

Healthcare worker safety after the EU Sharps Directive

Legislation to protect healthcare workers came into force in 2013, and the effects of the mandate, particularly Directive Clause 6, are examined in this article

Paul De Raeve Mphil

Secretary General,
European Federation of Nurses Associations
Brussels, Belgium
Email: efn@efn.be

As well as having a high cost burden

for employers,¹ a sharps injury can result in possible infection from 30 potentially dangerous blood-borne pathogens and healthcare-associated infections, including hepatitis B and C and HIV.² Negative psychological consequences can also occur when a sharps injury is sustained. For example, the distress of having potentially contracted a blood-borne disease can be enough to trigger post-traumatic stress disorder,³ depression and potentially career-limiting fear.

To combat the risks posed to European healthcare workers, the European Council Directive on sharps injury prevention, Council Directive 2010/32/EU⁴ (EU Sharps Directive), was issued in 2010 to help prevent the estimated one million sharps injuries occurring in the EU each year.⁵ It established a framework in relation to sharps injuries that includes measures to address the following: risk assessment, risk prevention, training and information, awareness raising and monitoring and response and follow-up procedures.

'A milestone moment'

The implementation of the EU Directive was arguably a milestone moment for ensuring healthcare worker safety in Europe, and all EU member states were mandated to incorporate the Directive into national law by 11th May 2013. Member States have had to draw up new



regulations or amend old statutes to incorporate the messaging of the legally binding Directive. It is paramount that healthcare employers across the EU are fully aware of the impact the Directive has had on country law to avoid committing an offence.

Some months after the deadline for compliance with the EU Sharps Directive, the European Federation of Nurses Associations (EFN) decided to evaluate whether the preventable measures outlined within the Directive have been effectively incorporated into the daily practice of European healthcare professionals. The evaluation was conducted and an EFN Report on the Implementation of Directive 2010/32/EU on the prevention of sharps injuries in the healthcare sector⁶ was published. To provide data for the report, the EFN carried out a survey that prompted almost

7,000 replies from its members across 28 EU Member States. The majority of the respondents represent nurses (6,095 or 87%), followed by healthcare assistants (283 or 4%) and physicians (47 or 1%). In total, 546 (8%) respondents registered with another occupation.

Europe-wide survey

Responses to the questionnaire revealed that, overall, professionals feel that their respective Member states have put into place measures for the prevention of sharps injuries and that their practice has improved thanks to the design and implementation of the Directive. Data analysis reveals that respondents believe that the issuing of the Directive has had a positive impact on the daily practice and clinical environment of health professionals as more safety-engineered medical devices (SEMDs) are available



and responsibility for reporting an injury is clear.

However, respondents also identified significant areas that are not being covered and that require addressing. The areas lacking were: specific education on sharp injuries prevention, the performance of risk assessments in the workplace, the explicit ban of recapping and, arguably surprisingly, the lack of awareness campaigns. Furthermore, respondents stressed that professionals are in need of further guidance when they suffer a sharps injury and that guidelines need to be better rooted into daily practices.

Utilisation of safety-engineered medical devices

Perhaps the most concerning finding was that training in the use of SEMDs is often found to be weak or non-existent, despite multiple independent studies, such as Adams and Elliott⁷ and Tarantola and colleagues⁸ showing that a combination of training, safer working practices and the use of SEMDs can prevent more than 80% of sharps injuries. The capability of certain manufacturers to provide excellent training needs to be taken into account in procurement. Where SEMDs are purchased in accordance with tenders, the tenders should include training and

support services as a specific requirement. Furthermore, nurses should be more involved in the selection of suitable SEMDs as, in my experience, the performance and quality of such devices does vary.

Directive Clause 6

For the purposes of this article, I shall highlight the results of one particular area of questioning, Directive Clause 6 – Elimination, Prevention and Protection. The Directive states that sharps injury risks must be eliminated by the consistent introduction of SEMDs, sharps bins and safe procedures for the use and disposal of sharps and contaminated waste. It

Perhaps the most concerning finding was that training in the use of safety-engineered medical devices is often found to be weak or non-existent, despite multiple independent studies

requires premises, furnishings and equipment to be designed so as to avoid the spread of biological agents, and to facilitate any decontamination required.

When categorised by country, the majority of states positively recorded the

existence of SEMDs. Only Bulgaria and Iceland have a higher percentage of respondents indicating that this is not the case. A matter of concern though is that Directive 2010/32/EU prohibited the practice of recapping with immediate effect, and 25% of respondents affirm it is still yet to be prohibited at their workplace.

In relation to the availability of safety equipment, 70% of respondents (4,487) indicate that they have access to SEMDs. Among those devices available, it is most common for those devices and instruments to be used for the purposes of blood collection and injection. Worryingly, 30% of the respondents indicated that they have no suitable

equipment at their disposal, even for very high-risk procedures.

These figures perhaps suggest that there is an ongoing process of converting from conventional devices to SEMDS, but they also present the possibility that some

employers may be attempting to ration the provision of SEMDs for reasons of cost. Furthermore, only 80% of respondents confirmed that they have appropriate sharp bins to discard needles and sharp instruments. It is possible to assume, therefore, that needles and contaminated materials can end up in plastic bags or carton boxes, which is unacceptable.

The EFN further analysed the responses of the 30% that revealed they do not have SEMDs at their disposal. Of this 30%, analysis showed that 1,105 respondents are working in hospitals, 161 are located in elderly care homes, and 319 work in the community and primary care sector. It should therefore be noted that although values are generally high (70%), continued efforts are required across all healthcare settings in order to increase the proportion of those who use SEMDs to 100%.

Personal protective equipment

Positively, 96% of respondents confirmed that they have personal protective equipment (PPE), such as gloves, masks, and gowns, when they need. Although these results are positive, the EFN still believes that there should be 100% provision of PPE as no healthcare workers should be exposed to the risks sharp injuries pose.

To conclude the interpretation of the questions related to elimination, prevention and protection, in response to the overall question "I believe that in my workplace appropriate measures to prevent sharp injuries have been implemented", 74% of respondents believe that appropriate measures to prevent sharp injuries have been implemented at their workplace. Interestingly, a total of 1,278 respondents did not give an answer to this question. This may be related to earlier negative responses within the questionnaire concerning available information specific to sharp injuries, awareness and specific training on policies and procedures related to sharps injuries. Without appropriate information, healthcare workers may well feel that they are not in a position to assess whether appropriate preventative measures are in place.

Healthcare workers requirements

The prevention of sharps injuries in healthcare settings can be emboldened by strengthening those areas that healthcare workers believe are currently

Key points

- Sharps injuries can result in possible infection from 30 potentially dangerous blood-borne pathogens and healthcare-associated infections. Fear of transmission alone can trigger anxiety and depression.
- Healthcare employers are legally bound by the EU Directive on sharps injury prevention and must carry out its obligations such as risk assessments and the provision of safety-engineered medical devices (SEMDs) where possible.
- European Federation of Nurses Associations (EFN) survey responses suggest that partial compliance with the legislation is all too common. Implementing safety measures for certain procedures alone and not all, in the same facility, has the potential to create safety risks due to inconsistency and confusion.
- Comprehensive training in the use of SEMDs is important and should be provided by the manufacturer. Currently there is high variability in training provided. Training requirements should be included in tenders for the supply of SEMDs.
- A 'zero tolerance' policy in relation to sharps injuries across all healthcare settings, including hospital community, and elderly care should be strongly enforced. There is no doubt that the requirements of the EU Directive apply in full whether healthcare is provided to patients in their own home or any other non-hospital settings.

missing. Respondents placed emphasis on a need for further education, awareness and follow-up support subsequent to an injury. Such efforts are crucially important to making progress with the EU safety and quality agenda. After all, as stated in Directive 2010/32/EU, a well-trained healthcare workforce is essential to preventing injuries and the transmission of infections from sharps. In order to overcome this lack of training, each member state should strengthen its continuous professional education and make use of the European Social Funds available during the period 2014 to 2020 with the objective of strengthening knowledge transfer and implementation.⁹

The data gathered show that the EU Directive has had a positive impact on clinical practice; however, it exposes that there is still work to be performed in critical areas that have been proved to reduce the risk of sharps injuries as partial compliance is all too common. Healthcare employers across Europe have a responsibility to strongly enforce a 'zero tolerance' policy in relation to sharps injuries across all healthcare settings, including hospital, community and elderly care. There is no doubt that the requirements of the EU Directive apply in full whether healthcare is provided to patients in their own home or any other non-hospital settings. ●

References

1. European Biosafety Network, Prevention of sharps injuries in the hospital and healthcare sector: Implementation guidance for the EU Framework Agreement, council directive and associated

national legislation. Available at: <http://europeanbiosafetynetwork.eu/EU%20Sharps%20Injuries%20Implementation%20Guidance.pdf> (accessed 19 May 2014).

2. Ibid.
3. Green B, Griffiths EC. Psychiatric consequences of needlestick injury, *Occup Med (Lond)*, 2013;63:183–8.
4. EU Council Directive 2010/32/EU. Available at: <http://europeanbiosafetynetwork.eu/OJEU.pdf> (accessed 19 May 2014).
5. EU Commission for Employment, Social Affairs and Inclusion, New legislation to reduce injuries for 3.5 million healthcare workers in Europe, 8th March 2010. Available at: http://www.saferneedles.org.uk/news/pdf_articles/Directive_press_statement.pdf (accessed 19 May 2014).
6. European Federation of Nurses Associations, EFN Report on the Implementation of Directive 2010/32/EU on the prevention of sharps injuries in the healthcare sector: Descriptive and Explorative Cluster Analysis of Directive. Available at: <http://www.efnweb.be/wp-content/uploads/2013/12/EFN-Report-on-Sharps-Injuries-DIR32-Implementation> (accessed 19 May 2014).pdf
7. Adams D, Elliott TS. Impact of safety needle devices on occupationally acquired needlestick Injuries: a four-year prospective study. *J Hosp Infect* 2006;64:50–5.
8. Tarantola A, et al., CCLIN Paris-Nord Blood and Body Fluids (BBF) Exposure Surveillance Taskforce. Occupational blood and body fluids exposures in health care workers: four-year surveillance from the Northern France network. *Am J Infect Control*. 2003;31:357–63.
9. European Commission, Horizon 2020: The EU Framework Programme for Research and Innovation 2014–2020. Available at: <http://ec.europa.eu/programmes/horizon2020/> (accessed 19 May 2014).