NIPRO'S TOTAL SOLUTION:

Nipro is a global market leader with the widest range of safety needles adapted to both patients and procedures.

More choice means more opportunities for success.

With Safety Needles in place, you can prevent up to 85% of needlestick injuries. 10

ASEPTIC TECHNIQUES

- 1. On-Off kit, customized on request
- 2. Prefilled syringes of 0.9% NaCl to minimize potential contamination
- 3. Nipro Safe Derm Fix IVN
- 4. Pushban™



On-Off kit



Safe Derm



Pushban





Prefilled syringe

PREVENTION OF NEEDLESTICK AND SHARPS INJURIES

- SafeTouch™
- 2. SafeTouch Tulip™
- 3. AVF SafeTouch™ Catheter Needle
- 4. AVF SafeTouch™ Single Needle Catheter Needle



SafeTouch



SafeTouch Tulip







AVF SafeTouch Catheter Needle

AVF SafeTouch Single Needle Catheter Needle

INFORMATION AND EDUCATION

- Safety mechanism is activated while needle is being withdrawn, eliminating potential for needle stick injury.
- A secured lock is confirmed by an audible and/or tactile click.
- Activation of safety mechanism is done with one hand, allowing the other hand to apply pressure to venipuncture site as per usual.
- Once the needle is protected, promptly dispose it in a sharps container.



BECAUSE EVERY LIFE DESERVES AFFORDABLE CARE

- 1. World Health Organisation (WHO) The world health report, 'Chapter 4 Selectedoccupational risks' http://www.who.int/whr/2002/chapter4/en/index8.html.
- 2. Infectious complications in dialysis epidemiology and outcomes: Philip Kam-Tao Li & Kai Ming Chow- Nature Reviews Nephrology, 8, Feb 2012.
- 3. Prüss-Üstün A, Rapiti E, Hutin Y: Estimation of the global burden of disease attributable to contaminated sharps injuries among health-care workers. Am J Ind Med
- 4. Epidemiology of sharp injuries e Prospective EPINet data from five tertiary care hospitals in India e Data for 144 cumulated months, 1.5 million inpatient days. Murali Chakravarthy. October 2013. DOI; 10.1016/j.cegh.2013.09.002.
- 5. Centers for Disease Control and Prevention (CDC). Hepatitis B FAQs for Health Professionals. Accessed January 2011.
- 6. National Health Service for Scotland (NHS Scotland). Needlestick Injuries: Sharpen Your Awareness. Report of the Short Life Working Group on Needlestick Injuries in the NHS Scotland. Edinburgh: National Health Service for Scotland: 2001.
- SHARPS INJURIES AMONGST HEALTHCARE WORKERS: REVIEW OF INCIDENCE, TRANSMISSIONS AND COSTS. Elseviers MM (2014). Journal of Renal Care
- 9. Healthcare-associated infections: prevention and control in primary and community care. Clinical guideline. Last updated: February 2017.
- 10. Wittmann A. Arbeitsunfälle Kosten durch Nadelstichverletzungen. ErgoMed/Prakt. Arb. Med. 2011; 3/2011 [35] 8-12.

Nipro Medical Europe : European Headquarters, Blokhuisstraat 42, 2800 Mechelen, Belgium T: +32 (0)15 263 500 | F: +32 (0)15 263 510 | medical@nipro-group.com | www.nipro-group.com

Please contact your local representative for more information

NIPRO MEDICAL AUSTRIA GMBH: livischgasse 4, 1210 Wien, AUSTRIA | T: +43 1 532 23 14 | F: +43 1 532 23 14 89

NIPRO EUROPE - EGYPT :

NIPRO FRANCE SA:

NIPRO MEDICAL GERMANY GMBH:

NIPRO MEDICAL EUROPE NV - ITALY :

NIPRO D.MED AG KAZAKHSTAN : Gogol street, 39, office 1008, 050010, Almaty, KAZAKHSTAN | +7 (727) 259-01-24

NIPRO EUROPE - NETHERLANDS : Regus Business Center, Verlengde Poolseweg 16, 4818 CL Breda, NETHERLANDS | T: +31 (0)76 524 50 99 | F: +31 (0)76 524 46 66

NIPRO MEDICAL NIGERIA LTD. :

NIPRO EUROPE - POLÁND : III. Panska 73. 00-834 Warszawa. POLAND. | T: +48 (0)22.31.47.155. | F: +48 (0)22.31.47.152 NIPRO FUROPE - PORTUGAL

Avd. Da Liberdade 249.1° Andar. 1205-143 Lishoa. PORTUGAL. | T: +34 (0)91.878.29.21. | F: +34 (0)91.878.28.40.

raya Nab., Office 1407, entrance 6, 123610 Moscow, RUSSIA | T: +7 (0)495 258 1364 | T: +7 (0)495 258 1365 NIPRO SENEGAL S.U.A.R.L.:

NIPRO MEDICAL D.O.O. BEOGRAD:

NIPRO MEDICAL SOUTH AFRICA (PTY) LTD:

4B Dwyka Street, Stikland Industria, Cape Town, 7530, SOUTH AFRICA | T: + 27 21 949-2635 | F: +27 21 949-2397 Unit 20&21, Falcon Lane, Lanseria Business Park, Erf 805 Lanseria Corporate Estate, Pelindaba Rd., Lanseria Ext. 26, Gauteng, SOUTH AFRICA | T: + 27 11 431 1114 / 26 | F: +27 11 431 1115

NIPRO EUROPE - SPAIN :

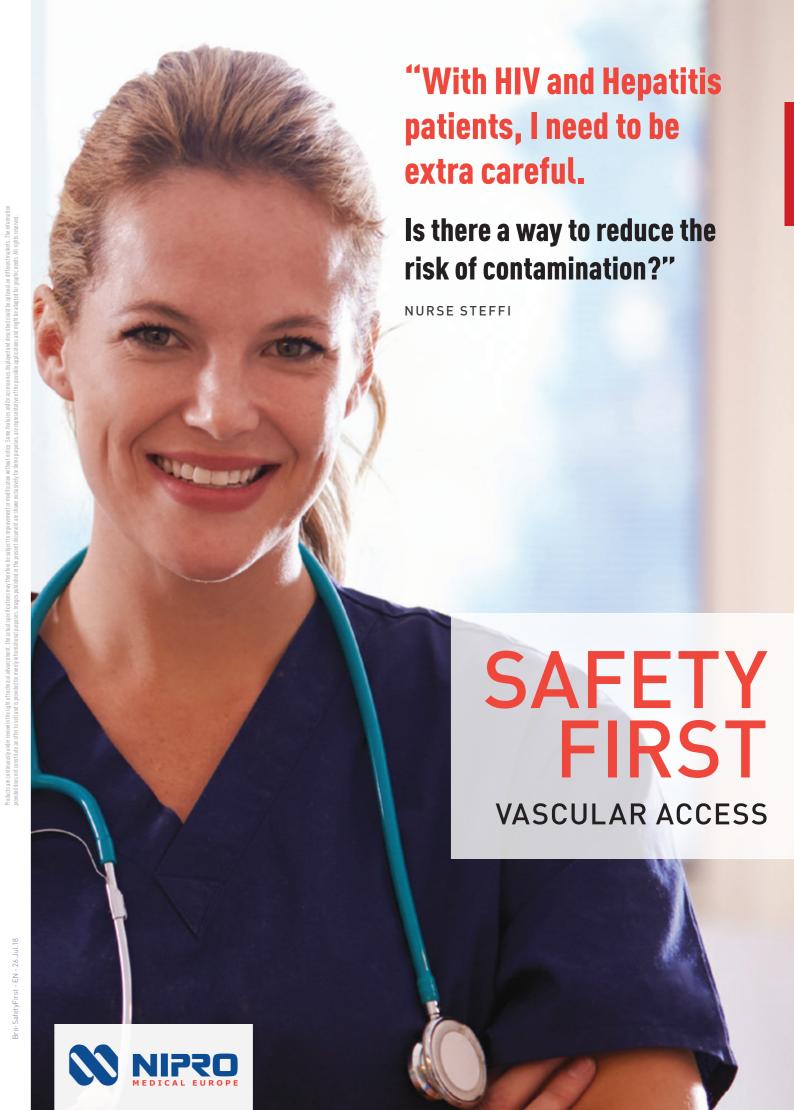
NIPRO MEDICAL UK LTD.

Poligono Los Frailes n° 93 y 94, Daganzo, 28814 Madrid, SPAIN | T: +34 (0)91 884 5531 | F: +34 (0)91 878 2840

NIPRO D.MED SCHWEIZ GMBH: Kantonsstrasse 77, 8807 Freienbach, SWITZERLAND | T: +41 (0)55 410 40 44 | F: +41 (0)55 410 40 43

NIPRO MEDIKAL SAĞ.HIZ.TIC.LTD.STI.: Aziziye Mah.Pilot Sok.17/4, 6540 Çankaya-Ankara, TURKEY | T: +90 (0)312 442 21 12 | F: +90 (0)312 442 21 92

25 Barnes Wallis Road, Segensworth East, Fareham Hampshire PO15 5TT, UNITED KINGDOM | T: +44 148 985 48 30





very year, healthcare professionals are affected by needlestick and sharps injuries. The World Health Organization estimates that 3 of the 35 million healthcare professionals worldwide are exposed to bloodborne pathogens each year as a result of these injuries.¹

Almost 50% of injuries are not reported, which leads to a significant under-estimation.

1 HEALTHCARE PROFESSIONAL IN 10 WILL BE EXPOSED TO BLOODBORNE PATHOGENS IN THE COMING YEAR.

A needlestick injury is a serious matter and exerts extra pressure on hospitals and healthcare professionals alike.

Healthcare professionals

- After a NSI and before contamination is confirmed or denied:
- Stress and decreased productivity
- For those who contract a disease as a result of their injury:
- Lifelong consequences
- Physical and emotional adjustment
- Financial burdens
- Inability to continue working in the healthcare profession in some cases

Hospitals

- Costs for testing viral contamination, compensation, and leave of absence
- Loss of professional knowledge and time spent training new persons

Globally, 1 in 5 patients in dialysis centers are considered "at risk." ²

As a result of needlestick injuries, it is estimated that healthcare professionals contract the following viruses annually: ³

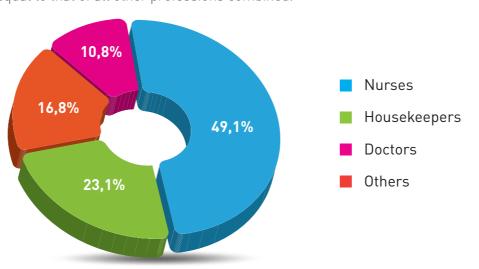
- 66.000 cases of Hepatis B virus
- 18.000 cases of Hepatitis C virus
- 200 5.000 cases of HIV

The primary pathogens in dialysis are Hepatitis C and HIV, which could be present among 20% of patients in dialysis units.³



Sharps injuries as per job category:4

Nurses have the highest frequency of injuries, totaling 49,1%. This means the frequency of sharps injuries to nurses is nearly equal to that of all other professions combined.



The period after a needle stick injury can be a stressful period of doubt due to the incubation time of different infections:⁵

- Hepatitis B virus = 40-160 days after exposure
- Hepatitis C virus = 14-180 days after exposure
- HIV = 4-8 weeks after seroconversion

€ 922.000 PER NSI

During the period of unknown results, healthcare professionals experience high mental stress due to uncertainty. This waiting period usually requires the individual to refrain from work until results are conclusive. This presents further strain on the already limited human resources in the medical profession.

Direct costs for hospitals range from 150 € in case of non-contamination to 922.000 € in cases of contamination⁶. The average costs comes to $1.966 \, €.7$

The goal is to prevent contamination without worrying about the costs.

BECAUSE EVERY LIFE DESERVES AFFORDABLE CARE

IS THERE A WAY TO REDUCE THE RISK OF CONTAMINATION?

The European Council Directives recognize that, due to the nature of their profession, healthcare professionals are at risk everyday of serious infections, with more than 30 potentially dangerous pathogens, including Hepatitis B, Hepatitis C and HIV, as a result of needle stick injuries.

Clinical Practice Guidelines recommend different procedures to prevent contamination:8,9

Aseptic techniques:

For manipulation, connection and disconnection of the vascular access

Prevention of needlestick and sharps injuries:

- Risk Assessment:
- Identify hazards
- Identify workers at risk
- Estimate the risk
- Consider if the risk can be eliminated
- Evaluate measurements

Inform and educate healthcare professionals:

- On the risks
- Prevention methods
- Incident reporting

The use of medical devices that incorporate "safety-engineered protection mechanisms" and the possibility of eliminating the unnecessary use of sharps devices are recommended measures to take in preventing sharps injuries.

- Safety mechanism must be an integral part of the safety device, not a separate accessory;
- Activation of the safety mechanism must be convenient and allow the care-giver to maintain appropriate control over the procedure;
- A single-handed or automatic activation is preferred;
- Activation of the safety mechanism must manifest itself by means of an audible, tactile or visual sign to the healthcare professional;
- Safety mechanisms should not be reversed once activated.

