Kingston University BLOODBORNE-PATHOGENS EXPOSURE CONTROL PLAN

POLICY

Kingston University is committed to providing a safe and healthful work environment for our entire staff. In pursuit of this endeavor, the following exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

The ECP is a key document to assist our institution in implementing and ensuring compliance with the standard, thereby protecting our employees. This ECP includes:

- * Determination of employee exposure
- * Implementation of various methods of exposure control,
 - including: Universal precautions Engineering and work practice controls Personal protective equipment Housekeeping
- * Hepatitis B vaccination
- * Post-exposure evaluation and follow-up
- * Communication of hazards to employees and training
- * Recordkeeping
- * Procedures for evaluating circumstances surrounding an exposure incident

The methods of implementation of these elements of the standard are discussed in the subsequent pages of this ECP.

DEFINITIONS

The following is a list of common terms and their definitions as they are used in the Exposure Control Plan.

Blood: Human blood, human blood components, and products derived from human blood (i.e. serum, plasma, albumin, immune globulins, factors 8 & 9).

Bloodborne pathogens (BBPs): Pathogenic microorganisms that are present in human blood and other body fluids that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV).

Contamination: The presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Contaminated Sharps: Any (biologically) contaminated object that can penetrate the skin including, but not limited to: needles, scalpels, broken glass, glass slides, Pasteur pipettes, razor blades, and capillary tubes.

Decontamination: 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 causing disease. Thus, the surface or item is rendered safe for handling, use or disposal.

Employee: An individual who receives monetary compensation from the employer for performing work.

Engineering controls: Equipment that is designed to isolate or remove the bloodborne pathogen hazard from the workplace (i.e. sharps disposal containers, self-sheathing needles, blunt needles, plastic capillary tubes, biosafety cabinets, autoclaves).

Exposure incident: A specific eye, mouth, other mucous membrane, non-intact skin (includes skin with dermatitis, hangnails, cuts, abrasions, chafing, acne, etc.), or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

HBV: Hepatitis B virus; causes inflammation of the liver and may lead to long-term liver damage including cirrhosis and cancer.

HCV: Hepatitis C virus; causes inflammation of the liver and can lead to long-term liver damage including cirrhosis and cancer.

HIV: Human immunodeficiency virus; attacks critical cells of the immune system, which leads to acquired immunodeficiency syndrome (AIDS), a life-threatening condition.

Occupational exposure: Reasonably anticipated (includes the potential for contact as well as actual contact with blood or OPIM) skin, eye, mucous membrane, non-intact skin, 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 (OPIM): Materials in addition to human blood that may be capable of transmitting bloodborne pathogens. These include:

- 1. The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental settings, any body 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).

- 3. HIV-containing cell or tissue cultures, organ cultures, and HIV or HBVcontaining culture media or other solutions.
- 4. Human cell/tissue/organ cultures not shown to be free of bloodborne pathogens. See

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Appendix A.
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5. Blood, organs, or other tissues from experimental animals infected with human bloodborne pathogens.

Parenteral exposure: Exposure occurring due to piercing of the mucous membranes or skin barrier via a needle stick, human bite, cut or abrasion, or other mechanical means.

Post-exposure follow-up: In the case of an exposure incident, the mandatory course of action taken by the employer to provide medical services (i.e. medical assessment, vaccination, source testing, baseline testing, counseling) to the exposed worker in order to reduce the risk of infection.

Regulated waste: Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials as a liquid or semi-liquid 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; pathological and microbiological wastes containing blood or other potentially infectious materials.

Sharps with engineered sharps injury protection: Non-needle sharp or 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.

Source individual: Any individual, living or dead, whose blood or other potentially infectious materials is a source of occupational exposure to the employee.

Sterilization: The use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Synovial fluid: Fluid from the joints such as the knees or elbows.

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

Work practice controls: Controls that reduce the likelihood of exposure by altering the manner in which a task is performed

PROGRAM ADMINISTRATION

* The OSHA Compliance Officer is responsible for the implementation of the ECP. The OSHA Compliance Officer will maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and

procedures. Contact location/phone number: <u>3871 E. Colorado Blvd.</u>, <u>Pasadena,</u> <u>CA 91107/(626) 229-9929</u>

- * Those employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this ECP.
- * The OSHA Compliance Officer will maintain and provide all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by the standard. The OSHA Compliance Officer will ensure that adequate supplies of the aforementioned equipment are available in the appropriate sizes. Contact location/phone number: <u>3871 E. Colorado Blvd., Pasadena, CA 91107/(626) 229-9929</u>
- * The OSHA Compliance Officer will be responsible for ensuring that all medical actions required are performed and that appropriate employee health and OSHA records are maintained. Contact location/phone number: <u>3871 E. Colorado</u> <u>Blvd., Pasadena, CA 91107/(626) 229-9929</u>
- * The OSHA Compliance Officer will be responsible for training, documentation of training, and making the written ECP available to employees, OSHA, and NIOSH representatives.
 Contact location/phone number: <u>3871 E. Colorado Blvd., Pasadena, CA</u><u>91107/(626) 229-9929</u>

EMPLOYEE EXPOSURE DETERMINATION

The following is a list of all job classifications at our establishment in which **all** employees have occupational exposure:

JOB TITLE	DEPARTMENT/LOCATION
Clinical Supervisor Faculty	MSOM Program
Licensed Acupuncturist	Clinic

The following is a list of job classifications in which **some** employees at our establishment have occupational exposure. Included is a list of tasks and procedures, or groups of closely related tasks and procedures, in which occupational exposure may occur for these individuals:

JOB TITLE	DEPARTMENT/LOCATION	TASK/PROCEDURE
Janitor	Campus Maintenance	Cleaning and handling wastes

Part-time, temporary, contract and per diem employees are covered by the standard. How the provisions of the standard will be met for these employees should be described in the ECP.

METHODS OF IMPLEMENTATION AND CONTROL

Universal Precautions

All employees will utilize universal

precautions. Exposure Control Plan

Employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees have an opportunity to review this plan at any time during their work shifts by contacting the OSHA Compliance Officer. If requested, we will provide an employee with a copy of the ECP free of charge and within 15 days of the request.

The OSHA Compliance Office is responsible for reviewing and updating the ECP annually or more frequently if necessary to reflect any new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

Engineering Controls and Work Practices

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. The specific engineering controls and work practice controls used are listed below:

- * Hand washing facility and hand sanitizer
- * Disposable acupuncture needles for one time use
- * <u>Clean and sanitize treatment tables and equipment after each use/treatment</u> <u>session following standard sanitization procedure with the use of sanitizing</u> <u>solution/agent of approved grade and composition</u>
- * Biohazardous Sharps Container
- * Biohazardous Waste Container
- * Autoclave

Sharps disposal containers are inspected and maintained or replaced by the OSHA Compliance Office every month or whenever necessary to prevent overfilling.

This facility identifies the need for changes in engineering control and work

practices through the review of OSHA records, employee interviews, committee activities.

We evaluate new procedures or new products regularly by reviewing relevant literature supplier info, products considered and attending relevant seminars or workshop.

Both front line workers and management officials are involved in this process.

The OSHA Compliance Office will ensure effective implementation of these recommendations.

Personal Protective Equipment (PPE)

PPE is provided to our employees at no cost to them. Training is provided by the OSHA Compliance Office in the use of the appropriate PPE for the tasks or procedures employees will perform.

The types of PPE available to employees are as follows: <u>*gloves, mask</u>*</u>

PPE is located at the OSHA Compliance Officer Office and may be obtained through the OSHA Compliance Officer

All employees using PPE must observe the following precautions:

- * Wash hands immediately or as soon as feasible after removal of gloves or other PPE.
- * Remove PPE after it becomes contaminated, and before leaving the work area.
- * Used PPE may be disposed of in the Biohazardous Waste Container
- * Wear appropriate gloves when it can be reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces; replace gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised.
- * Utility gloves may be decontaminated for reuse if their integrity is not compromised; discard utility gloves if they show signs of cracking, peeling, tearing, puncturing, or deterioration.
- * Never wash or decontaminate disposable gloves for reuse.
- * Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.
- * Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.

The procedure for handling used PPE is as follows:

1. Reusable PPE (lab coats, safety glasses, face shields, etc.) must be cleaned or laundered and decontaminated as needed. Lab coats (and any personal clothing that becomes contaminated with blood or OPIM) must not be sent home with employees for laundering. For

assistance with identifying on-site laundry or commercial laundry services, contact your departmental office or campus safety officer.

- 2. Single-use PPE that is contaminated with blood or OPIM to the extent where the material can drip or flake off of the item will be disposed of as biohazardous waste.
- 3. Replace disposable gloves as soon as possible after contamination or immediately when torn, punctured or otherwise rendered unable to function as an exposure barrier.
- 4. Remove and replace compromised or moderately contaminated PPE as soon as feasible.
- 5. Wash hands after removal of PPE.

Housekeeping

Regulated waste is placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded (see Labels), and closed prior to removal to prevent spillage or protrusion of contents during handling.

The procedure for handling **sharps disposal containers** is: All sharps containers must be permanently closed and disposed of when ³/₄ full. The sharps containers when ³/₄ full must be removed and placed in the Biohazardous Waste Container in the Biohazardous Waste Storage Room for removal by the contracted Biohazardous Waste Disposal company

The procedure for handling other regulated waste is:

- 1. Place all non-sharp regulated waste such as used cotton and tissue papers in biohazardous waste bags (red bags)
- 2. Tie the biohazardous waste bag (red bags) securely and place it in the biohazardous waste bin in the Biohazardous Waste Storage Room.

Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leakproof on sides and bottoms, and labeled or color- coded appropriately. Sharps disposal containers are available at the OSHA Compliance Officer Office

Bins and pails (e.g., wash or emesis basins) are cleaned and decontaminated as soon as feasible after visible contamination.

Broken glassware which may be contaminated is picked up using mechanical means, such as a brush and dust pan.

Laundry

The following contaminated articles will be laundered by the institution:

Patient gowns, linens, pillow cases, towels

*items contaminated with blood and mucous secretions of the patients must be disposed of by placing the items in a red bag secured and place the red bag in the Biohazardous Waste Container in the Biohazardous Waste Storage Room Laundering will be performed by janitors at outside laundry shop

The following laundering requirements must be met:

- * handle contaminated laundry as little as possible, with minimal agitation
- * place wet contaminated laundry in leak-proof, labeled or color-coded containers before transport. Use red bags or bags marked with biohazard symbol for this purpose.

* wear the following PPE when handling and/or sorting contaminated laundry: disposable gloves

Labels

Biohazard labels consist of a red or fluorescent orange colored background with the traditional biohazard symbol in a contrasting color. The Biosafety Office will keep a supply of labels meeting these criteria and these will be available upon request.

The following items must be labeled:

- Containers of regulated waste;
- Refrigerators, freezers, incubators, or other equipment containing blood, cell cultures, or other potentially infectious materials;
- Sharps disposal containers;
- Laundry bags/containers holding contaminated items. Alternately, laundry may be placed in a biohazard bag. Employees handling laundry must be informed of the potential for contamination and/or infectivity of the biohazard bags.
- Contaminated equipment.

The OSHA Compliance Officer will ensure warning labels are affixed or red bags are used as required if regulated waste or contaminated equipment is brought into the facility. Employees are to notify the OSHA Compliance Officer if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc. without proper labels.

HEPATITIS B VACCINATION

The OSHA Compliance Officer will provide training to employees on hepatitis B vaccinations, addressing the safety, benefits, efficacy, methods of administration, and availability.

The hepatitis B vaccination series is available at no cost after training and within 10 days of initial assignment to employees identified in the exposure ______ determination section of this plan. Vaccination is encouraged unless: 1) documentation exists that the employee has previously received the series, 2) antibody testing reveals that the employee is immune, or 3) medical evaluation shows that vaccination is contraindicated.

However, if an employee chooses to decline vaccination, the employee must sign

a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept at the OSHA Compliance Officer office.

Vaccination will be provided by physicians at St. George's Medical Clinic at 1750 East Colorado Blvd., Pasadena, CA 91106

Following the medical evaluation, a copy of the health care professional's Written Opinion will be obtained and provided to the employee. It will be limited to whether the employee requires the hepatitis vaccine, and whether the vaccine was administered.

POST-EXPOSURE EVALUATION AND FOLLOW-UP

Should an exposure incident occur, contact the OSHA Compliance Officer at the following number: (626) 229-9929.

An immediately available confidential medical evaluation and follow-up will be conducted at St. George's Medical Clinic. Following the initial first aid (clean the wound, flush eyes or other mucous membrane, etc.), the following activities will be performed:

- * Document the routes of exposure and how the exposure occurred.
- * Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
- * Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
- * 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 (e.g., laws protecting confidentiality).
- * After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status
- * If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

ADMINISTRATION OF POST-EXPOSURE EVALUATION AND FOLLOW-UP

The OSHA Compliance Officer ensures that health care professional(s) responsible for

employee's hepatitis B vaccination and post-exposure evaluation and follow-up are given a copy of OSHA's bloodborne pathogens standard.

The OSHA Compliance Officer ensures that the healthcare professional evaluating an employee after an exposure incident receives the following:

- * a description of the employee's job duties relevant to the exposure incident
- * route(s) of exposure
- * circumstances of exposure
- * if possible, results of the source individual's blood test
- * relevant employee medical records, including vaccination status

The OSHA Compliance Officer provides the employee with a copy of the evaluating health care professional's written opinion within 15 days after completion of the evaluation.

PROCEDURES FOR EVALUATING THE CIRCUMSTANCES SURROUNDING AN EXPOSURE INCIDENT

The OSHA Compliance Officer will review the circumstances of all exposure incidents to determine:

- * engineering controls in use at the time
- * work practices followed
- * a description of the device being used (including type and brand)
- * protective equipment or clothing that was used at the time of the exposure incident (*gloves, eye shields, etc.*)
- * location of the incident (O.R., E.R., patient room, etc.)
- * procedure being performed when the incident occurred
- * employee's training

The OSHA Compliance Officer will record all percutaneous injuries from contaminated sharps in the Sharps Injury Log.

If it is determined that revisions need to be made, the OSHA Compliance Officer will ensure that appropriate changes are made to this ECP. *(Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)*

EMPLOYEE TRAINING

All employees who have occupational exposure to bloodborne pathogens receive training conducted by the OSHA Compliance Officer (*Attach a brief description of their qualifications.*)

All employees who have occupational exposure to bloodborne pathogens receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:

- * a copy and explanation of the standard
- * an explanation of our ECP and how to obtain a copy
- * an explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident
- * an explanation of the use and limitations of engineering controls, work practices, and PPE
- * an explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE
- * an explanation of the basis for PPE selection
- * information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge
- * information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
- * an explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available
- * information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- * an explanation of the signs and labels and/or color coding required by the standard and used at this facility
- * an opportunity for interactive questions and answers with the person conducting the training session.

Training materials for this facility are available at the OSHA Compliance Officer office.

RECORDKEEPING

Training Records

Training records are completed for each employee upon completion of training. These documents will be kept for at least **three years** at the OSHA Compliance Officer office.

The training records include:

- * the dates of the training sessions
- * the contents or a summary of the training sessions
- * the names and qualifications of persons conducting the training
- * the names and job titles of all persons attending the training sessions

Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to OSHA Compliance Officer.

Medical Records

Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020, "Access to Employee Exposure and Medical Records."

The OSHA Compliance Officer is responsible for maintenance of the required medical records. These **confidential** records are kept at the OSHA Compliance Officer office for at least the duration of the employee's employment plus 30 years.

Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent to the OSHA Compliance Officer at 3871 E. Colorado Blvd., Pasadena, CA 91107.

OSHA Recordkeeping

An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by OSHA Compliance Officer

Sharps Injury Log

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

- the date of the injury
- the type and brand of the device involved
- the department or work area where the incident occurred

-an explanation of how the incident occurred.

This log is reviewed at least annually as part of the annual evaluation of the program and is maintained for at least five years following the end of the calendar year that they cover. If a copy is requested by anyone, it must have any personal identifiers removed from the report.

Establishment/Facility Name: KINGSTON UNIVERSITY

	Sample Sharps Injury Log Year 2							
Date	Case/ Report No.	Type of Device (e.g., syringe, suture needle)	Brand Name of Device	Work Area where injury occurred [e.g., Geriatrics, Lab]	Brief description of how the incident occurred [i.e., procedure being done, action being performed (disposal, injection, etc.), body part injured]			

29 CFR 1910.1030, OSHA's Bloodborne Pathogens Standard, in paragraph (h)(5), requires an employer to establish and maintain a Sharps Injury Log for recording all percutaneous injuries in a facility occurring from *contaminated* sharps. The purpose of the Log is to aid in the evaluation of devices being used in healthcare and other facilities and to identify problem devices or procedures requiring additional attention or review. This log must be kept in addition to the injury and illness log required by 29 CFR 1904. The Sharps Injury Log should include all sharps injuries occurring in a calendar year. The log must be retained for five years following the end of the year to which it relates. The Log must be kept in a manner that preserves the confidentiality of the affected employee.

HEPATITIS B VACCINE DECLINATION (MANDATORY)

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Signature of employee

Print Name of Employee:	Date	
Witness signature and position		
Position:	Date	