



**Ontario Health Care Health and Safety Committee Under
Section 21 of the Occupational Health and Safety Act**

**Guidance Note for Workplace Parties #4
Safety-Engineered Medical Sharps (SEMS)**

September 2010



About This Guidance Note

This Guidance Note has been prepared to assist the workplace parties in understanding their obligations under the *Occupational Health and Safety Act* (OHSA) and the regulations. It is not intended to replace the OHSA or the regulations and reference should always be made to the official version of the legislation.

It is the responsibility of the workplace parties to ensure compliance with the legislation. This Guidance note does not constitute legal advice and has no legal effect. If you require assistance with respect to the interpretation of the legislation and its potential application in specific circumstances, please contact your legal counsel.

While this Guidance Note will also be available to Ministry of Labour inspectors, they will apply and enforce the OHSA and its regulations based on the facts as they may find them in the workplace. This Guidance Note does not affect their enforcement discretion in any way.



Health Care Section 21 Committee¹ Guidance Note # 4 Issue: Safety-Engineered Medical Sharps (SEMS)

Process

This document has been reviewed by the management and labour representatives of the Ontario Health Care Health and Safety Committee appointed under Section 21 of the *Occupational Health and Safety Act* (OHS) to ensure that appropriate, consistent information is made available to health care workplaces, to support them in assessing practice against legislative requirements and recommended leading practices.

Purpose of this Guidance Note

Health Care *Guidance Notes* are intended for all health care organizations, to provide advice to workplace parties related to legislative requirements and leading practices applicable to the prevention of illness and injury to health care workers. Health Care *Guidance Notes* are applicable to all organizations that provide health care, treatment, diagnostic services, personal care and/or supportive services in either health care organizations, community service agencies and emergency medical services.

The Guidance Note is intended to assist Boards of Directors, CEOs, administrators, supervisors, health care workers, joint health and safety committees (JHSCs), health and safety representatives (HSRs) and trade union representatives in all health care sectors to recognize their rights and duties in law and strive to eliminate injuries from medical sharps.

Effective action will reduce the spread of dangerous and potentially fatal diseases from pathogens carried in blood and bodily fluids, reduce associated health care costs and reduce the emotional burden of health care workers exposed to risk as a result of a sharps injury. Workplace parties must understand the risks of exposure to blood and bodily fluid-borne pathogens and the role that safety-engineered sharps can play in eliminating and/or reducing the risk of exposure.

The intent of *Guidance Notes* is to assist the workplace parties in achieving compliance and sharing leading practices. *Guidance Notes* are also intended to assist other parties who play decision-making roles that ultimately impact occupational health and safety (OHS) in the health care sector.

¹ The Ontario Health Care Health and Safety Committee under Section 21 of the *Occupational Health and Safety Act* (the "Health Care Section 21 Committee") was announced by the Minister of Labour on September 18, 2006. The July 11, 2006 Terms of Reference set out the mandate of the Health Care Section 21 Committee. The Objectives of the Health Care Section 21 Committee is to advise and make recommendations to the Minister of Labour on matters relating to occupational health and safety of all health care workers in Ontario. The scope of the Health Care Section 21 Committee is to review occupational health and safety issues related to health care workers that have provincial impact.

What are Safety-Engineered Medical Sharps (SEMS)?

Safety-engineered medical sharps (SEMS) are sharp pointed or bladed medical devices or instruments designed to include safety features to help protect workers from being cut, punctured or otherwise injured by the medical devices. A large variety of SEMS are available in the marketplace and health care organizations are encouraged to consult with vendors and/or safety web sites and/or joint health and safety committees (JHSC) or health and safety representatives (HSR) to determine which available products best meet their needs.

1. Introduction

Blood and bodily fluids are potentially hazardous to health care workers because they may carry infectious disease agents such as HIV, hepatitis B and/or hepatitis C viruses and other infectious agents. Exposures may come from a splash or spray of blood and bodily fluids onto open skin surfaces and mucous membranes as well as from punctures or cuts from medical sharps contaminated with blood and bodily fluids. Health care workers may be injured when they use, disassemble, handle or dispose of needles and other medical sharps. When disposed of improperly, needles and other medical sharps can become concealed in linen or garbage and injure other workers who encounter them unexpectedly, such as housekeeping or maintenance staff.

Sharps injuries can be reduced by 75% through planned and comprehensive implementation of a SEMS program.² However, in spite of well publicized research and leading practice literature about the merits of SEMS, sharps injuries have continued to present a significant risk for health care workers. Ontario's Ministry of Labour has implemented a proactive approach to reduce risk and the negative outcomes associated with needlestick injuries through a specific regulation mandating the use of safety-engineered needles in certain circumstances.

2. Relevant Legislative and Regulatory Provisions

Ontario Regulation 474/07 (Needle Safety)

Ontario Regulation 474/07 (Needle Safety), under the OHS Act, was introduced in 2007 and applied to hospitals as of April 1, 2008. It was amended in 2009 and 2010 to apply to additional categories of workplaces. Effective July 1, 2010, the Regulation applies in any workplace where a hollow-bore needle is used on a person for a therapeutic, preventative, palliative, diagnostic or cosmetic purpose, including hospitals, long-term care homes, psychiatric facilities, laboratories, specimen collection centres, doctors' and dentists' offices, community health centres, family health teams, independent health facilities and other workplaces where health-related services are provided, including home care services, ambulance services, public health programs, health support services to students in schools and health care/first aid services to workers in industrial and other workplaces (Ministry of Labour, News Release, November 26, 2009).

Section 1 of the Regulation defines "safety-engineered needle" (SEN) to mean, (a) a hollow-bore needle that is designed to eliminate or minimize the risk of a skin puncture injury to the worker and is licensed as a medical device by Health Canada, or (b) a needleless device that replaces a hollow-bore needle and is licensed as a medical device by Health Canada. Where the regulation requires a SEN to be used, an employer must provide a SEN that meets the regulatory definition.

² *Centres for Disease Control and Prevention*

To address patient care, availability and other issues, the Needle Safety Regulation provides for the following exceptions regarding the use of SENs.

Subsection 3(2) provides that the employer duty to provide a SEN does not apply *“if the employer is unable, despite making efforts that are reasonable in the circumstances, to obtain a safety-engineered needle that is appropriate for the work”*.

Subsection 4(2) provides that:

“the worker [who has been provided with a safety-engineered needle] may use a hollow-bore needle that is not a safety-engineered needle if he or she believes on reasonable grounds that in the particular circumstances, the use of a safety-engineered needle would pose a greater risk of harm than the use of the hollow-bore needle.”

Subsection 4(3) states that “risk of harm” refers to:

1. *A risk of harm to the worker or to another worker and/or*
2. *If the work involves the use of a needle on a person, a risk of harm to him or her.*

Subsection 4 (4) provides that “the employer shall develop, establish and provide training for workers to assist them in applying subsection (2).

Subsection 5(1) provides for an exception to the employer obligation to provide SENs where (1) a declaration of emergency is in effect or a situation exists that constitutes or may constitute a serious risk to public health; (2) the employer’s supplies of SENs have run out; and (3) the risk of harm from waiting for new supplies outweighs the risk from using hollow-bore needles that are not SENs.

Subsection 5(2) states that, in addition to the risks identified in subsection 4(3), the “risk of harm” referred to in subsection 5(1) also includes an immediate or potential risk to the public or to the public interest.

These exceptions are intended to apply to situation-specific circumstances and are not meant to enable general exemptions based on institutional practices or preferences. Blanket exceptions would be contrary to both the letter and intent of the Needle Safety Regulation and could constitute a significant threat to worker safety. For some examples of potential exceptions, please see Appendix C.

Occupational Health and Safety Act

Clause 25(2)(h) of the OHS Act requires every employer to “take every precaution reasonable in the circumstances for the protection of a worker.” This may include the use of SEMS which are not hollow-bore needles.

Clause 25(2)(e) requires an employer to “afford assistance and co-operation to a committee [joint health and safety committee] and a health and safety representative in the carrying out by the committee and the health and safety representative of any of their functions.”

One of the “functions” or powers of the joint health and safety committee or health and safety representative is to “identify situations that may be a source of danger or hazard to workers” [subsection 8(10), clause 9(18)(a)]. This can be accomplished through the required inspections of a workplace and investigations of worker injuries and by obtaining information from an employer

respecting “the identification of potential or existing hazards of materials, processes or equipment”[clause 9(18)(d)].

Another power of the joint health and safety committee or HSR is to “make recommendations to the constructor or employer and the workers for the improvement of the health and safety of workers” [subsection 8(10), clause 9(18)(b)].

When the joint health and safety committee or health and safety representative uses this power, the OHSA requires the employer to respond in writing within 21 days [subsection 8(12), subsection 9(20)] with a timetable to implement the recommendations the employer agrees with and give reasons why it disagrees with any it does not accept [subsection 8(13), subsection 9(21)].

Ontario Regulation 67/93 (Health Care and Residential Facilities)

For those workplaces to which the Health Care and Residential Facilities Regulation (O.Reg.67/93) under the OHSA applies, section 8 provides: “Every employer in consultation with the joint health and safety committee or health and safety representative, if any, and upon consideration of the recommendation thereof, shall develop, establish and put into effect measures and procedures for the health and safety of workers.”

Section 9 requires (in part), “The employer shall reduce the measures and procedures for the health and safety of workers established under section 8 to writing” and such measures and procedures may deal with, but are not limited to, the following:

- Safe work practices;
- Safe working conditions;
- Proper hygiene practices and the use of hygiene facilities;
- The control of infections;
- Immunization and inoculation against infectious diseases;
- The reporting of unsafe defective devices; and
- The handling, cleaning and disposal of soiled line, sharp objects and waste.

Subsection 9(2) states, “At least once a year the measures and procedures for the health and safety of workers shall be reviewed and revised in the light of current knowledge and practice.” Subsection 9(3) states, “The review and revision of the measures and procedures shall be done more frequently than annually if:

- (a) the employer, on the advice of the joint health and safety committee or health and safety representative, if any, determines that such review and revision is necessary;
- or
- (b) there is a change in circumstances that may affect the health and safety of a worker.”

Subsection 9(4) states, “The employer, in consultation with and in consideration of the recommendation of the joint health and safety committee or health and safety representative, if any, shall develop, establish and provide training and educational programs in health and safety measures and procedures for workers that are relevant to the workers’ work.”

3. Guidance for Workplace Parties

Effective July 1, 2010, the Needle Safety Regulation will require the use of safety-engineered needles, (i) in any workplace where a hollow-bore needle is used on a person for a therapeutic,

preventative, palliative, diagnostic or cosmetic purpose including all health care workplaces, and (ii) for any type of work requiring the use of a hollow-bore needle in the health care workplaces specified in the regulation.

Although the Needle Safety Regulation mandates that only hollow-bore needles and not all medical sharps be safety-engineered, the utilization of safety-engineered medical sharps in all instances where there is risk of exposure to blood or bodily fluids is a leading practice and is strongly encouraged, to ensure that workers in all sectors are protected from medical sharps injuries. A Sample Checklist is provided for organizations as a guide (see Appendix A).

Following are a number of leading practices, employers should implement in consultation with the joint health and safety committee or health and safety representative:

- Perform a risk assessment to identify the potential for worker exposure to blood and bodily fluids.
 - The risk assessment should include: all workers who could reasonably be anticipated to be at risk of exposure to blood or potentially biohazardous materials as a result of performing their duties; a review of the circumstances that led to past injuries; and the steps taken/planned to eliminate or minimize injury.
- Create and implement an exposure control plan to address identified risks of exposure to blood and bodily fluids;
 - The control plan should include at a minimum the hierarchy of controls, including: engineering controls, administrative controls, work practices, personal protective equipment (PPE) and education and training.
- Utilize safety-engineered medical sharps in instances where there is risk of exposure to blood or bodily fluids from medical sharps;
- Provide effective training on the use of the safety-engineered medical sharps;
- Provide education on how to reduce the risks of exposure to blood and bodily fluids, the implications/consequences of exposure and relevant infection prevention and control policies, procedures and protocols;
- Implement a sharps injury log; and
- Develop easily accessible and clearly established post-exposure protocols

Senior management should provide leadership in the creation of an exposure control plan and support frontline management and the joint health and safety committee or health and safety representative in program development, implementation, maintenance, monitoring and evaluation.

An annual review and revision, as necessary, of the measures and controls (exposure control plan) should be completed collaboratively by the infection prevention and control staff and the joint health and safety committee or health and safety representative.

When implementing a SEMS program, senior management should involve infection prevention and control staff, occupational health staff (if present in the workplace) and members of the joint health and safety committee (if any) or health and safety representative in identifying and testing products and providing advice prior to final selection of a SEMS. Senior management should also involve clinical staff who will be using the safety-engineered medical sharps in the pilot and the evaluation. Consider identifying a “champion” to guide successful implementation of the selected SEMS.

In evaluating a potential SEMS, consideration should be given to its impact on worker safety, ease of use, reliability of use and quality of care. The device(s) should be evaluated to ensure that:

- the safety feature works effectively and reliably;
- the device is acceptable to health care workers; and
- the device does not adversely affect patient care.

The product(s) selected should not require extensive training in order to be operated safely and correctly.

When implementing SEMS (needleless devices, retractable needles, syringes with protective shield) in a workplace, all other devices that are not safety-engineered should be removed from inventory at the same time.

In community care, health care workers may encounter clients using their own conventional (non safety-engineered) needles/medical sharps. For example, community care clients may utilize insulin pens that are not safety-engineered. It is important to note that the Needle Safety Regulation does not apply to clients and to clients' needles but only to the hollow-bore needles that are used by health care workers and supplied by the workers' employers. In these circumstances, community care employers must not allow workers to administer medication using clients' needles that are not safety-engineered. Employers should develop comprehensive policies and procedures to guide workers in the safe handling and disposal of needles/medical sharps.

Following implementation of a SEMS program, the workplace should develop a process to ensure regular monitoring of the devices' efficacy and the availability of better devices.

Reporting Injuries from Needles and Medical Sharps

Every workplace should have a written protocol to deal with needlestick and/or medical sharps injuries if they do occur.

All needlestick and medical sharps injuries that result in an occupational illness or a claim to the WSIB related to an occupational illness must be reported in writing to the Ministry of Labour, joint health and safety committee or health and safety representative and the trade union within four (4) days [OHSA subsection 52(2)] of the employer being advised of the occupational illness or WSIB claim. The written notice must contain the information prescribed by a regulation applicable to the workplace e.g. Health Care and Residential Facilities Regulation, Regulation for Industrial Establishments.

If a worker is unable to perform his/her usual work or requires medical attention due to a needlestick or medical sharps injury, the employer is required to report the occurrence in writing to the joint health and safety committee or health and safety representative and the trade union within four (4) days and report in writing to the Ministry of Labour, if an inspector requires notification [OHSA subsection 52(1)]. The written notice must contain the information prescribed by a regulation applicable to the workplace e.g. Health Care and Residential Facilities Regulation, Regulation for Industrial Establishments, etc.

It is leading practice to report all needlestick and medical sharps injuries to the employer and the joint health and safety committee or health and safety representative (if any) in order to identify trends, analyze incidents and injuries, monitor post-exposure follow up as required, and determine the effectiveness of control measures and corrective actions, to prevent recurrence.

Training

In accordance with an employer's duty under OHSA clause 25(2)(a), training must be provided for all workers who use SEMS and/or have the potential to come into contact with the devices and/or have occupational exposure to blood-borne pathogens. Senior management should ensure that adequate time is made available for staff to fully participate in this training. Training should include but not be limited to:

- ✓ Use, handling and disposal of safety-engineered medical sharps, specific to the type(s) of device(s) being used in the workplace;
- ✓ Safe handling of waste and laundry;
- ✓ Steps to take in the event of a needlestick injury/exposure;
- ✓ Hand hygiene;
- ✓ Proper use of PPE; and
- ✓ Exceptions to the Needle Safety Regulation

In community care, training should also be provided for patients, residents, clients and/or their families regarding the devices that they are or will be using at home, the associated risks, and safe disposal of needles and medical sharps (see Appendix C for more details on training).

Resources

Appendix A: A sharps safety and needlestick injury prevention checklist.

Appendix B: Examples of Exceptions to Regulation 474/07

Appendix C: Training

Appendix D: Legislation, Codes, Standards and Guidelines



Appendix A

A Sharps Safety and Needlestick Injury Prevention – Recommended Checklist

Effective July 1, 2010, the Needle Safety Regulation applies to any workplace where a hollow-bore needle is used for a therapeutic, preventative, palliative, diagnostic or cosmetic purpose, including hospitals, long-term care homes, psychiatric facilities, laboratories, specimen collection centres, doctors' and dentists' offices, community health centres, family health teams, independent health facilities and other workplaces where health-related services are provided, including home care services, ambulance services, public health programs, health support services to students in schools and health care/first aid services to workers in industrial and other workplaces

Clause 25(2)(h) of the OHS Act requires employers to take every precaution reasonable in the circumstances to protect workers' health and safety. This may include the use of SEMS where they would constitute a reasonable precaution to protect workers, whether the Needle Safety Regulation applies to the device or not. This checklist reflects leading practices for situations involving medical sharps and devices, and their associated risks of injuries that are commonly encountered by workers in health care workplaces. Some leading practices/situations may be covered by the Needle Safety Regulation, while others may fall under the general duty clause in the OHS Act (clause 25(2)(h)), which may require employers to protect workers from risks of exposure to pathogens borne by blood and bodily fluids.

Workplace parties are encouraged to use the checklist and/or modify it as necessary to reflect their workplace circumstances, in order to assess the extent to which the employer has adopted safety-engineered medical sharps and implemented an exposure control plan, sharps injury log and appropriate training for all affected workers. If there is no exposure control plan or the answer to any of the items in the checklist is "no", workplace parties should take steps to fully implement a Sharps Safety and Needlestick Injury Prevention program. This could include notifying the employer of the results of the checklist and, as appropriate, having the JHSC or HSR forward related written recommendations to the employer in accordance with subsection 8(10) and clause 9(18)(b) of the OHS Act. If occupational health and safety concerns remain after these steps have been completed, the Ministry of Labour should be contacted.

SITUATIONS and DEVICES COVERED BY THE NEEDLE SAFETY REGULATION

Blood Collection:

- Has your workplace replaced hollow-bore blood collection needles with needles that have integrated safety features designed to prevent needlestick injuries?

Examples of such safety-engineered needles include:

- *shielded or self-blunting needles for vacuum tube phlebotomy;*
- *shielded, retracting or self-blunting butterfly-type needles, syringes with a cylindrical sheath that shields needles when drawing blood into tubes;*
- *blood gas syringes with a hinged needle shield that can be put in place over the needle using a hands-free technique.*

- Have devices such as needles used for drawing blood from intravenous, arterial, and central lines been eliminated? These devices can be replaced by needleless or blunt cannula devices.
- Does your workplace specify that syringes should not be used for venous blood collection, because of increased risk of needlestick injuries?
- Has the practice of injecting blood through a stopper into a vacuum tube using an exposed needle been discontinued? Does your workplace use a method which draws blood directly into vacuum tubes or other specimen containers? If not, use a safety syringe with a cylindrical needle shield locked in place over the needle, which allows a vacuum tube to be inserted into the shield during blood injection. This method will reduce the risk of needlestick injuries and blood splatter from dislodged tube stoppers.

Vascular Access:

- Has your workplace implemented safety-engineered vascular access catheters that provide a protective shield for the stylet or blunt the stylet before or during its withdrawal from the patient?

IV Infusion:

- Has your workplace converted to needleless or recessed needle IV infusion systems?

A Food and Drug Administration (FDA) Safety Alert warned in 1992 of the dangers associated with "piggyback" or "intermittent I.V." line connections. Since then, many health care workplaces have switched to needleless or recessed needle IV infusion systems. But beware: in some health care workplaces, both systems – needleless/recessed needle and needle-based – are sometimes provided side by side. All health care workplaces should eliminate needles used to access I.V. ports.

Injection:

- For syringes used for subcutaneous or intramuscular (IM) injections, has your workplace converted to devices that have integrated safety features such as sliding sleeves, retracting needles, or hinged caps, or to a needleless injection system?
- Has your workplace eliminated the inappropriate use of conventional or safety syringes for accessing ports of needleless or recessed needle I.V. systems?
- Does your workplace use safety-engineered pre-filled syringes, where available, for vaccinations and other applications where pre-filled syringes are employed?
- Does your workplace use shielded, retracting, or self-sheathing needles for insulin delivery.

Dialysis:

- Has your workplace replaced all fistula needles, syringes, and blood collection equipment with safety engineered devices?

SITUATIONS AND DEVICES WHICH ARE NOT COVERED BY THE NEEDLE SAFETY REGULATION, BUT IN MOST CIRCUMSTANCES ARE COVERED BY OHSA S. 25 (2) (h)

Blood Collection:

- Does your workplace use automatically retracting finger/heelstick lancets in place of manual lancets or non-retracting spring-loaded lancets?
- Has your workplace switched from glass to plastic micro-bore capillary tubes for measuring hematocrit (or to mylar-wrapped glass capillary tubes, or alternative methods of measuring hematocrit that do not require capillary tubes)? See Joint Safety Advisory issued by FDA, OSHA and CDC, in February 1999.
- Has your workplace replaced glass blood collection vacuum tubes with plastic tubes?
- Have blood-drawing personnel been advised not to manually recap or remove needles from blood-drawing devices?
- Have blood-drawing personnel been advised not to reuse blood tube holders, which require manipulation of a blood-filled needle?

Surgery:

- Are blunt-tip suture needles, stapling devices, adhesive strips or tissue adhesives used whenever clinically feasible in order to reduce the use of sharp-tip suture needles?
- Are scalpel blades with safety features - such as round-tipped scalpel blades and retracting-blade and shielded-blade scalpels - used?
- Are alternative cutting methods - such as blunt electrocautery devices and laser devices - used when appropriate?
- Is manual tissue retraction avoided by using mechanical retraction devices?
- Has all equipment that is unnecessarily sharp been eliminated?

Example: towel clips have been identified as a cause of injury in operating rooms, yet blunt towel clips are available that do not cause injury and are adequate for securing surgical towels and drapes. Other examples of devices that do not always need to have sharp points include surgical scissors, surgical wire, and pick-ups.

Additional Specialized Situations:

Has your workplace implemented safety alternatives for specialized areas such as:

- Dialysis: retracting lancets, capillary tubes
- Blood banks: retracting lancets, capillary tubes

- Labs: slide preparation, glass Pasteur pipettes

For information on evaluating safety-engineered sharps devices, please refer to: www.tdict.org.

Exposure Control Plan:

NOTE: The Needle Safety regulation does not require an exposure control plan. However, as a leading practice, an effective sharps safety program should include an exposure control plan

- Does your workplace have a written exposure control plan?
- Does the exposure control plan include a list of all jobs and tasks with potential for exposure to blood and bodily fluids?
- Is it accessible to workers?
- Is it reviewed and updated at least annually to document that safer medical devices designed to eliminate or minimize occupational exposure have been evaluated and implemented?
- Is it reviewed and updated at least annually to document that the employer has solicited input from non-managerial employees responsible for direct patient care in the identification, evaluation and selection of safety devices?
- Is it updated annually to reflect changes in technology that eliminate or minimize exposure to blood and bodily fluids?

Sharps Injury Log

NOTE: The Needle Safety regulation does not require a sharps injury log. However, as a leading practice, an effective sharps safety program should include a sharps injury log.

- Does your workplace maintain a sharps injury log? Does it include information on:
 - Type and brand of device involved in exposure incident;
 - Department or work area where exposure occurred;
 - An explanation of how exposure occurred?

Other important information to track: job classification of exposed workers, procedure involved, and whether the device causing the injury was a safety or conventional design.

(A surveillance system such as EPINet™ fulfills this requirement; for information on EPINet and for free forms and software, go to <http://www.med.virginia.edu/epinet> and click on About "EPINet".)

- Does your workplace ensure injured employees' confidentiality when recording and maintaining information in the sharps injury log?

Training Program:

Part of an employer's obligation under the OHS Act is to provide information, instruction and supervision to a worker to protect the health and safety of the worker [clause 25(2)(a)] and to acquaint a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent [clause 25(2)(d)]. These obligations would include providing training and instruction to workers on the hazards and safe work practices related to the use of needles and other medical sharps.

The Needle Safety Regulation [subsection 4(4)] requires additional worker training in specific circumstances. Workplaces subject to the Health Care and Residential Facilities Regulation (O. Reg. 67/93) must also comply with the training requirements under subsection 9(4).

An effective sharps safety program should include a comprehensive training plan for all affected workers.

- Has a training plan been developed to educate workers about the use of the new devices as well as other program components?
- Was the training program developed in consultation with the JHSC?
- Has senior management provided adequate time to staff to fully participate in the training?

A comprehensive staff education program should include:

- Legislation
- Goals/objectives of the program
- Explanation of diseases borne by blood and body fluids, their modes of transmission, consequences of infection and treatment options
- Overview of injury demographics/statistics
- Labelling and identification of bio-hazardous material
- Policy regarding medical sharps and associated procedures
- Research/evidence for safety-engineered medical sharps
- Device-specific training
- Post-exposure procedures including follow-up procedures
- Hepatitis B vaccination: its purpose, benefits, safety and availability
- Records of training
- An evaluation tool



Appendix B

Examples of Exceptions under the Needle Safety Regulation

To address patient care, availability and other issues, the Regulation provides several exceptions to the requirement to use SENs. A SEN is not required if:

- A worker determines that the use of a SEN would pose a greater risk of harm to himself or herself, another worker or the patient than would a conventional hollow-bore needle.
- An employer is unable, despite making a reasonable effort, to obtain a SEN that is appropriate for the work.
- An emergency is declared or a situation exists that constitutes or may constitute a serious risk to public health, an employer's supplies of SENs have been exhausted, and postponing work would create a greater risk of harm than the risk of using a hollow-bore needle that is not a SEN.

For situation-specific circumstances, a clinical needs assessment should be conducted to determine if a SEN appropriate for the specific situation/procedure is available and can be used. This may be done in partnership with clinical staff, a vendor and JHSC or HSR to understand device options.

- **Situation:** The pharmacy department in a hospital supplies medications in pre-loaded syringes with a hollow-bore needle attached.

Solution: Pharmacy departments in a hospital should only supply safety-engineered needles. A conventional syringe barrel may be used if no needle is attached and the medication delivery is being done via a needleless access system. A conventional syringe barrel may be used if no needle is attached when the syringe leaves pharmacy and a safety-engineered needle is used at the time of medication delivery.

- **Situation:** A procedure requires the use of a hollow-bore needle of a specific length and gauge and no safety-engineered equivalent has been licensed as a medical device by Health Canada i.e. there is no available safety-engineered needle within the meaning of the Regulation.

Solution: Assuming at this time there is no other safety-engineered needle that can be appropriately used for the work, the employer would likely be considered unable to obtain a safety-engineered needle appropriate for the work for the purposes of the exception set out in subsection 3(2) of the Regulation.

- **Situation:** The SEN is not compatible with other equipment currently used.

Solution: In most cases, a solution can be found, either by changing existing equipment or by sourcing a new SEN. If the incompatibility cannot be corrected, the exemption and the reasons for it should be discussed with the JHSC, HSR and trade union. It should be noted that the exemption is temporary until an appropriate SEN becomes available or the problematic equipment is replaced by compatible equipment.

Documenting Exemptions and Recommended Leading Practices

- Situations in which conventional hollow-bore needles are used instead of safety-engineered needles should be documented to justify departing from the regulatory requirements.
- Employers should document any exceptions to the regulatory requirements.

- Use of a required device, needle, or medical sharp may require modification of a medical procedure associated with the device, needle or medical sharp. This circumstance alone does not necessarily mean that the use of the required [safety-engineered] device, needle, or sharp will compromise patient care or safety or worker safety. Therefore, it may be clinically appropriate to use the required device, needle, or sharp even though the use requires modification of a medical procedure

- Appropriate staff should be consulted to evaluate the safety-engineered medical device, needle or medical sharp in question with respect to its impact on the associated medical procedure, quality of patient care, worker safety, ease of use and reliability of use. Such an evaluation should help determine whether the affected medical procedure should be changed to accommodate the use of the safety-engineered medical device, needle or medical sharp in question.

- Persons who evaluate and determine the use of safety-engineered devices, needles, or medical sharps should:
 - Be knowledgeable about the work, the hazards involved to workers and the means to control the hazards, through education, training and experience
 - Have medical/clinical expertise in the procedure involving the device, needle or medical sharp in question and its potential impact on the procedure and quality of patient care
 - Have knowledge of the safety-engineered devices that are commercially available for the procedure in question



APPENDIX C Recommended Training Practices

- The employer should inform workers about the contents of the exposure control plan and to provide them with adequate education and training to work safely and in proximity to potentially biohazardous material.
- For workplaces covered by the *Health Care and Residential Facilities Regulation*, training must be developed and established in consultation with the joint health and safety committee or the health and safety representative. For other workplaces this is a leading practice.
- Training should be provided to any worker – part-time, full-time, temporary, casual – who has or may have exposure to biohazardous material.
- Education and training should be provided before a worker begins work with a potentially biohazardous material.
- The employer should review the exposure control plan at least annually and update it as necessary. Based on the review findings, the employer may need to provide refresher training annually or whenever the exposure control plan is updated.
- The training should include:
 - applicable requirements of relevant health and safety regulations:
 - definition of biohazardous materials,
 - occupational exposure to biohazardous materials, how it occurs, such as modes of transmission
 - effects of exposure
 - what to do in the event of exposure
 - use and limitations of control measures to prevent or minimize exposure
 - engineering controls
 - work practices, or administrative controls
 - personal protective equipment
- The training should also include the opportunity for an interactive question and answer period.
- In consultation with the JHSC the employer should assign a person to evaluate the effectiveness of the training, through observation and interviews to determine if workers work safely. Informed workers can be identified by their ability to answer the following questions:
 - Do you work with biohazards? If so, what are they?
 - What precautions are required to prevent exposure?
 - What do you do in the case of emergency?
 - Where do you go for further information?

- Accurate and sufficiently detailed records of education and training should be maintained by the employer and should include:
 - dates of training
 - content or a summary of the training sessions
 - type of training and education
 - names and qualifications of those conducting the training
 - names, job titles and work locations of workers attending the sessions



Appendix D

Legislation, Codes, Standards and Guidelines

Workplace parties when following this guidance note should consider existing legislation, codes, standards and good practices such as the following:

The workplace parties when following this guidance note should consider existing legislation, codes, standards and leading practices such as the following:

Occupational Health and Safety Act – <http://www.e-laws.gov.on.ca/>

Health Care and Residential Facilities Regulation – <http://www.e-laws.gov.on.ca/>

Regulation for Industrial Establishments – <http://www.e-laws.gov.on.ca/>

Needle Safety Regulation – <http://www.e-laws.gov.on.ca/>

Workplace Safety and Insurance Act – <http://www.wsib.on.ca>

Health Protection and Promotion Act – www.e-laws.gov.on.ca/

Public Services Health and Safety Association (OSACH) – Implementation of SEMS – <http://www.osach.ca/>

CSA Canadian Standards Association (CSA) – Medical Sharps Containers – <http://www.csa.ca/>

Ministry of Labour Publications

A Guide for the Occupational Health and Safety Act

A Guide for Joint Health and Safety Committees (JHSCs) and Representatives in the Workplace

These and other guides and fact sheets and advisories can be found online at:

<http://www.labour.gov.on.ca/english/hs/hs/pubs.html>

Other Information

Web sites of the various healthcare unions, employers, associations and Health and Safety Associations also have additional information, including documents that outline a step-by-step process to help joint health and safety committees and health and safety representatives ensure workplace compliance, and sample written recommendations that can be tailored to the needs of individual workplaces.

1. Public Services Health & Safety Association www.healthandsafetyontario.ca.