

Dealing with the Effects of a Needlestick Injury

Scot Grant is a 35-year-old ambulance technician, having worked both in the private medical sector and now within the National Health Service (NHS) in Sussex, UK. He is married with four children. Outside work, he volunteers with Search Dogs Sussex as a lowland rescue medical technician, providing a service to police forces when looking for vulnerable missing people. Scot is also a needlestick injury survivor. He understands all too well the devastating personal consequences of a needlestick injury. Here's his story.

A Close Call: Dealing with the Effects of a Needlestick Injury

Five years ago, Scot suffered a possibly life-threatening needlestick injury from a used injection needle while at work. His ambulance crew had been transferring a critically-ill patient between hospitals and had loaded the patient onto the ambulance. Scot set off driving under emergency conditions with the vehicle's lights flashing.

The sun was low in the sky, so Scot put his hand up to pull down the sun visor. As he did, he felt a sharp prick on the side of his finger, which began to bleed.

"I wasn't sure what had happened," explains Scot, "but because we had an ill patient in the back, I sucked my finger and carried on driving for another 30 miles." When they got to the hospital, the crew transferred the patient and then returned to the ambulance. "I told my crew mate what had happened, and we looked to see what had caused the puncture wound," he remembers.

"We were both disgusted to find that someone who had used the ambulance before us had pushed a used intra-muscular injection needle into the sun visor rather than dispose of it properly in a sharps bin."

Scot followed the sharps injury procedures put in place at the hospital. "They were great," he recounts. "When I informed them what had happened, they cleaned the wound thoroughly and then carried out



Scot Grant, ambulance technician

blood tests to see if I had picked anything up from it, in case it had been used on a HIV, hepatitis or other infectious patient. As well as angry, deep down I was scared I would contract something, so they offered me the chance to see a counselor."

The doctor explained that the usual course of action was to start people on a course of post-exposure prophylactic antibiotics. Scot suffered extreme side effects from the antibiotics, being sick and feeling terrible for three months.

The needlestick had an extremely distressing effect on Scot's life. Anger was quickly followed by fear. "Mentally, it was like I wasn't leading my own life. I was scared, worried for the future and the stress of not knowing whether or not I was infected took its toll on family life. I was described as being like Jekyll and Hyde by my kids. I would isolate myself in my workshop as I felt I couldn't talk, and it was wrong for a man to cry."

- 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® developed over 14 generations of hand protection to solve the material recovery facility's needle injuries, and continues to collaborate on further R&D

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The needlestick incident also had a damaging effect on Scot's work, where he began to feel negative towards his colleagues. "No one would own up to putting the sharp in the sun visor, and because everyone denied it, I struggled to trust them. Because of someone's stupidity, I was living a time of hell."

He has since changed employers moving from the private medical sector to the NHS and is back to loving his job. Scot had regular blood tests throughout his treatment that fortunately all turned out negative. However, he had to wait six months from the date of the injury to find out if he had contracted HIV. It was a huge relief to both him and his family that the result was clear.

"Working in a busy city, we regularly attend areas where drug users hang out," says Scot. "To begin with, after the injury, I was extra cautious and wouldn't kneel down in case I knelt on something. I would put on three pairs of examination gloves and still to this day I won't use hand rails in communal buildings, as there have been cases of needles being taped underneath to deliberately injure people."

These days the NHS crew's vehicles are made ready and prepared for them, which Scot hopes should limit the risk of anything like this ever occurring again. However, he still makes a thorough visual check of each ambulance before leaving the station.

PointGuard® Ultra 4041

When searching for missing people in his volunteer role, they primarily work in woodland and sometimes come across evidence of drug use. "I now carry a set of HexArmor® PointGuard® Ultra 4041 gloves in my search vest, so should I need to search an area I deem to pose a risk, they go on immediately. I also keep them in the top of my work bag when out in an ambulance," he reports.



PointGuard® Ultra 4041 with SuperFabric® (interior layer)

"I think they are great. They are comfortable and provide me with an increased feeling of being safe while working and searching." After such a terrible ordeal, HexArmor® has provided Scot with peace of mind at last.

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 glove available today.

Needle Puncture Protection

HexArmor® gloves and arm protection use SuperFabric® brand materials, and are extensively tested according to ASTM F2878 testing for needle resistance. HexArmor® needle products rate 2-3 times higher than competitors on this test, and have been a trusted leader in needle protection for over 10 years. SuperFabric® brand material is a HexArmor® exclusively licensed solution for the Industrial PPE Market.

Cut Resistance

Needles aren't the only hazards that sorters need to watch out for. Metals, glass, and plastics can come down the line with razor-sharp edges, which call for PPE with high cut-resistance. All puncture-resistant HexArmor® gloves are put to the test in the lab and in the field.

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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.