

#### <u>WEST VIRGINIA UNIVERSITY (WVU) SHARPS POLICY FOR</u> <u>NON-HOSPITAL PERSONNEL</u>

## 1. PURPOSE

The WVU Sharps Policy focuses on procedures for proper handling of sharps and proper management of sharps in the waste stream.

The Needlestick Safety and Prevention Act (the Act) (Pub. L. 106-430) was signed into law on November 6, 2000. Because occupational exposure to bloodborne pathogens from accidental sharps injuries in healthcare and other occupational settings continues to be a serious problem, Congress felt that a modification to OSHA's Bloodborne Pathogens Standard was appropriate (29 CFR 1910.1030) to set forth in greater detail (and make more specific) OSHA's requirement for employers to identify, evaluate, and implement safer medical devices. The Act also mandated additional requirements for maintaining a sharps injury log and for the involvement of non-managerial healthcare workers in evaluating and choosing devices.

# 2. <u>DEFINITIONS</u>

*Sharps:* Sharps may be described as any material that may be rigid enough, that when cracked or broken, is able to pierce the skin.

- Any object which could readily puncture or cut the skin of an individual when encountered. A Sharp May Be Any Type of Material. Examples would be:
- used and discarded, Glass or plastic pipettes and pipette tips, needles, syringes, knives, pasteur pipettes, scalpels, capillary tubes, razor blades, suture needles., metal shavings, broken beaker, metal from a cage or a broken test tube etc.
- Any broken glass, plastic, metal, pottery with sharp edges, etc.
- Anything that could puncture through a garbage bag risking the bag to rupture and spill, or risking unexpected injury and exposure to custodial or cleanup personnel.

*Laboratory Supervisor:* Person who oversees the Laboratory Management.



**Engineering Control:** means sharps prevention technology including, but not limited to, systems not using needles and needles with engineered sharps injury protection.

<u>Needleless System:</u> means a device that does not utilize needles for the withdrawal of body fluids after initial venous or arterial access is established, and administration of medication or fluids, or any other procedure involving the potential for an exposure incident.

<u>Needlestick Injury</u>: means the parenteral introduction into the body of a health care worker, during the performance of his or her duties, of blood or other potentially infectious material by a hollow-bore needle or sharp instrument, including, but not limited to, needles, lancets, scalpels, and contaminated broken glass.

## 3. <u>ROLES & RESPONSIBILITIES</u>

<u>**Principal Investigator:**</u> Individual responsible for ensuring that staff are trained annually regarding safe sharps handling and that all researchers working in the laboratories are informed on biosafety procedures.

**Biosafety Officer:** Staff member responsible for advising researchers on biosafety engineering controls, procedures for use and proper disposal.

*Laboratory Supervisor:* should adopt improved engineering and work practice controls that reduce risk of sharps injuries.

## 4. STANDARD OPERATING PROCEDURES FOR SHARPS USE

- Sharps must not be handled directly, use gripping tools such as forceps or a broom and dust pan to collect sharp objects such as broken glass or needles.
- Careful management of needles and other sharps are of primary importance. Used needles must not be bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal. If recapping, bending, or removal is necessary, employers must ensure that workers use either a mechanical device or a one-handed technique.



- Used disposable needles and syringes must be carefully placed in conveniently located puncture-resistant containers used for sharps disposal located as close to the point of use as possible.
- Non-disposable sharps must be placed in a hard walled container for transport to a processing area for decontamination, preferably by autoclaving.
- Broken glassware must not be handled directly. Instead, it must be removed using a brush and dustpan, tongs, or forceps. Plastic ware should be substituted for glassware whenever possible.
- Whenever practical, laboratory supervisors should adopt improved engineering and work practice controls that reduce risk of sharps injuries.
- Plastic-ware should be substituted for glassware whenever possible.

### <u>Don't</u>

- place loose needles and other sharps on the counters in the labs.
- Throw needles and other sharps into the trash.
- Flush needles and other sharps down the toilet.
- Put needles and other sharps in your recycling bin they are not recyclable.
- Try to remove, bend, break, or recap needles used by another person. This can lead to accidental needle sticks, which may cause serious infections.
- Attempt to remove the needle without a needle clipper device because the needles could fall, fly off, or get lost and injure someone.

#### **Handling Contaminated Sharps**

- Careful handling of contaminated sharps can prevent injury and reduce the risk of infection.
- Contaminated broken glass must not be picked up by hand, but must be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.



### **Safer Medical Devices**

The Centers for Disease Control and Prevention (CDC) estimates that 62-88% of all sharps injuries can be prevented by the use of safer medical devices.

### **Does OSHA Require the Use of Specific Devices?**

No. OSHA does not require employers to institute specific devices, but it does require that employers evaluate the effectiveness of existing controls and review the feasibility of instituting more advanced engineering controls. Further, OSHA's Bloodborne Pathogens Standard<sup>(9)</sup> requires that employers establish a written exposure control plan as well as engineering and work practice controls to eliminate or minimize employee exposure. Additionally, employers are required to provide post-exposure follow-up if an employee sustains a needle puncture and to record the injury on the OSHA 200 log in some cases.

- Employers are required to consider and use safer medical devices, wherever possible. These devices include those that are needleless or have built-in protection to guard workers against contact with the contaminated sharp.
- The employer must document consideration and implementation of these devices, and the solicitation of worker input, in the Exposure Control Plan.



Figure 1. Needleless IV Connector





## **Sharps Containers**



- Sharps disposal containers must be readily accessible and located as close as feasible to the area where sharps will be used.
- Containers for contaminated sharps must be puncture-resistant. The sides and the bottom must be leakproof.
- They must be appropriately labeled or color-coded red to warn everyone that the contents are hazardous. Containers for disposable sharps must be closable (that is, have a lid, flap, door, or other means of closing the container), and they must be kept upright to keep the sharps and any liquids from spilling out of the container.
- The containers must be replaced routinely and not be overfilled, which can increase the risk of needlesticks or cuts. Sharps disposal containers that are reusable must not be opened, emptied, or cleaned manually or in any other manner that would expose workers to the risk of sharps injury.



- Employers also must ensure that reusable sharps that are contaminated are not stored or processed in a manner that requires workers to reach by hand into the containers where these sharps have been placed.
- All sharps disposal containers should be:
- [29 CFR 1910.1030(d)(4)(iii)(A)(1)]:
  - 1. Closable, puncture-resistant, and leak-proof on sides and bottom.
  - 2. Accessible, maintained upright, and not allowed to overfill.
  - 3. Labeled or color coded according to 29 CFR 1910.1030(g)(1)(i)
  - 4. Colored red or labeled with the <u>biohazard symbol</u> [4 KB GIF<sup>\*</sup>]
  - Labeled in fluorescent orange or orange-red, with lettering and symbols in a contrasting color [29 CFR 1910.1030(g)(1)(i)(C)]. Red bags or containers may be substituted for labels [29 CFR 1910.1030(g)(1)(i)(E)].

#### **Handling Sharps Containers**

Before sharps disposal containers are removed or replaced, they must be closed to prevent spilling the contents. If there is a chance of leakage from the disposal container, the employer must ensure that it is placed in a secondary container that is closable, appropriately labeled or color-coded red, and constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping.

#### How to obtain sharps containers for medical care?

#### How to obtain sharps containers for laboratories?

What to do when hypodermic needles are found:

What to do if you are injured with a hypodermic needle:

- Immediately seek medical care
- Inform your Supervisor & the WVU BSO
- File an Injury report with the WVU EHS.



### Sharps Disposal

- All sharps must be disposed of in puncture-proof/leak-proof containers, which indicate that they are "sharps" biohazard waste and the container must be labeled with the international biohazard symbol:
  - These are red/orange shatterproof containers that resist breaking under normal conditions of use and handling, meet ASTM standard F2132-01, and that are marked prominently with the universal biohazard warning symbol and the word "Biohazard" in a contrasting color.
- Once the sharps containers are filled upto 2/3<sup>rd</sup> full (to the line marked on the container), they must be sealed and then disposed of by Environmental Health and Safety (EH&S) and not placed in the regular trash. Contact EHS at: / ...or handed over to Stericycle (?)
- Care must be taken to follow these procedures to prevent serious injury and comply with the West Virginia Department of Public Health regulations, \_\_\_\_\_, Minimum Requirements for the Management of Medical or Biological Waste (State Sanitary Code \_\_\_\_\_)

## **Sharps Injury Reporting**

#### As per the OSHA standard 1904.8(a);

*Basic requirement.* The employer must record all work-related needlestick injuries and cuts from sharp objects that are contaminated with another person's blood or other potentially infectious material (as defined by 29 CFR 1910.1030). The employer must enter the case on the OSHA 300 Log as an injury. To protect the employee's privacy, the employer not enter the employee's name on the OSHA 300 Log.

The employer must update the classification of the case on the OSHA 300 Log if the case results in death, days away from work, restricted work, or job transfer. The employer must also update the description to identify the infectious disease and change the classification of the case from an injury to an illness.



The employer must also record, if the employees is splashed or exposed to blood or other potentially infectious material(OPIM) without being cut or scratched on the OSHA 300 Log as an illness if;

It results in the diagnosis of a bloodborne illness, such as HIV, hepatitis B, or hepatitis C; or

It meets one or more of the recording criteria in the OSHA Standard 1904.7.

[<u>1904.7(a)</u> : *Basic requirement* The employer must consider an injury or illness to meet the general recording criteria, and therefore to be recordable, if it results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness. The employer must also consider a case to meet the general recording criteria if it involves a significant injury or illness diagnosed by a physician or other licensed health care professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness].