

The unfinished story

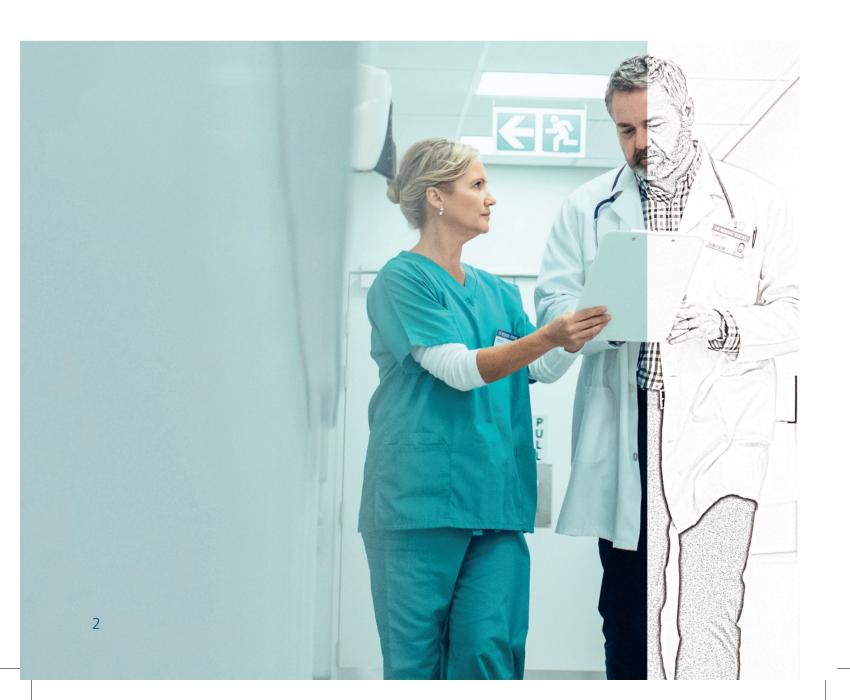
Healthcare worker safety



We are BD

BD is a global medical technology company that is *advancing the world of health* by improving medical discovery, diagnostics and the delivery of care. We work in close collaboration with customers and partners, helping to:

- Improve outcomes
- Lower healthcare delivery costs
- Increase efficiencies
- Improve healthcare safety
- Expand access to health



Needlestick injuries remain a serious threat

The European Parliament described needlestick injuries as...

"One of the most serious health and safety threats in European workplaces"1.

In 2013, the EU Directive on the Prevention of Sharps Injuries in the Hospital and Healthcare Sector became legally binding². Hospitals now have a duty to:

- Achieve the **safest possible** working environment
- Prevent workers' injuries caused by all medical sharps including needlesticks
- **Protect** workers at risk

However, legislation is only half of the story. Needlestick injuries (NSIs) are still happening every day and continue to pose a threat due to non-compliance³, failure to use safety engineered devices³ and ignorance of the risks of infectious disease⁴.

Needlestick injuries: What you need to know



1 million

Needlestick injuries are estimated to occur in Europe each year¹



More than 30

Dangerous pathogens⁵ can be present in human blood, including hepatitis B,



1 in 6

Nurses, physicians and medical students report repeated injuries³



37%

Estimated proportion of HBV infections in healthcare workers attributable to occupational exposure⁷

The problem could be bigger than you think



Under-reporting is common^{8,9}, with a range of factors preventing healthcare workers from reporting needlestick injuries, including:

- Lack of **time, routine** or a **robust system** for reporting^{3,10,11,12,13}
- Lack of clarity and information about reporting⁵
- Inadequate **knowledge** or **understanding** of infection risks^{3,11}
- Fear of embarrassment or a punitive response¹²

The impact of needlestick injuries can be far reaching

Needlestick injuries are unpleasant and they put your employees at unnecessary risk.

They can also affect the emotional wellbeing of your staff and put significant strain on your budget.

Emotional impact



The fear of needlestick injuries can be severe and long-lasting¹⁰



Waiting for test results and taking prophylactic treatments can result in months of anxiety and stress for healthcare workers¹⁴



The average wait time for test results following injury¹⁴

Financial impact



€500-1600+

The estimated direct cost of needlestick injuries per incident³



Litigation costs

With additional indirect costs, injuries present a very real financial burden



\$75 million

Data from a systematic review (2016) of economic studies suggested this could be the total cost of needlestick injuries in Italy alone⁶

It's time to complete the picture and finish the story



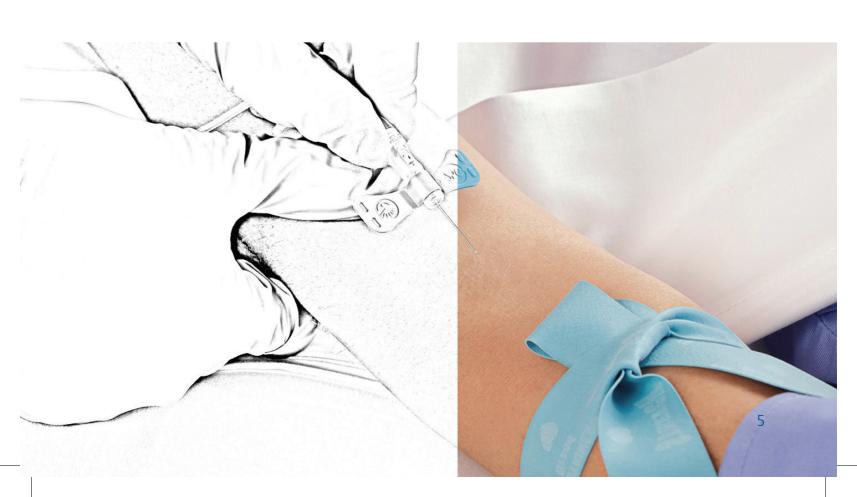
Needlestick injuries remain a serious threat, but there are solutions available that can significantly reduce your risk. We recommend using our three-step process to determine the risks inherent in your department, implement new devices and ensure that your teams are trained to use them appropriately.

The BD three-step process

STEP ONE: Recognise the risks

Risk assessment is a vital first step. BD can provide you with a tool that helps you to:

- Identify harm
- Assess risk
- Develop recommendations



STEP TWO: Introduce safety-engineered devices

The use of safety-engineered devices has been proven to prevent needlestick injuries, particularly when used in conjunction with specific training.



Reduction in needlestick injuries when safety devices were used. Education and training were key factors¹⁵



Decrease in reported needlestick injuries. Safety devices probably the most important factor¹⁷



The percentage of injuries that could have 'probably' or 'definitely' been prevented by safety devices¹⁸

BD safety-engineered devices

BD provides superior quality safety-engineered devices that can help to reduce needlestick injuries and improve clinical performance, thereby lowering the overall cost of operations. Our broad portfolio of products covers a wide range of clinical applications, including the following:

Safety in blood collection



BD Vacutainer® EclipseTM
SignalTM Blood Collection Needle
with Integrated Holder



BD Vacutainer® *UltraTouch™* Push
Button Blood Collection Set

Safety in peripheral vascular access



BD Venflon™ Pro Safety IV Cannula



BD Nexiva™ Closed IV Catheter System

Safety in injection preparation and administration



 BD^TM Blunt Fill and BD^TM Blunt Filter Needles



BD Eclipse™ with SmartSlip™ Technology



BD AutoShield® Duo



BD can help you selecting the most appropriate safety engineered devices to meet your clinical needs and transform safety within your organisation. Our highly skilled professionals can work with you to develop a bespoke implementation plan.

STEP THREE: Educate and train

BD can partner with you to develop safety training and education programmes that go beyond safety-engineered device training.



Training

We can provide expert help and best-practice training in safety and everyday clinical applications, such as effective injection, blood collection and vascular access techniques



Investment

We continue to invest in the development of high-quality educational tools, materials and training programmes



E-learning

Our e-learning programmes offer around-the-clock training

Let's complete the picture and finish the story

Nurses and other healthcare workers who are dedicated to the health and wellbeing of patients should be protected from harm at work. We can empower you to make the changes that will protect your teams from the risks associated with needlestick injuries.

Building upon more than a century of expertise and innovation, BD is committed to supporting you on your journey to a safer working environment – one that protects all healthcare workers, while ensuring that you comply with the relevant standards, guidelines and directives.



References

- 1. EU Press Release, Reference No.: 20100210IPR68824, e:mail empl-press@europarl.europa.eu.
- 2. EU Council Directive 2010/32/EU of 10th May 2010 implementing the Framework Agreement on prevention from sharp injuries in the hospital and healthcare sector concluded by HOSPEEM and ESPU
- 3. Dulon M et al. Causes of needlestick injuries in three healthcare settings: analysis of accident notifications registered six months after the implementation of EU Directive 2010/32/EU in Germany. J Hosp Infect 2017;95(3):306-311.
- 4. Frickmann H et al. Risk reduction of needle stick injuries due to continuous shift from unsafe to safe instruments at a German University Hospital. Eur J Microbiol Immunol (Bp) 2016;6(3):227-237. eCollection 2016 Sep 29.
- 5. European Biosafety Network. Prevention of Sharps Injuries in the Hospital and Healthcare Sector. European Biosafety Network Implementation Guidance Toolkit for EU Council Directive 2010/32/EU. January 2013 Available at: www.europeansafetynetwork.eu (accessed May 2017).
- **6.** Mannocci A et al. How much do needlestick injuries cost? A systematic review of the economic evaluations of needlestick and sharps injuries among healthcare personnel. Infect Control Hosp Epidemiol 2016;37(6):635-646.
- 7. d'Ettore G. Job stress and needlestick injuries: which targets for organizational interventions? Occup Med (Lond) 2016;66(8):678-680.
- 8. Westermann C et al. Hepatitis C among healthcare personnel: secondary data analyses of costs and trends for hepatitis C infections with occupational causes. J Occup Med Toxicol 2016;11:52. eCollection 2016.
- 9. Fritzsche C et al. Reducing the underreporting of percutaneous exposure incidents: A single-center experience. Am J Infect Control 2016;44(8):941-3.
- 10. Glenngård AH & Persson U. Costs associated with sharps injuries in the Swedish health care setting and potential cost savings from needle-stick prevention devices with needle and syringe. Scand J Infect Dis 2009:41(4):296-302.
- 11. Voide C et al. Underreporting of needlestick and sharps injuries among healthcare workers in a Swiss University Hospital. Swiss Med Wkly. 2012;142:w13523.
- 12. Choi LY et al. Sharps and needlestick injuries among medical students, surgical residents, faculty, and operating room staff at a single academic institution. J Surg Educ 2017;74(1):131-136.
- 13. HSE Sharps inspection initiative 2015/16 Summary Document. Available at: http://www.hse.gov.uk/healthservices/needlesticks/inspection-campaign.htm
- 14. Green B, Griffiths EC. Psychiatric consequences of needlestick injury. Occupational medicine. 2013;63(3):183-188.
- 15. De Carli G et al. The importance of implementing safe sharps practices in the laboratory setting in Europe. Biochem Med 2014;24(1):45–56.
- 16. Valls V et al. Use of safety devices and the prevention of percutaneous injuries among healthcare workers. Infect Control Hosp Epidemiol 2007;28:1352-1360.
- 17. Lamontagne F et al. Role of safety-engineered devices in preventing needlestick injuries in 32 French Hospitals. Infect Control Hosp Epidemiol 2007;28(1):18-23.
- **18**. Cullen BL et al. Potential for reported needlestick injury prevention among healthcare workers through safety device usage and improvement of guideline adherence: expert panel assessment. J Hosp Infect 2006;63:445–451.

BD Switzerland Sárl Terre Bonne Parl - A4 Route de Crassier 17 1262 Eysins Switzerland

bd.com

