

UK MEDTECH COMPANY TO HELP PROTECT US HEALTHCARE WORKERS AND US CITIZENS FROM 1 MILLON NEEDLESTICK INJURIES EACH YEAR

Liverpool England and Philadelphia USA (ots) -

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SAFETY INITIATIVE AND COMPLIANCE WILL SAVE AMERICAN HEALTHCARE INDUSTRY \$1 BILLION

British smart MedTech company NeedleSmart, which is pioneering disruptive technologies in the global healthcare sector, is expanding into the US healthcare market to protect American healthcare workers and patients from the rising tide of **needlestick injuries (NSI)**.

In the US alone, more than **1** Million NSI are reported each year, affecting frontline nurses, healthcare workers and patients. However, it is estimated that the more accurate figure may be five times that number, due to a culture of underreporting.

Initially NeedleSmart will focus their efforts on helping the US healthcare system reduce Needlestick injuries (NSI). Pre Covid-19, NSI cost the US healthcare industry more than \$1Bn each year. A cost built on treatments (both physical and mental), absenteeism, agency staff and in many cases law suits.

Approximately **5.6 million healthcare workers in the US** are at risk of occupational exposure to bloodborne pathogens via NSI or other sharps-related injuries, according to the Occupational Safety and Health Administration every year.

Needlestick injuries are caused when a hypodermic needle accidentally punctures the skin. These injuries – which can happen at any time, however the NSI which carry the most significant risks are those that happen after exposure to the patient.

The Centre for Disease Control and Prevention (CDC) estimates that at least 385,000 NSI occur each year to hospital-based healthcare workers, amounting to more than 1,000 NSI per day amongst hospital healthcare staff. Many more of those NSI also occur through emergency services, homecare and nursing homes. The CDC has also targeted the elimination of NSI as an agency priority, with both federal and state laws increasing enforcement of NSI injury prevention. Over 41% of NSI occur during use, with 41% occurring after use and before disposal, 15% occurring during and after disposal and 4% in other settings.

NeedleSmart is working closely with lawmakers and Government agencies in the US to inform, advance and extend legislation that will protect healthcare workers and frontline staff.

US based NeedleSmart Chief Operating Officer Michael Barron said:

"Needlestick injuries were already a serious global problem pre Covid-19, with more than 3 million reported cases each year and rising. The introduction of a global vaccination program has added significantly to this with pandemic with NSI statistics yet to be made publicly available.

The global supply and use of needles is at an all-time record, which means the risk of becoming injured by a NSI has also greatly increased. If we factor into this equation that hospitals, emergency services and healthcare staff are under even more pressure, facing longer shifts and suffering from burnout and chronic fatigue, this creates the perfect storm for an unprecedented increase and risk of NSI to US healthcare and frontline emergency services staff. While the reported figure of NSI in the US is 1 Million, it is believed that the actual figure could be considerably more due to a culture of under reporting NSI.

With NeedleSmart, we can not only reduce and prevent NSI to key frontline healthcare staff, EMS personnel and patients, but we can increase staff efficiencies as we link our bespoke software solutions directly to the NeedleSmart Pro hardware and eliminate significant amounts of pre and post procedure administration and in-efficiency. Our audit and compliance software runs alongside the safe destruction technology to create a singular end to end workflow. NeedleSmart will significantly reduce post procedural PPNSI, directly targeting and reducing the \$1Bn per year associated costs."

NeedleSmart, which has offices in Liverpool, England and Philadelphia USA, is already at the forefront of pioneering disruptive technologies with the **British National Health Service (NHS)** to prevent **NSI** to NHS healthcare workers and clinicians. It is also developing carbon reduction strategies in clinical waste disposal, as well as digitising vaccination programmes

NeedleSmart has achieved FDA approval as a Class II medical device, making it the first UK company to achieve FDA 510(k) approval (Class II for Sharps Needle Destruction Device (NDD)).

The NeedleSmart Pro device destroys a contaminated hypodermic needle in a sealed chamber in just 6 seconds, minimizing postprocedural NSI. The device heats the needle to 2372 degrees Fahrenheit, killing potentially harmful pathogens, viruses and bacteria adhering to the needle. Within seconds, the needle is compressed into a tiny ball and released from the NeedleSmart device as a safe sphere of metal at the tip of the syringe. The product can be seen here <u>https://youtu.be/C968RkWtSi8</u> Aligned with this Needle Smart have set the ambitious goal of re-purposing this waste away from plastic sharps containers to a 96% recycled cardboard clinical waste container in the near future.

NeedleSmart has developed a ground-breaking set of disruptive technologies in digital data and AI for medical and clinical records, healthcare worker safety and carbon reduction programs in clinical waste. To learn more about how the Needle Smart Pro works with the DVS system can be seen here https://www.youtube.com/watch?v=nlAzsMwyBDc

NeedleSmart's disruptive smart MedTech technologies are focussed on:

- Safety: The reduction and hopeful elimination of harmful post procedural NSI to US healthcare workers and patients
- Sustainability: Reducing the associated carbon footprint by up to 95%
- Efficiency: The digitalization of vaccination programs, medical treatments, clinical workflows and associated records

Cliff Kirby, NeedleSmart's Global CEO, added

"Not only is this the world's first safe needle destruction technology that also has FDA 510 (k) approval as a Class II medical device (Sharps Needle Destruction Device (NDD)), but it is the only Smart MedTech to have a unique compliance and audit software each time a needle is used.

"When used as part of a vaccination program, our system offers 30-50% increased efficiencies, providing unique compliance with a digital audit trail from the point of when the needle is unwrapped from its sterile packaging. This provides a full audit trail and compliance including, vaccination batch and manufacturer, the healthcare professional administering the vaccination, date, time and patient details – right through to the safe destruction of the needle. This firmly puts healthcare and EMS worker safety at the forefront."

ENDS

For more information on Needle Smart, visit www.needlesmart.com

www.digitalvaccination.com

The Needle Smart process explainer

https://youtu.be/C968RkWtSi8

The Needle Smart DVS explainer

https://www.youtube.com/watch?v=nIAzsMwyBDc

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ABOUT NEEDLESMART

NeedleSmart is a market-leading, British-patented needle destruction technology engineered in the UK, with offices in Knowsley and Pittsburgh, Pennsylvania. Its award-winning NeedleSmart Pro needle destruction device has achieved FDA approval as a Class II medical device, being the first UK company to achieve FDA 510(k) approval (Class II for Sharps Needle Destruction Device (NDD)).

As well as contributing to the reduction of needlestick injuries and their consequential costs, the NeedleSmart process has the potential to reduce the cost and increase efficiency of used needle disposal. NeedleSmart's innovative technology also offers the opportunity to move hypodermic needles, syringes and consumables associated with the injection/vaccination process, away from conventional sharps bins to a solution that allows recycling to become a possibility.

NeedleSmart technology compresses the needle, significantly reducing the needle footprint leading to a minimum of 50% increase in needle count per sharps bin. After the unexpected Covid-19 pandemic and the mass vaccination program that followed, NeedleSmart's Digital Vaccination System (DVS) was created to support mass vaccination program, digitalizing the vaccination process, with every detail being automatically recorded in the cloud. DVS delivers a single solution that can coordinate every individual vaccination initiative into a single, coherent vaccination program.

ABOUT MICHAEL BARRON

CHIEF OPERATING OFFICER NEEDLESMART US

Michael Barron has spent the last 30 years helping to build, scale, and lead high growth companies.

As both an investor and executive, he has helped take several firms from inception to over \$1Bn in assets.

Michael has been featured in The Wall Street Journal and Investor's Business Daily.

He has been a regular guest on Bloomberg and CNBC. He is a board member at The Foreign Policy Research Institute and The Satell Institute. He a graduate of Villanova University.

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MEDIA NOTICE

NeedleSmart assets and images can be downloaded here

https://we.tl/t-NQfuq4O9tr

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