Community College of Rhode Island

Blood Borne Pathogens Program

Triumvirate Environmental Inc

Revision 3

November, 2019

1. Definitions…………………………………………………………………………………………………………3
2. Purpose……………………………………………………………………………………………………………..5
3. Scope…………………………………………………………………………………………………………………5
4. Occupational Exposure Determination.…………………………………………………………….5
5. Exposure Control Plan……………………………………………………………………………………….5
6. Hepatitis B Vaccination………………………………………………………………………………………7
7. Exposure and Post Exposure………………………………………………………………………………7
8. Documentation…………………………………………………………………………………………………..8
9. Training………………………………………………………………………………………………………………8
10. OSHA Recordkeeping………………….…………..….………………………………………….……9

**1.0 DEFINITIONS**

**Blood means** human blood, human blood components, and products made from human blood.

**Bloodborne Pathogens** means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

**Contaminated**means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

**Contaminated Sharps** means any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

**Decontamination**means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

**Engineering Controls** means controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

**Exposure Incident** means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

**Handwashing Facilities** means a facility providing an adequate supply of running potable water, soap, and single-use towels or air-drying machines.

**Licensed Healthcare Professional** is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

**HBV** means hepatitis B virus.

**HIV means human immunodeficiency virus.

Needleless systems** means a device that does not use needles for:

(1) The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established;

(2) The administration of medication or fluids; or

(3) Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

**Occupational Exposure** means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

**Other Potentially Infectious Materials** means

(1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, anybody fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;

(2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and

(3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Parenteral means** piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.
 **Personal Protective Equipment** is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.
 **Regulated Waste** means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

**Research Laboratory** means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities. **Sharps with engineered sharps injury protections** means a non-needle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

**Sterilize** means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

**Universal Precautions** is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

**Work Practice Controls** means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

**2.0 PURPOSE**

 Community College of Rhode Island is committed to providing a safe and healthful work environment. The goal of this program is to minimize or eliminate occupational exposure of CCRI employees to bloodborne pathogens from human blood or other potentially infectious materials.

**3.0 SCOPE**

The Bloodborne Pathogens standard applies to all employees who may come in contact with blood or other potentially infectious materials as part of their job or during the course of their employment. The plan provides determination of employee exposure, demonstrates implementation methods for exposure control; universal precautions, engineering and work practice controls, personal protective equipment and housekeeping.

Medical Laboratory Technology Courses (MLTC), Dental, Nursing Labs, Student Health Services, Housekeeping, and Maintenance are established positions which have reasonable occupational exposure through one or more routes. These positions attend training sessions annually and during their initial start date.

Copies of this written program as well as accompanying handouts are made available to anyone at any time. More information can be obtained from the trainer, the College Health Service, the CCRI Office of Human Resources, or the Rhode Island Department of Labor.

**4.0 OCCUPATIONAL EMPLOYEE EXPOSURE DETERMINATION**

Occupational exposure is any reasonably anticipated skin, eye, mucous membrane or other contact with blood or potentially infectious materials as result of the employee’s duties. This includes, accidental needle sticks, improperly packaged sharps, cuts from broken glass containers of body fluids, accidental skin contact with vomit, urine or feces possibly contaminated with blood. Other potentially infectious materials that may enter the body through routes of exposure include human body fluids, unfixed tissue, organ cultures, culture medium and other solutions, or HIV and HBV infected animals.

**5.0 EXPOSURE CONTROL PLAN**

**5.1 Universal Precautions**

All employees will utilize universal precautions. Universal precautions is a concept used to treat all human blood and certain human body fluids as if they were known to be infectious for HIV, HBV and other bloodborne pathogens.

Universal precautions include washing hands before and after exposure to blood and other body fluids. Employees should also always wear gloves, masks, goggles, other personal protective equipment (PPE) and use work practice controls to limit exposure to potential bloodborne pathogens.

**5.2 Labeling**

Warning labels must be affixed to containers, refrigerators, freezers, etc. that contain blood or other potentially infectious material. Red or orange bags may also serve as an indicator of blood or OPIM.

**5.3 Engineering and Work Practice Controls**

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens.

* Puncture-proof sharps containers are used to dispose of use hypodermic needles, scalpels, lances, etc.
* Used sharps are never thrown directly in the trash.
* Signs and Labels (including red or orange biohazard symbol) on all sharps containers and medical waste containers from MLTC, Dental, Nursing Labs, and from Student Health offices).
* Sharps disposal containers are inspected and maintained or replaced to prevent from overfilling.
* The plan is updated as new procedures, methods, or job descriptions change to ensure proper engineering controls and work practices are in place.
	1. **Personal Protective Equipment**

Personal protective equipment (PPE) is readily available to each department with potential occupational exposure. PPE must be cleaned, repaired, and replaced as needed and should be used as a last line of defense when engineering and work practice controls does not eliminate potential exposure.

All employees using PPE must observe the following precautions:

* Use gloves when moving or handling anything containing biohazardous materials.
* Use PPE (gloves, goggles, face shield, apron etc.) appropriate to the situation when assisting anyone with injuries, such as a cut, scrape, bloody nose etc.
* Use heavy gloves and dustpan and brush when cleaning up sharps such as broken glass or loose hypodermic needles.
* Cells phones should never be used while using PPE and only after disinfecting possible exposed areas, hands, face, arms, etc.
* Wash hands immediately or as soon as feasible after removing gloves.
* Remove PPE after it becomes contaminated and before leaving the work area
* Contaminated PPE shall be disposed of in a biohazard bin.
* Wash exposed tissues thoroughly with disinfectant soap after any contact with possibly infectious material.
* Never wash, decontaminate, or re-use disposable gloves.
* Wear appropriate face and eye protection when splashes, sprays, splatters, or droplets of blood or OPIM pose a hazard to eyes, ears, nose, or mouth.
* Make sure all re-usable PPE is thoroughly decontaminated and disinfected immediately after use.

**5.5 Housekeeping**

* For cleanup use gloves and EPA-registered disinfectants or a minimum 10% solution of chlorine bleach.
* Disinfectants must be in contact for at least 10 minutes with contaminated areas
* All contaminated work surfaces, tools, equipment, etc. must be decontaminated immediately or as soon as feasible
* Regulated waste is placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded and closed prior to removal to prevent spillage or protrusion of contents during handling.
* Put all broken glass and loose hypodermic needles in containers that are closable, puncture-resistant, leak proof on sides and bottoms, and appropriately labeled or color-coded.
* Known or suspected contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leak proof on sides and bottoms, and appropriately labeled or color-coded.
* Dispose of contaminated material in regulated waste containers.
* Wash hands with disinfectant soap after any clean-up operation.

**6.0 HEPATITIS B VACCINATION**

The vaccine series is offered free through the college Health Services to any individual whose job duties expose him/her to contact with possibly infectious body fluids. You may elect not to take the vaccine for any reason (for instance, high antibody titre, allergy to vaccine or simply, your preference). At present, there is no known vaccine effective against the IDS virus or the Hepatitis C virus.

Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of initial refusal will be kept.

**7.0 EXPOSURE AND POST-EXPOSURE**

**7.1 Exposure**

If an employee is exposed to bloodborne pathogens or incurs a sharps injury, the following steps should be followed:

* Wash any exposed areas, cuts, needlesticks with soap and water
* Flush area with water
* Irrigate eyes with water or saline
* Immediately seek medical treatment
* Report incident
* Document the routes of exposure and how the exposure occurred.
* Make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity.
* If the source individual is already known to be HIV, HCV, and/or HBV positive, new testing need not be performed.
* Assure that the exposed employee is provided with the source individual’s test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual.

**7.2 Post-Exposure**

Any CCRI employee who suffers an exposure to bloodborne pathogens is urged to seek testing, and, if necessary, treatment and follow up counseling. These must be provided at no-cost to the employee. This can be provided by the employee’s own physician or at an emergency room. Testing treatment and counseling are also available through Workers Compensation to College employees by Occupational Health and Rehabilitation Inc. of Warwick and Pawtucket, Rhode Island. Immediate response to worker exposure or injury is available. Information on OH+R services is available from the CCRI Office of Human Resources. Exposure and testing records are confidential and kept by OH+R.

The health care professional responsible for employee’s hepatitis B vaccination and post-exposure evaluation and follow up is given. The health care professional evaluating an employee after an exposure incident will receive the following:

* A copy of this BBP Plan
* A copy of the OSHA Bloodborne Pathogen regulations (29 CFR 1910.1030)
* A description of the employee’s job duties relevant to the exposure incident
* Documentation of the route(s) of exposure
* Circumstances of exposure
* Relevant employee medical records, including vaccination status.

**8.0 DOCUMENTATION**

Circumstances of all exposure incidents are reviewed to determine:

* Engineering controls in use at the time
* Work practices followed
* A description of the device being used (including type and brand) if applicable
* PPE or clothing that was used at the time of the exposure incident (gloves, eye shields, etc.)
* Location of the incident (Lab, dental department, etc.)
* Procedure being performed when the incident occurred
* Employee’s training
* Record all percutaneous injuries from contaminated sharps in a Sharps Injury Log
* Medical Records

**9.0 TRAINING**

All personal will be trained upon initial hiring and must demonstrate full competency of this program and the parts within it. Training should occur on an annual basis, or if new tasks or procedures affect the occupational exposure. Training must be presented in a language that workers can understand.

**10.0 OSHA RECORDKEEPING**

Exposure incidents will be evaluated to determine if the case meets OSHA’s Recordkeeping Requirements (29 CFR 1904).

**10.1 Sharps Injury Log**

In addition to the 1904 Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are also recorded in a Sharps Injury Log. All incidences must include at least:

* Date of the injury
* Type and brand of the device involved (syringe, suture needle)
* Department or work area where the incident occurred
* Explanation of how the incident occurred. This log is reviewed as part of the annual program evaluation and maintained for at least five years following the end of the calendar year covered. If a copy is requested by anyone, it must have any personal identifiers removed from the report.