Clinically proven. Comprehensive portfolio. Fully sterile. 7 days persistence.¹

BD ChloraPrep™ Patient Preoperative Skin Preparation with Sterile Solution
BD ChloraPrep™ Skin Prep, a trusted brand for healthcare providers for over 21 years

Proven solutions and performance matters

BD ChloraPrep™ Patient Preoperative Skin Preparation with Sterile Solution delivers standardized, powerful, persistent antimicrobial protection. It is backed by more than 60 published studies² and trusted by healthcare providers for over 21 years with a track record of proven performance and safety like no other.

BD ChloraPrep™ Skin Prep is simply 2% CHG and 70% IPA with the option for tint. The formulation contains no additional excipients making the clinical studies specific to the BD ChloraPrep™ solution.²

A full portfolio of products to meet the skin prep needs of each patient

No other supplier can match the full breadth of the BD applicator-based skin prep offering providing significant value, consistency, and sustainability of practice. With an impressive 5 billion+ applicators sold, we continue to meet the complex intricacies of manufacturing and supply to meet customer demand.

Over 5 billion applicators sold  
Trusted by healthcare providers for more than 21 years  
Backed by more than 60+ peer reviewed clinical studies²
BD ChloraPrep™ Skin Prep is backed by more than 60+ peer reviewed clinical studies²

BD offers an innovative skin antiseptic portfolio of ready-to-use, single-use, skin prep applicators with sterile antiseptic solutions

BD ChloraPrep™ Skin Prep is backed by over 60 published studies demonstrating category leadership through its clinical evidence and aligned with the latest best practice guidelines.

“Because the efficacy of any formulation is significantly affected by the excipients present, trials demonstrating activity of one formulation cannot be used as evidence for the efficacy of another.”
– Graham W. Denton

Hierarchy of evidence is assigned to studies based on the methodological quality of their design, validity, and applicability to patient care. These decisions give the “grade” (or strength) of recommendation. The more rigorous the standards, the less potential for bias and the better quality of evidence.

<table>
<thead>
<tr>
<th>Level of Evidence</th>
<th>Study Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Meta-analysis and systemic review</td>
</tr>
<tr>
<td>Level 2</td>
<td>Randomized controlled trials</td>
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<tr>
<td>Level 3</td>
<td>Controlled trials without randomization</td>
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<tr>
<td>Level 4</td>
<td>Cohort study or case controlled</td>
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<tr>
<td>Level 5</td>
<td>Cross-sectional study</td>
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<tr>
<td>Level 6</td>
<td>Descriptive or qualitative study</td>
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<tr>
<td>Level 7</td>
<td>Expert opinions, editorials, review articles</td>
</tr>
<tr>
<td>Animal Research</td>
<td>Animal research</td>
</tr>
<tr>
<td>In Vitro (test tube) Research</td>
<td>In vitro (test tube) research</td>
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</tbody>
</table>

*Data on file
Before using BD ChloraPrep™ solution, please read the instructions on the package. Use in accordance with the policies and procedures of your facility. Coverage areas are approximate sizes per the BD ChloraPrep™ instructions for use. All coverage areas are not shown to scale.

BD ChloraPrep™ Skin Prep's comprehensive portfolio

BD ChloraPrep™ Skin Prep comes in multiple sizes to allow for consistency in prepping processes throughout the facility.

Tint is important for skin antiseptics to mark the area that has been prepped

Selecting the right tint is important so that it is visible on a variety of skin tones and may reduce clinical misdiagnoses from skin coloring during post op care. BD ChloraPrep™ has both Hi-Lite Orange™, Scrub Teal™, and clear available for diverse skin tones.

BD ChloraPrep™ Hi-Lite Orange™ tint with Sterile Solution

BD ChloraPrep™ Scrub Teal™ tint with Sterile Solution
BD ChloraPrep™ Skin Prep, the only 2% CHG/70% IPA, fully sterile surgical skin antiseptic in the U.S. with demonstrated persistence of at least 7 days

**Definition of persistence**

Antimicrobial persistence defined as post-treatment microbial counts less than or equal to pre-treatment counts.

Why is persistence important?

- **Healing takes time**
  - Re-epithelialization can take up to 2 weeks
- **Dressing**
  - Changes can occur between 2–7 days

- **Necessary to limit bacteria on the skin and help minimize its entry into an incision or device-insertion site after application.**

A clinical study to evaluate the persistent antimicrobial properties of BD ChloraPrep® Preoperative Skin Preparation with Sterile Solution, 2% chlorhexidine and 70% isopropyl alcohol.

**Antimicrobial log₁₀ reductions on groin and abdomen post- BD ChloraPrep® Skin Prep²**

**Design**
- Randomized, single-center, partially blinded, clinical study
- 101 healthy volunteers between the ages of 18 and 69
- Evaluated the antimicrobial persistence of BD ChloraPrep® Preoperative Skin Preparation with Sterile Solution out to 7 days

**Results**
- BD ChloraPrep® Preoperative Skin Preparation with Sterile Solution showed antimicrobial efficacy 10 minutes post-application, exceeding 2 and 3 mean log₁₀ reductions on the abdomen and groin, respectively
- BD ChloraPrep® Preoperative Skin Preparation with Sterile Solution maintained antimicrobial persistence out to 7 days on both sites
- Mean microbial counts at all time points were below pretreatment levels (a log₁₀ CFU/cm² reduction ≥0)

BD: Advancing patient safety by evolving sterilization technology

Maintains the **efficacy and purity** of the antiseptic solution

Less than a **1 in a million** chance that a viable microorganism can exist in a BD skin antiseptic applicator

**Sterility assurance level of 10.**
The same level required for injectable products

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Why sterilize the solution?

**Antiseptic contamination is a potential health threat**

Contaminated antiseptics are a documented cause of healthcare-associated infections

- Antiseptics don’t self-sterilize
- All commonly used antiseptic agents have been linked to infection-causing contamination

**Outcomes associated with contaminated antiseptics**

- Disposal of the contaminated product before infection is discovered
- Inconsistent contamination within the same product lot

Confirmed outcomes from contaminated antiseptics

- **Death** (4 cases)
- **Bacteremia** (32 cases)
- **Wound infection** (5 cases)
- **Injection site infection** (16 cases)
- **Septic arthritis** (10 cases)
- **Need for indwelling catheter replacement** (14 cases)
- **Peritonitis** (7 cases)
- **Bacteremia** (32 cases)
- **Wound infection** (5 cases)
- **Injection site infection** (16 cases)
- **Septic arthritis** (10 cases)
- **Need for indwelling catheter replacement** (14 cases)
- **Peritonitis** (7 cases)

**2 mechanisms are responsible for antiseptic contamination**

**Extrinsic contamination**
End-user based; can result from:
- Insufficient aseptic technique used during product handling
- Contaminated water used to dilute the antiseptic
- Product stored under nonsterile conditions

**Intrinsic contamination**
Production based; has been linked to:
- Contaminated pharmaceutical water supply
- Nonsterile manufacturing environment

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The commitment behind the achievement

- **6 years** R&D hours
- **>50,000** R&D hours
- **3 patents**
- **7 teams**
Standardized practice to help increase compliance to clinical standards and guidelines

Facilitation of aseptic technique by moving the clinician’s hand away from the patient’s skin

Elevate the standard in preoperative skin prep

The sterile solution applicator portfolio of BD Chloraprep™ and BD Purprep™ products allows for:

- Standardized use of BD skin prep applicators with CHG/IPA or PVP-I/IPA antiseptic formulations
- Reduced variability in practice, helping to increase clinical efficiency
- Standardized practice to help increase compliance to clinical standards and guidelines™
- Facilitation of aseptic technique by moving the clinician’s hand away from the patient’s skin

BD sterile antiseptics come in proprietary sterile applicators that help prevent extrinsic contamination

Designed to improve antiseptic application

- Eliminates variability to help make life easier for clinicians and ensure a consistent, appropriate technique for patients
- Single step: As easy as “Pinch. Apply. Let Dry.”
- Single handed: Does not require burdensome two-handed technique
- Single use: Helps reduce risk of cross-contamination with no ability to manipulate the solution

A winning combination for complete sterility

- All-in-one, single-use applicator promotes a thorough, aseptic, “no touch” technique
- Proprietary wing design makes activation quick and easy
- Proprietary tinting process provides enhanced visualization for added assurance
- Foam sponge helps control solution flow and enables a gentle scrubbing motion for thorough coverage
BD: Your partner in preoperative skin prep

Personalized assistance and plentiful resources

A dedicated team of skin preparation experts who care about your success

- These highly trained specialists know our products inside and out, as well as the current guidelines for preoperative skin prep
- They are available expressly for you to answer any product questions you may have
- They can help to ensure the right BD product is being used at the right time

BD delivers experience

Our customers can receive the following support services in connection with their purchase of BD products:

Education and Training

BD has both territory managers and clinical specialists to support continual education and training on BD products for your clinical teams.

BD Power in Prevention Program

An innovative assessment program to help improve education, processes, and efficiency to impact patient safety.

- Designed to help hospitals identify and address surgical process variability to improve their standard of care with the use of BD products and solutions.
- Built on 28,000+ OR practice observations in 1,000+ US healthcare facilities since launching in 2014.

Medical Services and Support Services

This is a 24-hour hotline for product and cross-reference information, consultation, clinical papers, and literature.

Call: 1-800-562-0027

Our robust online resources are available for you 24 hours a day, 7 days a week, 365 days a year

https://bd.com/chloraprep

- To find out about more preoperative skin preparation tools
- To see the in-service video
- To contact sales and support
- To view product labels

A partnership that includes ongoing training and support

In-service training and educational materials can help to improve the standard of care for preoperative skin antisepsis in your operating room by working directly with your team through:

- Practice and policy recommendations
- Targeted education
- Expert training
- Progress benchmarks
## BD ChloraPrep® Patient Preoperative Skin Preparation with Sterile Solution

<table>
<thead>
<tr>
<th>Applicator</th>
<th>SKU</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>1 mL clear</td>
<td>930480</td>
<td>60 app/carton, 4 cartons/case</td>
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<tr>
<td>Frepp™</td>
<td>930299</td>
<td>20 app/carton, 25 cartons/case</td>
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<tr>
<td>3 mL clear</td>
<td>930400</td>
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<tr>
<td>Hi-Lite Orange™</td>
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<tr>
<td>10.5 mL clear</td>
<td>930700</td>
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<tr>
<td>Hi-Lite Orange™</td>
<td>930715</td>
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<tr>
<td>Scrub Teal™</td>
<td>930725</td>
<td>25 app/carton, 4 cartons/case</td>
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<tr>
<td>26 mL clear</td>
<td>930800</td>
<td>25 app/case</td>
</tr>
<tr>
<td>Hi-Lite Orange™</td>
<td>930815</td>
<td>25 app/case</td>
</tr>
<tr>
<td>Scrub Teal™</td>
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## BD ChloraPrep® Patient Preoperative Skin Preparation with Nonsterile Solution

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<tr>
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<tbody>
<tr>
<td>1.75 mL Single swabstick</td>
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<td>48 pouches/carton, 10 cartons/case</td>
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<tr>
<td>5.25 mL Triple swabstick</td>
<td>260103</td>
<td>3 swabsticks/pouch, 40 pouches/carton, 10 cartons/case</td>
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</tbody>
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## BD PurPrep™ Patient Preoperative Skin Preparation with Sterile Solution

<table>
<thead>
<tr>
<th>Applicator</th>
<th>SKU</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>10.5 mL PurPrep</td>
<td>960110</td>
<td>25 app/carton, 4 cartons/case</td>
</tr>
<tr>
<td>26 mL PurPrep</td>
<td>960120</td>
<td>25 app/carton</td>
</tr>
</tbody>
</table>

Please consult product labels and inserts for any indications, contraindications, hazards, warnings, precautions and instructions for use.

To order BD ChloraPrep® Patient Preoperative Skin Preparation with Sterile Solution and BD PurPrep™ Patient Preoperative Skin Preparation with Sterile Solution, contact your BD sales representative.

For more information, please scan the QR code, call 1-844-8 BD LIFE (844-823-5433) or visit [https://go.bd.com/ChloraPrep-PurPrep-persistence.html](https://go.bd.com/ChloraPrep-PurPrep-persistence.html)

References:
4. FDA 12/20/2017 - Final Rule: Finalizes rulemaking for healthcare antiseptics.
8. BD, Vernon Hills, IL, 60061, U.S.
9. bd.com