

HexArmor® PPE Gives Water Company Employees Protection from Needlesticks

The prevalence of needlestick injuries in recycling, waste, water, and law enforcement industries is steadily increasing. Without proper protection, workers are susceptible to life-changing needlestick injuries that can lead to bloodborne pathogens, including hepatitis B, hepatitis C, and HIV. Proper hand protection is essential.

The Challenge

A large water company in the UK covers both urban and rural locations. Due to the wide range of job functions within water companies, employees are regularly exposed to discarded hypodermic needles and sharps. Needles are sometimes thrown over fences into sites, left in picnic areas around reservoirs, or, more commonly, dropped into irrigation valve chambers or hydrant chambers along trails or sidewalks.

Wherever possible, the company's staff is trained to use tongs, tweezers, or scoops to pick up sharps, rather than a gloved hand.

However, where this isn't possible, and gloves are required, the gloves must provide high dexterity to ensure that wearers keep them on. If gloves are uncomfortable or lack movement and flexibility, they do not get worn, leaving employees exposed to serious hazards.

The team had previously used a well-known competitor's product which lacked flexibility and dexterity. Due to their rigid design, the staff often took them off because they found it difficult to pick up needles while wearing them.



HexArmor® SharpsMaster HV® 7082 needlestick-resistant gloves

The Process

Representatives of HexArmor® worked with the company both on-site and at conferences to educate them on the American National Standards Institute (ANSI) standard. They demonstrated how SuperFabric® brand materials* in HexArmor® products provide proven, industry-leading needlestick resistance while maintaining dexterity.

The Trial + Solution

The water company started a trial with HexArmor® products. After the initial trials, they received several "very good" product approvals from their employees concerning HexArmor® needlestick solutions.

The company approved products from HexArmor®, including the SharpsMaster HV® 7082 and the Hercules® NSR 3041, because of their needlestick protection, the range available for various applications, and the dexterity of the gloves.

- Needle exposures can cost anywhere from \$5,000 for initial evaluations to in excess of \$36,000 per year for ongoing treatment ¹⁻²
- 63% of injection drug users dispose of needles in their residential trash ³⁻⁴
- HexArmor® has developed over 14 generations of hand protection to solve the material recovery facility's needle injuries, and continues to collaborate on further R&D

*SuperFabric® is a registered Trademark of HDM, Inc.

The Feedback

The water company's safety advisor stated, "Users within the business regard these gloves as being leading-edge and of good quality. They provide a higher level of dexterity than previously experienced, and together with the increased protection have improved staff confidence. We are always looking for higher-quality products enabling our employees to carry out their roles safely."

The Future

Based on the water company's current experiences and their success with the HexArmor® range of products, the company is looking at future collaboration when new or innovative hand protection becomes available, or when they have a specific need based on their industry requirements.

"It is good to know there is a proactive company we can approach to discuss our specific needs," concluded the water company's safety advisor.

For Potential Needle Puncture Handling Injuries

The SharpsMaster HV® 7082 is extremely resistant to needles and cuts at the highest level and has a nitrile coating for extra protection against needles, oil, liquids, and grease. It is made with three layers of SuperFabric® brand material to provide even greater resistance to needlestick hazards.

For Potential Sharp Materials Handling Injuries

The Hercules® NSR 3041 is a heavy-duty, fully cut-resistant safety gauntlet glove. The two layers of SuperFabric® brand material provides optimum cut resistance to protect against sharp metals, wires, woods, and glass and delivers the best possible protection against cut hazards to the hand, fingers, and wrists.



HexArmor® 3041 Hercules® NSR heavy duty gauntlets

HexArmor® is an industry leading manufacturer of high performance personal protective equipment (PPE) made with technologies that push the limits of cut, puncture, needle, and abrasion resistance. Our mission is simple: give you better products with better technology designed with end user needs and collaboration. HexArmor® works with industries from oil and gas, to mining, food processing, and waste recycling to design the best working and most protective gloves available today.

¹ B R Schackman and others. The lifetime cost of HIV care in the United States in the current treatment era.

² Centers for Disease Control and Prevention.

³ Sterile syringe access and disposal among injection drug users newly enrolled in methadone treatment: a cross-functional survey; McNeely, et. al. Department of Medicine, Brigham and Woman's Hospital, Boston MA. February 18, 2007.

⁴ Abdala N, Stephens PC, Griffith BP, Heimer R. Survival I of HIV-1 in Syringes. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology 1999; 20(1):73-80.

SuperFabric® brand material is a breathable, durable, and lightweight fabric reinforced with an overlay of tiny guard plates. The geometric pattern of the guard plates on polyester provides optimum resistance against cut, puncture, and needlestick hazards.

HexArmor® gloves work by layering SuperFabric® materials over each other, blocking and deflecting needle hazards, or trapping them in the small gaps between the layers.

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