

### Be sure. Be secure.

### The BD PureHub<sup>™</sup> Disinfecting Cap

Help reduce the risk of infection<sup>1</sup>



### Minimise risk. Maximise outcomes.

Non-adherence to aseptic technique, such as hub disinfection, is a major risk factor for development of catheter-related infections<sup>2–8</sup>



In Europe, ~4 million patients are affected by ~4,544,100 episodes of healthcare-acquired infection (HAI) each year<sup>9</sup>



37,000 deaths each year are attributable to HAI in Europe<sup>9</sup> Catheter-related bloodstream infection (CRBSI) mortality rate is ~16-40%<sup>9</sup>



CRBSI increased length of hospital stay by 7.5–25 days<sup>9</sup>

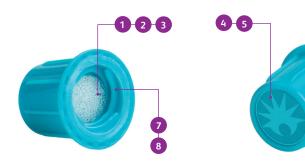


An Australian study showed **50% of needle connectors were contaminated** with microorganisms—most commonly, coagulasenegative staphylococci<sup>10</sup>

# Clinical study findings show many factors affect compliance, including:<sup>2-4,6,8</sup>

- duration of scrubbing
- location of and easy access to disinfectant products
- workload of nurses

## Stay secure with a BD PureHub™ Disinfecting Cap



#### Efficacy<sup>11</sup>

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

#### Security<sup>11</sup>

- 4 Maintains a physical barrier against contamination for up to 7 days
  - Provides visual confirmation of compliance with disinfection protocol

#### Ease of use<sup>11</sup>

- 6 Large width and finger grips for ease of application and removal
  - Easy to apply with uniquely designed luer threads
  - Shown to be compatible with needle-free luer connectors

### Supporting optimal outcomes

Disinfecting cap use for the prevention of central line-associated bloodstream infections (CLABSIs) can result in:<sup>2,12</sup>



- \* Demonstrated reduction on the most common causative agents of CRBSI including Staphylocaccus aureus, Staphylocaccus epidermidis, Pseudomonas aeruginosa, Escherichia coli, Candida glabrata, Candida albicans, and Acinetobacter baumannii. + Compared to traditional needle-free connector disinfection. Based on a cost per CLABSI of \$45,000 USD
- (approximately £27,312 GBP or €33,862 EUR).<sup>12</sup>
- ‡ Based on an 8-hour day.

### Part of BD vascular access management (VAM)

An integrated solution for VAM in line with clinical guidance can reduce complications



# Learn more about BD PureHub and schedule a Practice vs Guidelines review.

BD has the expertise to assess your clinical practice and develop customised solutions to reduce complications and achieve higher standard of care.

# Studies show risk reduction is at your fingertips<sup>13</sup>

In clinical studies, disinfecting caps reduced the risk of CLABSI by



\* Incidence Rate Ratio was statistically significant, p < 0.001.</li>
+ Compared to traditional needle-free connector disinfection.

# The use of disinfecting caps to reduce infection is **supported by**:

#### 2014 SHEA Compendium<sup>14</sup>

"If CLABSI surveillance or other risk assessments suggest that there are ongoing opportunities for improvement, hospitals should then consider adopting some or all of the prevention approaches listed as special approaches. Among the special approaches listed:

Use an antiseptic-containing hub/connector cap/port protector to cover connectors."

#### 2016 Infusion Nursing Standards of Practice<sup>15</sup>

"Use of disinfection caps containing alcohol has been shown to reduce intraluminal microbial contamination and reduce the rates of central line-associated bloodstream infection (CLABSI)."

#### The Joint Commission CRBSI Toolkit: Valve disinfection guidance<sup>16</sup>

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

#### Royal College of Nursing Infusion Therapy Standards<sup>17</sup>

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

### Please read labelling at all times.

Active ingredient: 70% isopropyl alcohol.

References: 1. Voor In 't Holt AF, Helder OK, Vos MC, et al. Antiseptic barrier cap effective in reducing central line-associated bloodstream infections: A systematic review and meta-analysis. Int J Nurs Stud. 2017;69:34-40. 2. Cameron-Watson C. Port protectors in clinical practice: an audit. Br J Nurs. 2016;25(8):S25–31. 3. DeVries M, Mancos PS, Valentine MJ. Reducing bloodstream infection risk in central and peripheral intravenous lines: initial data on passive intravenous connector disinfection. J Assoc Vasc Access. 2014;19(2):87–93. 4. McLaughlin GE, Nares MA, Smith LJ, Feinroth CA. Preventing central-line-associated bloodstream infections in pediatric specialized care units: A case study of successful quality improvement. Prog Pediatr Cardiology. 2012;33(1):47–52. 5. Sannoh S, Clones B, Munoz J, Montecalvo M, Parvez B. A multimodal approach to central venous catheter hub care can decrease catheter-related bloodstream infection. Am J Infect Control. 2010;38(6):424-429. 6. Shamshiri M, Fuh Suh B, Mohammadi N, Nabi Amjad R. A survey of adherence to guidelines to prevent healthcare-associated infections in Iranian intensive care units. Iran Red Crescent Med J. 2016;18(6):e27435. 7. Fakih MG, Jones K, Rey JE, et al. Sustained improvements in peripheral venous catheter care in non-intensive care units: a guasi-experimental controlled study of education and feedback. Infect Control Hosp Epidemiol. 2012;33(5):449-455. 8. Martínez-Morel HR, Sánchez-Payá J, Molina-Gómez MJ, et al. Catheter-related bloodstream infection: burden of disease in a tertiary hospital. J Hosp Infect. 2014;87(3):165–170. 9. World Health Organization. The burden of health care-associated infection worldwide: a summary. Accessed on July 28, 2017 at http://www.who.int/gpsc/country\_work/summary\_20100430\_ en.pdf. 10. Slater K, Cooke M, Whitby M, et al. Microorganisms present on peripheral intravenous needleless connectors in the clinical environment. Am J Infect Control. 2017;45(18):932–934. 11. Data on file, BD 1,2,3,4,5. 12. Stango C, Runyan D, Stern J, Macri I, Vacca M. A successful approach to reducing bloodstream infections based on a disinfection device for intravenous needleless connector hubs. J Infus Nurs. 2014;37(6):462–465. 13. Sweet MA, Cumpston A, Briggs F, Craig M, Hamadani M. 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. Am J Infect Control. 2012;40(10):931-934. 14. 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. 15. Gorski LA, Hadaway L, Hagle ME, McGoldrick M, Orr M, Doellman D. Infusion therapy standards of practice. J Infus Nurs. 2016;39(Suppl 1):S1–S159. 16. The Joint Commission CLABSI Toolkit and Monograph—CVC Maintenance. Accessed on March 23, 2017, at https://www.jointcommission.org/assets/1/6/CLABSI\_Toolkit\_Tool\_3-21\_Scrub\_the\_Hub.pdf. 17. Royal College of Nursing. Standards for infusion therapy, 4th ed. London, UK: RCN IV Therapy Forum; 2016.

### Ordering information

Material number	Description	Packaging	Units per box	Units per case
306598	BD PureHub™ Disinfecting Cap	Singles	300	3,000 (10 boxes)
306599	BD PureHub™ Disinfecting Cap	Strips (10 count)	30 strips	4,500 (15 boxes)



For more information or to order, please contact your local BD Sales Representative.

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