

BD PureHub™ Disinfecting Cap

Optimally designed to help optimize outcomes

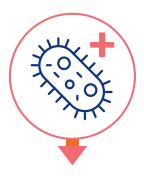


Clear Evidence: Contaminated IV access points are portals for infection

Consider the impact of central line-associated bloodstream infection (CLABSI)



Up to **90%** of hospital inpatients **require IV therapy**¹



Central venous catheters
are reported to be one of the
most frequent causes
of healthcare-associated
bloodstream infections²



30,100 CLABSIs still occur in intensive care units and the wards of U.S. acute care facilities each year³



The Centers for Disease
Control estimates that the
annual cost of CLABSI
is more than \$1 BILLION²

Expert clinical guidelines support the use of **disinfecting caps**



2014 SHEA* Compendium⁴

If CLABSI surveillance or other risk assessments suggest that there are **ongoing opportunities for improvement**, hospitals should then consider adopting some or all the prevention approaches listed as special approaches. Among the **special approaches listed**: Use an antiseptic-containing hub/connector cap/port protector to cover connectors.



The Joint Commission CRBSI[†] Toolkit: Valve disinfection guidance²

If you continue to have a high rate of infections, **consider using alcohol-impregnated port protectors**, scrubbing devices and needleless neutral displacement connectors in addition to scrubbing the hub.



Infusion Nursing Standards of Practice⁵

Disinfecting caps containing 70% isopropyl alcohol are supported by the Infusion Nursing Society 2021 guidelines for passive disinfection of needle-free connectors.

Active disinfection with alcohol-based chlorhexidine gluconate swab pads or passive disinfection with caps containing 70% isopropyl alcohol were associated with lower rates of CLABSI, while swab pads containing 70% isopropyl alcohol were the least effective according to a meta-analysis of quasi-experimental studies.

Royal College of Nursing

The Royal College of Nursing Infusion Therapy Standards⁶

Use of passive disinfectant caps containing agents (such as isopropyl alcohol) should be in line with local policies.

^{*} SHEA: Society for Healthcare Epidemiology of America

⁺ CRBSI: Catheter-Related Bloodstream Infection

BD PureHub[™] Disinfecting Cap is designed for rapid disinfection and secure protection





Efficacy

- Rapid disinfection in just 1 minute
- Disinfects with a sterilized 70% isopropyl alcohol solution
- Provides a >4 log (99.99%) reduction in bacteria*

Security

- Brightly colored BD PureHub™ Disinfecting Cap provides visual confirmation of compliance with disinfection protocol
- Maintains a physical barrier to contamination for up to 7 days, if not removed^{††}

Easy to use

- Large width and finger grips for ease of application and removal
- Easy to apply with uniquely designed luer threads
- Designed for compatibility with market leading needlefree connectors, including BD MaxZero[™], BD SmartSite[™] and BD Q-Syte[™] Needle-Free Connectors

Warning: 70% Isopropyl Alcohol is not considered sporicidal and may not prevent Central Line-Associated Blood Stream Infection arising from bacterial spores (e.g., Bacillus spp., Clostridia)

And optimized to fit market-leading needle-free connectors

Meets ISO performance standards for luer design compatibility

Intended use

BD PureHub $^{\text{\tiny M}}$ Disinfecting Cap is intended to be used as a disinfecting device for swabbable needle-free luer connectors prior to access and to act as a physical barrier between line accesses.





^{*} Demonstrated reduction on *Staphylococcus aureus, Staphylococcus epidermidis, Pseudomonas aeruginosa, Escherichia coli, Candida glabrata, Candida albicans* and *Acinetobacter baumannii* as tested in a laboratory.

⁺As demonstrated through in vitro studies.

^{*}Bench Test results may not necessarily be indicative of clinical performance.

BD PureHub[™] Disinfecting Cap delivers antimicrobial performance

Tested for effectiveness

BD PureHub[™] Disinfecting Cap demonstrated in a laboratory a **99.99% (>4 log) reduction** on the most common causative agents in CRBSI including:

Staphylococcus aureus, Staphylococcus epidermidis, Pseudomonas aeruginosa, Escherichia coli, Candida glabrata, Candida albicans, Acinetobacter baumannii.*



Staphylococcus aureus

Pseudomonas aeruginosa



Staphylococcus epidermidis

Candida glabrata





Candida albicans



Acinetobacter baumannii

BD PureHub™ Disinfecting Cap demonstrated reduction of Acinetobacter baumannii

A. baumannii is **the third most common gram-negative pathogen** responsible for hospital-acquired infections (HAIs)⁷

- BD PureHub demonstrated to reduce A. baumannii by 99.99%*
- It is one of the most common HAIs in children across the U.S. and is on the rise⁸
- A. baumannii accounts for **15%** of CLABSIs reported in one study⁹
- A. baumannii is introduced to a hospital by a colonized patient
- A. baumannii can be spread by person-to-person contact or contact with contaminated surfaces and can enter through open wounds, catheters and breathing tubes

Part of the full BD Vascular Access Management (VAM) portfolio

Designed to help reduce complications

BD Vascular Access Management is an integrated approach designed to help reduce vascular access—related complications that may help improve patient care.

The BD Vascular Care Solution, which included BD PureHub™ Disinfecting Cap, BD PosiFlush™ Prefilled Syringe, MaxZero[™] Needle-free Connector, and BD Nexiva[™] PIV Catheter, **reduced the relative risk** of PIVC failure by 27% as compared with the standard approach.* This BD Vascular Care Solution is also **significantly more effective to reduce PVC-complications** when compared to the standard devices approach, with significant cost savings for the hospital. 10,11



^{*} Standard group includes Insyte Autoguard, three-way stopcock, sterile gauze and alcohol-based antiseptic, gravity saline/polyionic solution infusion.

^{*} Bench Test results may not necessarily be indicative of clinical performance.

BD PureHub™ Disinfecting Cap ordering information

Material number	Description	Packaging	Units per box	Units per case
306596	BD PureHub™ Disinfecting Cap	Singles	300	3,000 (10 boxes)
306597	BD PureHub™ Disinfecting Cap	Strips (10 count)	30 strips	4,500 (15 boxes)







References

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- 10. Guenezan J, Marjanovic N, Drugeon B, et al. Chlorhexidine plus alcohol versus povidone iodine plus alcohol, combined or not with innovative devices, for prevention of short-term peripheral venous catheter infection and failure (CLEAN 3 study): an investigator-initiated, open-label, single centre, randomised-controlled, two-by-two factorial trial. *Lancet Infect Dis.* 2021;21(7):1038-1048.
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