



# Checklist for Sharps Injury Prevention\*

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\* All devices designed to prevent blood exposures should be closely monitored for user and patient safety. For more sharps injury prevention information, visit the Center's website at: [www.healthsystem.virginia.edu/internet/epinet](http://www.healthsystem.virginia.edu/internet/epinet).

This checklist is intended to help your facility comply with the sharps safety requirements of OSHA's Bloodborne Pathogens Standard (29 CFR Part 1910.1030), as revised in 2001. It does not cover all aspects of the standard. Consult the standard directly for requirements on: work practice controls; personal protective equipment; disposal containers; housekeeping and laundry; research laboratories and production facilities; hepatitis B vaccination; post-exposure protocol; communication of hazards to employees; employee training on the standard; and recordkeeping.

The revised Bloodborne Pathogens Standard, issued on January 18, 2001, and effective April 18, 2001, expanded the definition of "engineering controls" to specifically include "sharps with engineered sharps injury protections and needleless systems." It also added several new requirements. Health care employers must:

- document annually in their exposure control plan that they have evaluated and implemented "safer medical devices designed to eliminate or minimize occupational exposure" to HIV, hepatitis C and other bloodborne diseases, AND review and update their exposure control plans at least annually to reflect changes in sharps safety technology;
- solicit input from non-managerial (frontline) health care workers in identifying, evaluating and selecting safety-engineered sharp devices, and document this in the exposure control plan;
- maintain a sharps injury log with detailed information on percutaneous injuries to employees.

**In implementing these new requirements, keep in mind two key principles in needlestick prevention:**

(1) **Eliminate unnecessary needles and sharps wherever possible.** Needles used to connect IV lines or access IV ports are one type of unnecessary needle. Also look at the OR, where blunt-tip suture needles may be substituted for sharp ones in many cases, and at clinical labs, where needles and syringes are sometimes used as lab tools.

(2) **Give priority to implementing safety blood-drawing and vascular access devices,** since injuries from these devices have the highest risk of pathogen transmission.

## Sharps Safety Devices

### **Blood-drawing:**

- Has your hospital or facility implemented blood-drawing devices with integrated safety features designed to prevent percutaneous injuries?

*Examples of such devices include:*

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

- Have all unnecessary needles been eliminated from use, including needles used for drawing blood from intravenous, arterial, and central lines, which can be replaced by needleless or blunt cannula devices (see below)?
- Does your facility use automatically retracting finger/heelstick lancets in place of manual lancets or non-retracting spring-loaded lancets?
- Has your facility 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 facility 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 requires manipulation of a blood-filled needle?
- Has the practice of injecting blood through a stopper into a vacuum tube using an exposed needle been discontinued?

*Methods of drawing blood directly into vacuum tubes or other specimen containers should be preferentially employed. If a syringe must be used, a safety needle that can be separated from the syringe barrel should be utilized. Once the blood is drawn, the safety feature is activated and the protected needle removed from the syringe; a blood transfer device is then attached to the syringe and a blood tube inserted into the transfer device.*

### **Vascular Access:**

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

(continued)



# Checklist for Sharps Injury Prevention\* (cont.)

## IV Infusion:

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

*An FDA Safety Alert warned in 1992 of the dangers associated with “piggyback” or “intermittent I.V.” line connections. Since then, most U.S. hospitals have switched to needleless or recessed needle systems. But in some hospitals both systems—needleless/ recessed needle and needle-based—may be used side by side, creating the potential for device incompatibility. Hospitals should eliminate needles used to access IV ports.*

## Injection:

- For syringes used for subcutaneous or intramuscular (IM) injections, has your facility converted to devices that have integrated safety features such as sliding sleeves, retracting needles, or hinged caps, or to a needleless injection system?
- Does your facility specify that syringes should not be used for venous blood drawing, because of increased needlestick risk?
- Has your facility eliminated the inappropriate use of conventional or safety syringes for accessing ports of needleless or recessed needle I.V. systems?
- Does your facility use safety-designed prefilled syringes, where available, for vaccinations and other applications where prefilled syringes are employed?

## 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 used, such as round-tipped scalpel blades and retracting-blade and shielded-blade scalpels?
- Are alternative cutting methods used when appropriate, such as blunt electrocautery devices and laser devices?
- 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 the operating room, 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 Sharps Categories:

- Has your facility implemented safety alternatives for specialized areas such as:
  - dialysis (e.g., safety fistula needles, syringes, blood-drawing equipment, needleless or recessed needle tubing access, retracting lancets, plastic alternatives to glass capillary tubes)
  - blood banks (e.g., safety IV access devices, segment sampling devices, retracting lancets, plastic alternatives to glass capillary tubes)
  - laboratories (refer to blood-drawing section; also, safety slide preparation devices, closed-system sample transfer)
  - nuclear medicine (e.g., syringe shields)

## Exposure Control Plan

- Does your facility have a written exposure control plan?
- Does the exposure control plan include a list of all jobs and tasks with potential for bloodborne pathogen exposure?
- 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 bloodborne pathogens?

## Sharps Injury Log

- Does your facility 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 [www.med.virginia.edu/epinet](http://www.med.virginia.edu/epinet) and click on “About EPINet.”)*
- Does your facility ensure injured employees’ confidentiality when recording and maintaining information in the sharps injury log?

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