Healthcare Workers should feel safe and comfortable as they perform their valuable roles: In a recent Europe-wide survey 82% reported major concern over the threat of needlestick injuries, with the infection of HIV and Hepatitis foremost in their fears.¹
The Covidien Safety Day reported these findings across Europe:

The problem of needlestick injuries

- Across Europe, 83% of healthcare workers responded that they were concerned about needlestick injuries compared to other workplace injury risks.¹

- 59% of healthcare workers asked in our survey reported having experienced a needlestick injury themselves.¹

- 94% of respondents know a colleague who has experienced a needlestick injury.¹

- The main concern for 82% of those questioned in regards needlestick injury was the infection of blood borne diseases, with 20% specifying the threat of HIV and 15% referencing Hepatitis.¹

This document explores some of the issues surrounding needlestick injuries. It provides guidance and information concerning recent legal changes to protect Healthcare workers, and examines a recent survey conducted by Covidien that highlights the health risks and costs involved with this serious problem.
The Solution

The Magellan™ Safety Needle

• 94% feel the safety feature on the Magellan™ Safety Needle is effective in reducing needlestick injuries.¹

• 92% agreed that the safety feature is easily activated.¹

• 93% agree that the safety feature causes no splashing during activation.¹

• 96% feel the product has a good ability to pierce the skin in regular use.¹

• 89% of those asked Europe-wide would use this product.¹
3 questions to ask...

1. Are you the person responsible for procuring safety needles and syringes?

2. What type or brand of product is normally chosen and what is your rate of use?

3. What decisions have you taken to comply with the EU directive?

5 reasons why you should choose Magellan™ safety needles

1. Proven Safety
   Once the Magellan™ safety shield is activated, it cannot be deactivated, and the shield remains in effect even after disposal.

2. Easier to Use
   Magellan’s small profile makes it less bulky than other safety shields, eliminating obstructions of the injection site and the syringe graduations.

3. Easy and Safe to Activate
   Three ways of activating the safety device – using a finger, thumb or flat surface. The clinician’s hand remains behind the needle at all times, eliminating user risk. Audible click when activated.

4. Market Leading Brand
   The Magellan™ is one of the most popular safety needle devices used in the United States today. Its proven reliability and functionality is now available in Europe, delivering the quality standard expected from Covidien.

5. Trusted by Users
   With 12 years experience in the market, the Magellan™ is a product with a solid track record and reputation. The Magellan™ range has been developed and improved to meet healthcare workers’ needs and demands.
What is the EU directive 2010/32/EU?

Directive 2010/32/EU requires that formal risk assessments are performed on all activities where medical sharps are used, and that wherever there is a risk of injury or infection it must be minimized by means of training, improved working practices – and the introduction of safety-engineered medical devices, such as the Magellan™ safety needle.

Who does the Directive protect?

The EU Directive covers all workers that are under the managerial authority and supervision of healthcare employer/organisations, including those providing healthcare in the home, in nursing and care homes, doctors’ offices, dental surgeries and other non-hospital settings, and any private or independent healthcare employers. Additionally the directive covers some self-employed workers (such as agency/bank nurses), and any sub-contracted staff providing services for healthcare organisations (e.g. cleaners). Furthermore, it also incorporates any students whilst they are under the supervision of a healthcare provider.

Why and when is the new EU Directive being introduced?

Existing legislation was largely ignored or misinterpreted, and as a result proved ineffective. The Directive implementation date is 13 May 2013.

Further information

Further information on the EU directive can be found in these information toolkits (All are available for download):

- EPN Toolkit for implementation of the European Directive
- Royal College of Nursing guidance to support implementation of the EU Directive 2010/32/EU on the prevention of sharps injuries in the Healthcare sector
- Prevention of Sharps Injuries in the Hospital and Healthcare Sector Implementation
- Guidance for the EU Framework agreement

EU Directive

“Eliminating the unnecessary use of sharps by implementing changes in practice and providing medical devices incorporating safety-engineered protection mechanisms.”
**Need for Safety - Key Findings**

**Profiles**

**Question**
What is your Job title?

**Results**

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Nurse</td>
<td>71%</td>
</tr>
<tr>
<td>Ward Sister</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
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<tr>
<td>Co-ordinator</td>
<td>6%</td>
</tr>
<tr>
<td>Doctor</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Question**
What type of ward or department are you based in?

**Results**

<table>
<thead>
<tr>
<th>Ward/Department</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Emergency A&amp;E</td>
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<tr>
<td>Other</td>
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<tr>
<td>ICU</td>
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<tr>
<td>Cardiology</td>
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<td>General medical ward</td>
<td>3%</td>
</tr>
<tr>
<td>First Aid</td>
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<tr>
<td>General surgical ward</td>
<td>2%</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>2%</td>
</tr>
<tr>
<td>Resuscitation</td>
<td>2%</td>
</tr>
<tr>
<td>Psychiatry</td>
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</tr>
<tr>
<td>Theatre/operating dept</td>
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<tr>
<td>Oncology</td>
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**Concerns**

**Question**
What is your main concern in regards a future needlestick injury?

**Results**

<table>
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<th>Concern</th>
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<tr>
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<tr>
<td>HIV</td>
<td>20%</td>
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<tr>
<td>Other blood borne diseases</td>
<td>20%</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>15%</td>
</tr>
<tr>
<td>General health concern</td>
<td>9%</td>
</tr>
<tr>
<td>Fear of not being able to work</td>
<td>2%</td>
</tr>
<tr>
<td>Psychological issues</td>
<td>1%</td>
</tr>
</tbody>
</table>

With over 8 out of 10 respondents expressing concern over the potential transmission of infection and disease through a needlestick injury it is clear a solution must be found to offer Healthcare workers the protection and peace of mind they deserve.
With an estimated 1 million needlestick injuries occurring annually in Europe, the Magellan™ safety needle can help reduce incidence and deliver peace of mind.

100% of respondents agreed it is a better alternative to traditional recapping.

100% of respondents agreed it is a better alternative to traditional recapping.
Innovative Design -
Key Findings

**SIMPLICITY**

**QUESTION**
Is the Magellan™ safety needle’s safety feature easily activated?

**BENEFITS**
Intuitive one-handed operation minimises training costs and disruption.
The safety shield is designed as an integral part of the device.
Needles are available on their own or pre-attached to syringe saving valuable nursing time and maximising efficiency.

**DIRECTIVE**
'The product must be easy to use and require little change of technique on the part of the health professional.'

**OPINION**
With 9 out of 10 respondents agreeing the safety feature is easily activated without special training it is apparent the Magellan™ safety needle finds favour with Healthcare Workers through its intuitive ease-of-use, and can be implemented without disruptive and costly training.

**91%** of respondents agreed that the safety feature is easily activated.

**WHY?** Intuitive, easy one-handed safety activation.

**DIRECTIVE**
'The safety mechanism must be an integral part of the safety device, not a separate accessory.'

'The device must not create other safety hazards or sources of blood exposure.'

EPN Prevention of Sharps Injuries in the Hospital and Healthcare Sector.

**HANDLING**

**QUESTION**
Is the safety feature easy to use and handle?

**KEY FINDING**

**85%** of respondents found the safety feature easy to use and handle without training.

**ERGONOMICS**

**QUESTION**
Can the safety feature be activated with one hand?

**KEY FINDING**

**94%** agreed that the safety feature can conveniently be operated using one hand.

EBN Toolkit
## RERAINTS

### QUESTION
Does the safety feature hinder routine use?

### KEY FINDING
87% of respondents agreed that the safety feature does not hinder routine use.¹

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## ACTIVATION

### QUESTION
Is the safety feature activation clearly communicated to the user?

### KEY FINDING
94% felt the safety feature activation was clearly communicated to the user.¹

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Magellan™ has an audible click when activated.

## WOULD I USE?

### QUESTION
Would I use this product?

### KEY FINDING
90% of respondents said that they would use this product, implying strong trust in its design to protect from needlepoint injuries, and appreciation of its user features.¹

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## BENEFITS

**Bevel orientation saves valuable nursing time; when the safety device is up it does not interfere with the view when delivering.**

**Needle-based safety technology promotes clinical flexibility.**

**Safety needle may be connected to any standard luer lock syringe.**

**Latex free:** Eliminates potential reaction.

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## DIRECTIVE

‘The device must perform reliably.’

‘The activation of the safety mechanism must manifest itself by means of an audible, tactile or visual sign to the health professional.’

EPN Prevention of Sharps Injuries in the Hospital and Healthcare Sector.
User Preferences -
Key Findings

**OPTIONALITY**

**QUESTION**
Is there a good range of sizes available?

**KEY FINDING**

89% said there is a good range of sizes available.¹

**VISIBILITY**

**QUESTION**
Does the safety feature hinder visualisation at the tip of the needle?

**KEY FINDING**

89% agreed the safety feature does not hinder visualisation of the needle.¹

**WHAT SIZES ARE AVAILABLE?**

Gauge Sizes range from 18 to 25 gauge and needle lengths are available in 5/8”, 1” and 1-1/2”.

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<tr>
<td>25</td>
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</tbody>
</table>

**OPINION**

Over 9 out of 10 Healthcare Workers across Europe were happy that there was a good range of sizes available¹: The Magellan™ safety needle provides good optionality to cover your specific requirements.

“Simplifies the standardization efforts from standard needle and syringe products to safety.”

**SAFETY**

Almost 9 out of 10 respondents felt the safety feature did not hinder routine use¹, meaning the effective benefits of the Magellan™ safety needle are appreciable without sacrificing everyday performance. With 94% reporting no splashing once the safety feature is activated, and an ultra sharp, tri-beveled, anti-coring needle this product has a number of advantages.
**EFFECTIVENESS**

**QUESTION**
The safety feature would be effective in reducing needlestick injuries?

**KEY FINDING**

94% of respondents felt the *Magellan™* safety needle would be effective in reducing needlestick injuries.¹

**BENEFITS**
Audible and tactile click confirms safety device has been activated.

**SPLASHING**

**QUESTION**
Does the safety feature cause splashing when activated?

**KEY FINDING**

94% told us there is no splashing when the safety feature is activated.¹

**TIME**

**QUESTION**
The safety feature does not require more time to use than conventional methods.

**KEY FINDING**

88% agreed the safety feature is as fast as conventional methods.¹

**PENETRATION**

**QUESTION**
Does the product have a good ability to penetrate the skin?

**KEY FINDING**

95% said the product penetrated the skin well.¹

**BENEFITS**
Minimises trauma to muscle tissue for smooth delivery of medications.
EPINet® reports that the four categories for follow-up charges after needlestick injuries are as follows:

- **Laboratory charges for blood tests.**

- **Charges for treatments e.g. hepatitis B, drugs for HIV, and tetanus vaccine.**

- **Money for emergency department or employee health department visits or other services.**

- **Other costs such as surgery, personal costs, loss of salary, as well as legal bills from litigating circumstances.**

In Spain, the annual cost of needlestick injuries is €6-7 million and the annual cost of injection/IV-related needlestick injuries is €4-5 million.

In Austria, the cost per person to cover needlestick injuries is €162.50 for the blood analysis, and €500 for the medical therapy (per year).

In Germany, the average cost for a needlestick injury is €450.

In Italy, it’s €850.

In Poland, the cost of drugs for doctor or nurse against hepatitis B is €470 - €700.

The cost of drugs for a doctor or a nurse to protect themselves against HIV is about €2,654 and the cost of complications in the event of infection is €17,777.

In the UK, the Bevan Brittan report estimated that needlestick injuries cost each trust £500,000 each year with the cost of an injury ranging from €403.59 for patients with low risk to €1761.97 for patients with unknown risk.

**TRAINING**

**QUESTION**

Does the product require detailed training?

**KEY FINDING**

92% said the product does not require detailed training.

**DIRECTIVE**

‘The device must be easy to use and require little change of technique on the part of the health professional.’

EBN Toolkit

‘A single-handed or automatic activation is preferable.’

EPN Prevention of Sharps Injuries in the Hospital and Healthcare Sector

**COSTS**

Fig 1. The cost of a needlestick injury per person in each country

- **UK:** €450
- **Germany:** €850
- **Italy:** €700
- **Poland:** €470
- **Austria:** €622.50

**Implications - Key Findings**
ABSENTEEISM

There is the additional service and economic cost of absenteeism. For example a hospital in the UK with 5,000 staff can spend around £100,000 annually on managing exposure incidents, including the costs of blood tests, lost staff time and post-exposure prophylaxis (excluding litigation costs). A recent large survey commissioned by the Scottish Executive demonstrated that in the case of sharps injuries 41% could probably be prevented, whilst 14% could definitely be prevented by the use of safety devices. Applying these figures to a hospital with 5,000 staff gives estimated annual savings of £14,000 - £42,000.³

There are significant economic, health, emotional and social issues arising from needlestick injuries. The Magellan™ safety needle can minimize incidence, saving money and time for Healthcare providers and bringing peace of mind to staff.

LEGAL

Health and Safety law is also criminal law. Hospitals and Healthcare establishments are subject to prosecution if they do not adhere to current or forthcoming guidelines relating to the prevention of sharps injuries.

Financial considerations are not an excuse for Member States failing to fully implement the Directive, and there are legal precedents (e.g. in Scotland in 2004) that state that cost alone cannot be used as a reason for not adopting safety engineered devices or for changing work practices to comply with European health and safety Directives.

In 2010 a Healthcare Worker contracted hepatitis C after sustaining a needlestick injury: The hospital trust was fined more than £20,000.⁴⁵

Worcestershire Acute Hospitals NHS Trust NHS trust was fined £12,500 and ordered to pay £9,000 costs after pleading guilty to breaching the Health and Safety at Work Act, and the control of substances hazardous to health regulations.⁶

Adopting of the Magellan™ safety needle will keep your hospital or healthcare service within the law, potentially saving expensive and damaging litigation costs, time, and your reputational standards.
Guidance

The Covidien Safety Day Initiative

Needlestick injuries and their effects continue to be major concerns for those involved in the healthcare system, understandably so when considered alongside the fact that there are 23 known blood-borne pathogens, including hepatitis B, C and HIV, which can be spread through contaminated needlesticks.12

‘The Covidien Safety Day’ campaign1 on World Aids Day, Dec 1st 2012, where over 65 hospitals from 7 European countries participated in an initiative to highlight the danger of blood-borne injuries, and the potential damage they can cause to the Healthcare Workers (HCW) exposed. The 204 HCW participants - incorporating A+E, ICU and ward based staff - were given training on the product, so they could use it during the World Aids Day before being asked to complete a questionnaire looking at specific product features and wider issues surrounding needlestick injuries. Their responses highlighted the Magellan™ safety needle’s valuable safety feature, ease of use and performance effectiveness.

Key Facts

In Europe, 94% of Healthcare Workers interviewed by Covidien said they knew a colleague that had experienced a needlestick injury, and 59% said that they had experienced one themselves.1

- Although the risk of infection following a needlestick injury from an HIV infection source is low (0.3%) it has significant impact.13
- The risk of infection from Hepatitis B can be as high as 30%.14
- Once caught, Hepatitis C will remain with the patient for the rest of their life.15

References

2 Estimate comes from the European Agency for Health and Safety at Work
7 Bevan Brittan LLP are your sharps policies and procedures up to scratch? February 2011
8 NHS Dumfries Galloway London June 2012 Sharp Injury Case Study.pdf
9 European Biosafety Network Toolkit for implementation of European Directive on Prevention of Sharps Injuries
CONCLUSION

The Covidien Safety Day results reveal the Healthcare Workers' preference for a safety needle that combines reliable usability, excellent everyday performance and effective safety functionality. Moreover, significant concern from Healthcare Workers over the incidence of needlestick injuries and the consequences thereof, the Magellan™ safety needle can provide a cost effective and valuable solution.

Magellan™ Safety Technology

Designed with integral safety shield that secures and permanently locks over the needle after use.

OTHER SAFETY PRODUCTS FROM COVIDIEN

- Magellan™ Hypodermic Safety Syringe
- Magellan™ Insulin Safety Syringe
- Magellan™ Tuberculin Safety Syringe
- Monoject™ SmarTip™ Needleless Cannula
- Monoject™ Blunt Fill Hypodermic Safety Syringe
- Insulin Safety Syringe
- Tuberculin Safety Syringe
- Needleless Med-Prep Cannula
- Blunt Tip Safety I.V. Access Cannula with Vial Access Pin
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