

VESTEX FAQs

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Don't see your question here? Where can your VESTEX® questions be answered?

If your question is not answered here, then Vestagen's Customer Service team will quickly reply to your online inquiries at service@vestagen.com. Prefer a personal touch? Then dial 407-781-2383. [Back to top](#)

What is VESTEX and how does it work?

VESTEX® Active Barrier ^I fabric incorporates powerful proprietary technologies – a fluid repellent fabric and a durable EPA registered antimicrobial ^{II, III, IV}. The result is a fabric that also wicks moisture away from the body to ensure wearer comfort.

A dual mechanism of action makes VESTEX unique. The first mechanism of action is fluid repellency and the second mechanism of action is a disinfectant technology. Combined, this approach has been demonstrated to reduce the acquisition and retention of tested germs on the VESTEX fabric itself. Hardwick demonstrated that a dual mechanism of

action provides an additive effect resulting in a higher reduction of MRSA on the fabric than does a fluid barrier alone.

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How comfortable are VESTEX garments?

The VESTEX technology preserves the inter-fiber space, which allows for moisture/vapor transmission from the skin making VESTEX breathable and comfortable to wear. Furthermore, VESTEX is manufactured with the latest fabric compositions to provide wearer comfort even when facing the rigors of long work shifts. [Back to top](#)

Is there any peer-reviewed published support for VESTEX?

Real-world, hospital wear experience and evaluation of the VESTEX product was published in a peer-reviewed journal. In a prospective, crossover trial (Bearman) in which users alternated weekly between VESTEX fabric and standard fabric garments, 2,000 microbiological samples were evaluated from the apparel of 32 healthcare workers (HCWs) in an intensive care unit (ICU) comparing the VESTEX scrubs to the control scrubs over a 16-week period. Cultures were obtained weekly from the high touch areas (the abdominal and the leg cargo pocket) known from prior testing to be most highly contaminated areas of the scrubs, as well as from the HCW's hands. The VESTEX scrubs demonstrated a statistically significant overall 4 to 7 mean log reduction of MRSA in the leg cargo and abdominal area pocket when compared to the control scrubs, in an actual hospital ICU setting. The study did not assess the impact of antimicrobial^{II, III, IV} scrubs on hospital-acquired infection rates. The authors noted that the findings are difficult to generalize beyond the ICU environment and study population, and also note that the fabric was not tested to establish the ability of the apparel to reduce disease transmission. They concluded, however, that garments that contain demonstrated antimicrobial^{II, III, IV} and fluid repellent characteristics, "when bundled with known infection prevention strategies such as hand hygiene, may limit the bacterial burden of the inanimate environment" and "may be a useful adjunct to other infection prevention measures."

The performance of the VESTEX Active Barrier^I fabric was further demonstrated directly with peer-reviewed published in vitro data (Hardwick) showing statistically significant reduction of levels of MRSA on the fabric compared to control fabrics. The results of these in vitro assays strongly correlate with the real-world conditions examined by Bearman. The fabric challenge assays involved modes of inoculation that mimic "real world" exposures that textiles might face in the healthcare environment, but with established quantities of known challenge organisms. These in vitro studies, showed consistent and reproducible reductions of MRSA challenge microorganisms on the VESTEX fabric under the conditions of the test. Although more study is needed, the authors of the in vitro study conclude that Bearman's findings in the clinical setting of an intensive care unit validate their findings. [Back to top](#)

Are all antimicrobial^{II, III, IV} and/or fluid repellent fabrics the same?

VESTEX effectiveness was verified in a peer-reviewed medical journal (Bearman, et al). Results for VESTEX are not translatable to other antimicrobial^{II, III, IV} fabrics.

1. Antimicrobial^{II, III, IV} fabrics that do not have fluid repellency make it likely that their antimicrobial^{II, III, IV} agent would be overwhelmed and rendered ineffective by the amount of the contaminant saturating the fabric. The agent used in VESTEX is fungicidal, bactericidal, and virucidal against lipophilic (enveloped) viruses^V; it is not sporicidal and generally not tuberculocidal or virucidal against hydrophilic (non-enveloped) viruses^V.

2. Fluid repellency results in fewer germs on the fabric and thus decreases the exposure time required to kill a bacterial inoculum. Without it, organic material from blood, secretions and other body fluids can interfere with the antimicrobial^{II, III, IV} agent and reduce its activity.

3. Metals (silver and copper), chitosan and triclosan have been shown to be ineffective in a hospital setting and leach from, or leave, the fabric surface^{VI}, be resistant to some bacteria and be slow to act (12-24 hours) [Back to top](#)

What about concern with antimicrobial^{II, III, IV} resistance if using VESTEX?

The action of antibiotics and the action of disinfectants, like those used in VESTEX, differ. The polymeric nature, lack of leachability (water solubility), and mode of action of the VESTEX antimicrobial^{II, III, IV} agent reduces the cause for concern

associated with antimicrobial^{II, III, IV} resistance. [Back to top](#)

Does VESTEX replace PPE?

No. Effective infection prevention is achieved by deploying many interventions. The continued use of PPE is expected to be followed per policy. VESTEX Active Barrier^I apparel can be of value when body fluid exposures are not anticipated. The use of PPE is generally associated with situations where such exposures are anticipated. You might think of the two together using the analogy of seat belts and air bags – additional insurance against the risks of unanticipated exposures. [Back to top](#)

Is VESTEX safe to wear?

Yes. The technologies used in VESTEX are certified by Blue Sign, as well as EPA registered. In addition, VESTEX did not cause skin irritations under the FDA's required testing conditions^{VII}. VESTEX safety was studied and presented at the Emergency Nurses Association meeting in 2011 where researchers reported that "Textiles impregnated with (VESTEX) passed both standard tests for evaluating the safety of products used in the healthcare setting. Although further testing of (VESTEX) is warranted, the results of this study show that the textiles do not exhibit cytotoxic effects on the epidermis of the wearer^{VIII}." [Back to top](#)

How long does VESTEX last?

The VESTEX manufacturing process assures durability while preserving functionality and comfort. Independent laundry testing using Vestagen Care Guidelines is performed on every manufactured lot of VESTEX. These test results support performance claims for VESTEX at up to 50 wash/dry cycles. Performance beyond 50 wash/dry cycles can be expected but is not routinely tested. This added durability compares to traditional healthcare worker apparel which has been reported to be approximately 30 uses^{IX}. [Back to top](#)

How should VESTEX be washed?

As with all new clothing, it is good practice to wash before wearing and to clean it thoroughly after each use. Care should be taken to avoid fabric softeners and dryer sheets as they may temporarily alter the performance. Should that occur, it can be reversed by subsequent washing without fabric softener or the use of dryer sheets. VESTEX can be ironed as heat actually regenerates VESTEX fluid repellency technology. [Back to top](#)

What methods of payment are accepted for online orders?

We accept Master Card, Visa, Discover, and American Express. [Back to top](#)

What is the VESTEX Return policy?

If dissatisfied for any reason with your unwashed and unworn VESTEX purchase, please return it within 60 days of the recorded original shipment date and choose either a full refund of the purchase price, or an equal-in-value exchange with no additional processing/shipping costs.

We'll pay for return shipping so your return process isn't just easy, it's free. (Original processing and shipping costs are not refundable.)

Some VESTEX garments cannot be returned or exchanged. VESTEX garments that have been washed or worn are non-returnable. Similarly, unless defective or shipped in error, VESTEX items with embroidered logos or any other unique customized artwork cannot be returned. If you have any questions about our return policy, please contact us at service@vestagen.com [Back to top](#)

Are VESTEX purchases exempt from sales tax?

There is no sales tax for shipments outside of Florida. Sales tax, based on current state and local tax rates and subject to change at any time, is charged for orders shipped within Florida where sales taxes are applicable. Sales tax will be refunded

for returned items. [Back to top](#)

How are VESTEX shipping expenses handled?

Standard delivery, via USPS Priority Mail or UPS Ground, shipping and handling charges are calculated at time of online checkout. If you have any questions, please email us at service@vestagen.com [Back to top](#)

VESTEX is out of stock or a status check on an order is desired, now what?

Though infrequent, if your desired VESTEX item is out of stock or you desire a status on your VESTEX order, please contact us at service@vestagen.com for additional clarification. [Back to top](#)

How to determine proper VESTEX sizing?

To assure a satisfactory fit, it is always best to try on any new clothing item before placing an order. If you do not know your size, please use our sizing chart found [here](#). [Back to top](#)

How are VESTEX purchase orders confirmed once placed online?

Provide a valid email address when placing an order and you will immediately receive a confirmation email. Note: If you are using e-mail filters and/or blockers, make sure that you can receive e-mails from the VESTEX online store so e-mail notices come through. [Back to top](#)

Will VESTEX colors match what is seen on your computer screen?

We do our best to accurately represent the appearance of the products. However, please keep in mind that if your monitor settings have been changed or are not set to the default standard settings, a product's true color may not appear as they should on your screen. [Back to top](#)

How long after ordering will VESTEX orders ship?

Standard orders containing only blank (no embroidering) items will typically ship within two (2) business days. Orders with embroidery typically ship in full within 14 business days. If there is a delay beyond this, we make every effort to notify you. Of course, you can always reach us. In all cases, shipment is dependent upon product availability and credit card verification. [Back to top](#)

Disclaimer: Studies to evaluate reduction in infection have not been performed on VESTEX fabric. VESTEX fabric is not intended as a replacement for PPE. The antimicrobial^{II, III, IV} agent used in VESTEX® is EPA registered to guard against the degradation of the fabric from microorganisms and to retard the growth and action of odor causing bacteria.

References

^I Active Barrier apparel is designed as a replacement for traditional, every-day hospital attire and is designed to help repel splatter and spills of fluids and other material on the fabric. The fabric also contains an antimicrobial substance shown in laboratory and hospital settings to inhibit certain tested bacteria from growing on the fabric under the conditions of the tests. Neither liquid repellency nor antimicrobial tests are intended to assess the active barrier apparel's ability to meet personal protective equipment requirements. The ability of the fabric to reduce exposure or infections has not been studied.

^{II} Bearman, G., Rosato, A., Elam, K., Sanogo, K., Stevens, M., Sessler, C., and Wenzel, R. P., "A Cross-over Trial of Antimicrobial Scrubs to Reduce Methicillin-Resistant Staphylococcus aureus Burden on Healthcare Worker Apparel," *Infect. Control Hosp. Epidemiol.*, Vol. 33, No. 3, 2012, pp. 268–275.

III Hardwick, Matthew, Walsh, Thomas, and Cotton, Margaret, "Fabric Challenge Assays: New Standards for the Evaluation of the Performance of Textiles Treated with Antimicrobial Agents," Pesticide Formulation and Delivery Systems: Innovating Legacy Products for New Uses on November 1–3, 2011 in Tampa FL; STP 1558, M. Bernards, Editor, pp.1–14, doi:10.1520/STP155820120184, ASTM International, West Conshohocken, PA 2013.

IV This product does not protect users or others against disease-causing bacteria. Always clean this product thoroughly after each use.

V Association of State and territorial Health Officials. HAI Policy Tool Kit: Eliminating Healthcare-Associated Infections: State Policy Options

VI Amber H. Mitchell Making the Case for Textiles with a Dual Mechanism of Action. Infect Control Hosp. Epidemiol. 2015 doi:10.1017/ice.2014.92 VII ISO 10993-1 Biological evaluation of medical devices, biocompatibility Part 5 and hypersensitivity, Part 10

VIII Elam K and Walsh T. Assessing the safety of antimicrobial textiles to be worn by healthcare workers. Poster presentation, Emergency Nurses' Association Annual Meeting, 2011, Tampa, Fla.

IX Phillips and Associates. 2008-2009 North American Edition Comparative Revenue and Expense Profile for the Healthcare Textile Maintenance Industry.

VPT-MKT-00015 Rev B