Introduction

Sharps are objects that can penetrate an individual’s skin, like hypodermic needles, glass Pasteur pipettes, scalpel blades, pipette tips, broken vials and glassware, slides and coverslips. Any sharp that could be contaminated with human blood or other potentially infectious materials, as defined in the OSHA bloodborne pathogens standard (29 CFR 1910.1030), is considered a contaminated sharp. Appropriate personal protective equipment must be worn when working with contaminated sharps.

An accident or injury involving a contaminated sharp may result in an individual being infected with human immunodeficiency virus, hepatitis B virus, hepatitis C virus or other bloodborne pathogens. Careful handling of contaminated sharps can prevent injury and reduce the risk of infection. The ASU Bloodborne Pathogens Exposure Control Program specifies measures to mitigate these injuries and the risk of infection.

Safer medical devices

Wherever possible, departments must use safer medical devices, like self-sheathing or retractable needles. These devices have built-in protection to guard workers against contact with the contaminated sharp. All individuals who may be potentially exposed to injuries from sharps are encouraged to provide input to their management and Environmental Health and Safety regarding the identification, evaluation and selection of safer medical devices.

Sharps containers

Used sharps must be discarded immediately or as soon as feasible into sharps containers. These containers must be puncture-resistant and the sides and bottom must be leakproof. Sharps containers must be appropriately labeled or color-coded red to warn everyone that the contents are hazardous. They must also have a closeable lid flap door or other means of closing the container. Containers must be kept upright to keep the sharps and liquids from spilling out.

During use, containers for used sharps must be easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found. Sharps containers must also be maintained upright throughout use, replaced routinely and cannot be overfilled. When moving sharps containers from the area of use, the containers must be:

1. Closed immediately before removal to prevent spillage or protrusion of contents during handling, storage, transport or shipping.
2. Placed in a secondary container if leakage is possible. The second container must be:
   a. Appropriately labeled or color-coded.
   b. Closable.
   c. Constructed to contain all contents and prevent leakage during handling, storage, transport or shipping.
   d. Disposed of as regulated waste.

Reusable sharps containers must not be opened, emptied or cleaned manually or in any other manner that would expose individuals to the risk of accident or injury. When full, sharps containers may be autoclaved provided that no hazardous chemicals are present in the container. Please email EHS or call 480-965-1823 to determine the appropriate disposal method for sharps containers.
Recapping needles

Contaminated needles must never be sheared or broken. Recapping, bending or removing needles is prohibited. In rare circumstances, recapping is permissible if it can be demonstrated by the department that no alternative is feasible or that a specific procedure requires such action. Procedures that describe the recapping process must be written and included in the laboratory-specific safety plan. If recapping is necessary, individuals must use either a mechanical device or a one-handed technique. The cap must not be held in one hand while guiding or placing it over the sharp. A one-handed “scoop” technique uses the needle to pick up the cap, and then the cap is pushed against a hard surface to ensure a tight fit onto the device. The cap may also be held with tongs or forceps and placed over the needle. Immediately after use, these sharps must be put into appropriate containers until they can be appropriately reprocessed or disposed of.

Reporting an accident or injury

In the event of a needlestick, sharps injury or exposure to human blood or other body fluid, immediately follow these steps:

1. Wash cuts or other needlestick injuries with soap and water.
2. Flush with water if exposure to the nose, mouth or mucous membranes occurs.
3. Rinse with clean water, saline or sterile irrigants if there is exposure to the eyes.
4. Seek medical treatment immediately.

It is highly recommended that post-exposure treatment be started as soon as possible following an exposure incident. If exposure occurs, the individual should immediately visit ASU Employee Health, if an employee or ASU Health Services, if a student. If ASU Employee Health or ASU Health Services is closed, emergency care may be obtained at the nearest emergency room and reported to EHS the next business day. In addition, the Arizona Department of Administration and Industrial Commission of Arizona requires reporting of the incident and completion of the Supervisor Incident Report for worker’s compensation claims to be processed. This is accomplished by completing the following forms:

- EHS Incident Report.
- Supervisor Incident Report.

Supervisors must report all accidents and injuries to EHS. Federal, state and local agencies may also need to be notified depending on the nature of the accident or injury. If the project involves recombinant or synthetic nucleic acids, the Institutional Biosafety Committee will be required to report any significant problems with or violations of the National Institutes of Health Guidelines for Research with Recombinant or Synthetic Nucleic Acid Molecules and any significant research-related accidents or illnesses to the NIH within 30 days.

Additional information

It is intended that the principal investigator and supervisory personnel will supplement this information with instruction and guidance regarding specific practices and procedures unique to the work being done in their facilities.

Questions? Contact ASU Environmental Health and Safety at 480-965-1823 or email asuehs@asu.edu.

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