011-2012 ECDC SURVEILLANCE REPORT—<http://www.ecdc.europa.eu/en/publications/Publications/healthcare-associated-infections-antimicrobial-use-PPS.pdf>
- 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 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
- 8 Kaler, W. Making it easy for nurses to reduce the risk of CLABSI, *Patient Safety, and Quality Healthcare*. 2014; 11 (6), 46-49.
- 9 Port protectors in clinical practice: an audit, Corinne Cameron-Watson, *British Journal of Nursing*, 2016, (IV Therapy Supplement) Vol 25, No 8.
- 10 Data reflects in vitro findings on Curoso Disinfecting Port Protectors conducted by an independent laboratory.
- 11 For more information regarding organisms associated with catheter-related bloodstream infections, refer to Wenzel RP and Edmond MB. The Impact of Hospital-Acquired Bloodstream Infections. *Emerg Infect Dis*. 2001 Mar Apr;7(2):174-7.
- 12 National Port Cleaning Survey – Port cleaning survey reveals patients are vulnerable to infection. Vygon (UK) Ltd. June 2017.
- 13 *Standards for Infusion Therapy* (Fourth Edition), Royal College of Nursing, Dec 2016.
- 14 Infusion Therapy Standards of practice. *Journal of Infusion Nursing*. Volume 39. No 1S, 2016.
- 15 Gorski L, Hadaway L, Hagle ME, McGoldrick M, Orr M, Doellman D. Infusion Therapy Standards of Practice. *Journal of Infusion Nursing*. 2016; 39(suppl 1):S1-S159.

Medical Care Solutions Division

3M United Kingdom PLC
Charnwood Campus
10 Bakewell Road
Loughborough
LE11 5RB
+44 (0)1509 611 611

3M Ireland
The Iveagh Building
Carrickmines Park
Carrickmines
Dublin 18
00 353 (01) 280 3555

© 3M 2022. All rights reserved. 3M, Curoso and Curoso Tips are trademarks of 3M Company. Tego® is a trademark of ICU Medical, Inc. 3M™ Curoso™ disinfecting caps are not affiliated with ICU Medical, Inc. GF318. OMG288221.

