California State University, Bakersfield

Bloodborne Pathogen Exposure Control Plan

CALIFORNIA STATE UNIVERSITY
BAKERSFIELD
Safety and Risk Management

Date Revised:	Revision Type:
May 2022	Formatting, Added sections, Annual Review
January 2023	Annual Review

1.0 Purpose

This program provides procedures that will reduce the potential for occupational exposures to bloodborne infectious disease according to the requirements of Title 8 CCR, §5193 and 29 CFR §1910.1030.

2.0 Scope

This Bloodborne Pathogen Exposure Control Plan (BBP-ECP) applies to all personnel of CSU Bakersfield who may come in contact with BBP materials during the course of their work. This ECP also applies to teaching laboratories at CSU Bakersfield and non-research support staff (e.g., custodians, facilities worker's, police officers, etc.)

3.0 Responsibilities

Safety & Risk Management is responsible for the following:

- Develop, implement, review, and update, as necessary, the written Bloodborne Pathogen Exposure Control Plan and make sure plan is made available to all employees by posting to SRM website.
- Provide guidance to handlers of biohazardous materials on how to develop departmental control procedures in accordance with this Plan.
- Administering the contract for off-site biohazardous waste disposal services.
- Transferring medical waste generated at the Student Health Center to Science Stockroom personnel for steam sterilization and for transferring sterilized sharps to disposal location.
- Investigates any potential exposures to determine root cause and identify preventative/correction actions.
- Determines potential levels of exposure to bloodborne pathogens for specific job categories or classifications.
- Keeping records pertaining to on-site treatment of biohazardous waste.
- Ensuring non-medical personnel handling medical waste are properly trained.
- Provide and maintain all necessary engineering controls (e.g., sharps containers, labels, and red bags) as required by the standard.

Employees are responsible for the following:

- Shall be familiar with this Plan and its contents and objectives.
- Participate in required training sessions.
- Use PPE and other protective devices when required.
- Report any exposure, accident, injury, or work site deficiencies to their supervisor

Supervisors are responsible for the following:

- Must be familiar with this Plan and its contents and objectives.
- Must know where human blood or other potentially infectious materials are used, produced, stored, or handled in any manner in the department.

- Identify employees who may be at risk of exposure and implement this plan to prevent identified risks.
- Ensure that employees have applicable information and training before beginning specific tasks involving blood or other potentially infectious materials.
- Identify and develop safety procedures (SOP) when work activities involve the use of blood and/or other potentially infectious materials. Specific procedures for spills, waste disposal, decontamination, and accident response procedures must be developed by the department.
- Ensure that proper administrative and engineering controls are provided in workplace areas.
- Provide proper personal protective equipment (PPE) to employees who work with blood or bloodborne pathogens.
- Monitor work sites and correct deficiencies.
- Refer all exposures immediately to an emergency care facility for assessment and exposure follow-up (CDC states HIV exposure assessment must be completed within 4 hours).
- Ensure that all exposure incidents are documented and reported to Human Resources and post-exposure and follow-up procedures are followed.

4.0 Definitions

Blood: Human blood, human blood components, and products made from human blood

Bloodborne Pathogens: 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).

Other Potentially Infectious Materials (OPIM):

- The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, and other body fluid that is visibly contaminated with blood such as saliva or vomitus, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids such as emergency response. Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and o 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.

Occupational Exposure: 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.

Contaminated: the presence or the reasonably anticipated presence of blood or other potentially infectious materials on a surface or in or on an item.

Exposure Incident: A specific eye, mouth, or other mucous membrane; non-intact skin; or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee's or student's duties.

Sharp: any object that can be reasonably anticipated to penetrate the skin and result in an exposure to bloodborne pathogens. Sharps used at CSUB include (but are not limited to) needle devices, scalpels, lancets, broken glass, and broken capillary tubes.

Regulated Waste: waste that is any of the following:

- Liquid or semi-liquid blood or OPIM.
- Contaminated items that contain liquid or semi-liquid blood or are caked with dried blood or OPIM and are capable of releasing these materials when handled or compressed.
- Contaminated sharps.
- Pathological and microbiological wastes containing blood or OPIM.
- Regulated Waste includes "medical waste" regulated by Health and Safety Code Sections 117600 through 118360

Universal Precautions: An approach to infection control that assumes all human blood and other potentially infectious materials may carry HIV, HCV, HBV, and other bloodborne pathogens.

Work Practice Controls: Controls that reduce the likelihood of exposure by defining the manner in which a task is performed (e.g., prohibiting recapping of needles by a twohanded technique and use of patient-handling techniques).

5.0 Exposure Determination

Employees working in the following job classifications perform duties which could result in exposure to bloodborne pathogens.

Category 1 Employees: Moderate – to – High Risk Exposure

- Health care providers with patient care responsibilities. Includes professionals, assistants, and other employees directly involved in the patient care process. Research investigators, technicians, and laboratory assistants who work with bloodborne pathogens, human blood, or other potentially infectious materials.
- Initial Responders: Law enforcement employees.
- Athletic sports medicine employees.
- Nursing Students

Category 2: Low - to - Moderate Risk Exposure

- Custodial personnel responsible to clean up spills of blood or other potentially infectious material.
- Maintenance plumbers responsible for opening sewage lines.
- Childcare assistants.
- Clinical instructors in Special Education.

- Employees responsible for laundry cleaning.

Category 3: No Risk - to - Low Risk Exposure

- Office support staff.
- Custodians not required to cleanup spills of blood or other potentially infectious materials.
- Personnel responsible for waste collection and hauling.
- Laboratory technicians with no assigned tasks involving blood or other potentially infectious materials.
- Employees whose job description defines no tasks related to exposure of blood or other potentially infectious materials.

Unclassified Risk Exposure

To be determined by SRM, department managers/supervisors on a case-by case basis.

6.0 Universal Precautions

All blood and bodily fluids are to be treated as if they are infected with HBV, HCV, HIV, or other pathogens.

7.0 Exposure Control

Personal protective equipment (PPE), administrative, work practice, and engineering controls as described in the next few sections below, have been implemented to reduce the potential for occupational exposure to bloodborne pathogens. Additional exposure control procedures will be developed by clinic or laboratory supervisors as needed for specialty work environments. Supervisors are responsible for ensuring that employees implement exposure control measures and are trained to use required personal protective equipment.

Employees who fail to implement exposure control measures or utilize PPE as required are subject to disciplinary action.

Personal Protective Equipment Controls

- Departments must provide, at no cost to the employee and require employees to use, appropriate personal protective equipment (PPE) such as gloves, gowns, masks, mouthpieces, and resuscitation bags; and must clean, repair, and replace these when necessary.
- PPE, such as lab coats, should be worn when there is a potential for soiling an employee's street clothing exists. The protective clothing, that is needed, will depend upon tasks and degree of risk of occupational exposure anticipated. It is required that each department conducts evaluations of risk and mandates the proper use of protective gowns/apparel. PPE should be kept clean; they may be stored in a designated location in the work area.
- When blood or other potentially infectious materials (OPIM) penetrate a garment, it should be removed and cleaned prior to being worn again.

- Proper masks, in combination with eye protection devices (goggles or glasses with solid side-shields or chin length face shields), must be worn when it can be reasonably anticipated that eye, nose, or mouth exposures may occur as a result of splashes, sprays, or from droplets of blood or other potentially infectious materials.
- Gloves should be worn when there is a potential for direct skin contact blood or other potentially infectious materials, and when handling or touching contaminated items or surfaces. Examination gloves are single use; gloves are not to be disinfected and reused. Check gloves for damage frequently. Wash hands as soon as possible after removing gloves.
- Filtering face-piece medical type masks, goggles, glasses with side shields, or a chin-length face shield, singularly or in combination, should be worn when splashes, sprays, splatters, or droplets of potentially infectious material may be anticipated by eye, nose, or mouth.
- Closed toe shoes are required.
- PPE should be removed before leaving a contaminated area.

Administrative Controls

- Keep laboratory doors closed when work is being performed on bloodborne pathogens.
- The area must be designated by placing the biohazard sign on entrance doors.
- Lock biohazard work areas when unattended.

Engineering Controls

- Injury protection shall be used for needles with engineered sharps and withdrawal of body fluids, such as accessing a vein or artery, administration of medications or fluids, and any other procedure for which a needle device with engineered sharps injury protection is available.
- Needleless systems shall be used for withdrawal of body fluids after initial venous or arterial access is established, for administration of medications, fluids, and/or any other procedure for which a needleless system is available as an alternative to the use of needle devices.
- If sharps other than needle devices are used, these items shall include engineered sharps injury protection.
- Bio-safety hoods will be used when contact with a pathogen occurs in which transmission is possible. The level of bio-safety hood will be selected based on the specific type of hazard present. Bio-safety hoods are certified annually. At that time, high efficiency particulate air (HEPA) filters, the functionality of liquid disinfectant traps, and vacuum lines will be checked.

Exceptions to Engineering Controls:

Engineering controls are not required when they are not available for purchase or when the use of the engineering control poses additional hazard to a patient or respective medical treatment. Engineering controls are not required when the control is deemed to be no more effective in preventing exposure than another alternative in use. The determination to NOT use

an engineering control for any of the above reasons must be justified in writing, reviewed, and approved by the head of the department involved with a copy provided to Safety & Risk Management.

Work Practice Controls

- Plan work to minimize the potential for splash, spray, or droplet generation.
- Never reuse disposable sharps.
- Do not bend, recap, or remove sharps from devices unless a mechanical device or a one-handed technique is used, and the employer can demonstrate that no alternative is available.
- Never pipette blood or OPIM by mouth.
- Do not eat, drink, smoke, apply cosmetics/lip balm, or handle contact lenses in areas where there is a reasonable likelihood of exposure to bloodborne pathogens.
- Do not keep food or drink in refrigerators, freezers, shelves, cabinets or on counter/ bench tops where blood or OPIM are present.
- Place specimens of blood or OPIM in a container that prevents leakage during collection, handling, processing, storage, transport and/or shipping.

Sharp Disposal

- Sharps must be disposed of in an approved sharps container that is rigid and puncture-resistant, and when sealed, is leak-resistant and cannot be reopened without difficulty. Note: In no instance should a used sharp be transported to a sharp's container; keep the container in the immediate worksite, and then, if necessary, transport the container after the sharp has been deposited.
- Sharps containers must remain upright, not overfilled, and be closed prior to removal.
- Containers for contaminated sharps must be red in color and have a biohazard label. Sharps containers shall be replaced when 2/3 full. If the sharps container must be sterilized before disposal, placed in an approved secondary container, and properly dispose of it. The secondary container must also have the biohazard label.
- Sealed sharps containers are to be disposed through a state permitted biomedical waste broker.

Labeling

- The standard orange or orange-red biohazard warning label must be affixed to containers of biohazard waste.
- Refrigerators, freezers, and other containers that are used to store or transport blood or other potentially infectious materials must display a biohazard warning label.
- When a department uses universal precautions in the handling of specimens, labeling of those individual specimens is not required within the department (i.e. laboratory samples).
- Laundry handled with universal precautions (considered contaminated with blood and body fluids) need to be labeled.

- If blood samples are tested and found to be infected with HIV or HBV, they must have a biohazard-warning label affixed to the sample, otherwise normal or routine blood samples need not be labeled.
- Biohazard waste, which has been decontaminated, need not be labeled. However, sharps, contaminated or not, must be placed in a sharp's container prior to disposal.
- The standard biohazard warning sign must be used to identify restricted areas in HIV and HBV research laboratories and production facilities.

8.0 Housekeeping & Decontamination

- All equipment and work surfaces shall be promptly cleaned with a disinfectant capable of killing HIV and hepatitis after contact with potentially infectious material.
- A 1:10 hypochlorite solution is effective for decontamination and can be prepared by slowly adding 1/4 cup of household bleach to 2 ½ cups of water. Any other disinfectant with a label stating that it is effective in killing HIV and hepatitis may also be used.
- Clean up and decontamination should only be conducted by persons who have completed bloodborne pathogen exposure control training and who understand the hazards of the contaminant.
- Use only nitrile or PVC gloves as a physical barrier during decontamination. PVC gloves may be washed, disinfected, and reused. Additional PPE should be worn if splash hazards exist.
- Departments shall establish procedures for handling contaminated laundry to minimize exposures. A written schedule must be developed for cleaning and identifying the method of decontamination to be used. Cleaning requirements following contact with blood or other potentially infectious materials must be included in this written procedure.

9.0 HIV and HBV Research Laboratories and Production Facilities

- If laboratories used HIV and/or HBV they must follow standard microbiological practices as outlined in the National Institutes of Health (NIH) guideline, "Biosafety in Microbiological and Biomedical Laboratories". These guidelines specify practices intended to minimize exposure of employees working with concentrated infectious agents and to reduce the risk of occupational exposure for other employees at the facility. Departments falling under these guidelines must have required containment equipment, and in some instances, an autoclave for decontamination of waste.
- CSUB is not currently involved in HBV, HBC or HIV research. Faculty, staff, or students who wish to conduct this type of research must notify the Safety & Risk Management Office at ext. 2066 at least one month prior to beginning work.

10.0 Training and Recordkeeping

Each department head will ensure that occupationally exposed employees under their supervision receive training at the time of initial assignment and annually thereafter. Supervisors should forward training records to Safety & Risk Management to be logged in the campus safety training database. If there is a change in task or procedures that affects the employee's occupational exposure, additional training will be provided.

Bloodborne pathogen training shall include:

- The location of 8 CCR 5193.
- A general explanation of the epidemiology and symptoms of bloodborne diseases.
- An explanation of the modes of transmission of BBP.
- An explanation of the ECP and how an employee can obtain a copy of the written plan.
- An explanation of the appropriate methods for recognizing tasks which may involve exposure to potentially infectious materials.
- An explanation of the use and limitations of exposure control including appropriate engineering controls, administrative controls, safe work practices and personal protective equipment (PPE).
- The basis for selection of PPE.
- Information on the efficacy, safety, method of administration, and benefits of the hepatitis B vaccine.
- Information on the actions to take in the event of an emergency involving blood or other potentially infectious materials.
- An explanation of the procedure to follow if an exposure incident occurs.
- Information on the post-exposure evaluation and follow-up.
- An explanation of the signs, labels, and color-coding used by the university to identify biohazardous areas and materials.
- An opportunity for questions from employees about the university's Bloodborne Pathogen Program.

Training records must be maintained by the department for three (3) years and must include:

- Dates and location of training
- Contents of the training program or a summary
- Trainer's name
- Names and job titles of all persons attending the sessions

11.0 Medical Surveillance

Hepatitis B Vaccination

- Hepatitis B Vaccinations are scheduled through the Medical Monitoring Program managed by SRM. All Category 1 and 2 Employees will be offered and encouraged to have Hepatitis B Vaccinations at no charge to the employee.
- Employees who decline Hepatitis B vaccinations, leaving themselves at risk for infection, must sign a "Hepatitis B Vaccine Declination" form.

Post-Exposure Evaluation and Follow-up

- Wash skin with soap and water or flush mucous membranes with water immediately after contact with blood or OPIM.
- Employees who have had an exposure incident must receive a follow-up evaluation from the University's Student Health Center or CSUS's emergency employee medical provider. This service is provided at no cost to the employee. Evaluations must be completed within 4 hours of the incident if anti-HIV therapy is to be fully effective.
- The medical provider will determine what follow-up care is necessary. This may include, but is not limited to, HBV, HCV, or HIV testing, HBV vaccinations, counseling, or drug therapy (Anti-viral drugs).
- Whenever possible a blood sample from the source should be brought to the emergency care facility for testing.
- The incident must be reported to SRM and documented.
- The attached sharp's injury log form must be filled out by the health care professional who completes the post exposure evaluation. A copy of each sharp injury log form shall be forwarded to the Office of Human Resources where the sharps injury log will be maintained for five years. The sharps injury log will be provided upon request to the California Department of Health Services and to the California Department of Occupational Safety and Health. CSUB's Office of Human Resources and Student Health Center staff will review the sharps injury log annually to evaluate the safety record of devices involved in causing injuries.

When an employer provides in-house post-exposure evaluation, the employee must be advised of their right to refuse to consent to post-exposure evaluation from the employers' healthcare professional. If the employee refuses to consent to evaluation at the CSUB Student Health Center, Health Center staff should notify Human Resources immediately. Human Resources will immediately arrange a confidential medical evaluation and follow-up from an alternate, non-employer, health care professional.

The evaluation shall include:

- Documentation of the route(s) of exposure and the circumstances under which the incident occurred.
- Determination whether an exposure incident occurred.
- Identification and documentation of the source individual(s).
- Offer of HBV vaccination series, immune serum globulin, or other prophylaxes to unvaccinated persons within 24 hours of the exposure.
- Document declination of the HBV vaccine series or other prophylaxes on the attached form.
- Baseline blood testing may be requested by the physician at the expense of the university.
- The exposed employee's consent is required for HIV testing.

The treating physician must be provided with:

- A copy of 8 CCR 5193.
- Copies of required CSUB forms.
- A description of the exposed employee's duties.
- A copy of the supervisor's Report of Injury.
- All medical records relevant to the appropriate treatment of the employee including vaccination status.

The physician must provide a written post-exposure report to the University within 15 days of completion of the exposure evaluation. The report should contain an opinion whether Hepatitis B vaccination is recommended for the employee and if the employee has begun the vaccination series.

Medical Records

- Records for each employee with occupational exposure are kept for the duration of employment plus thirty (30) years. The University's Student Health Center or the CSU's contract health care provider maintains these records.
- Medical records must be made available to the employee and/or to anyone with written consent of the employee. These records are not available to the employer.

12.0 Contract Services

Companies contracting services to CSUB that involve employee exposure to bloodborne pathogens must have their own exposure control plan. Contractors must train their employees in accordance with OSHA regulations including information that is specific to job duties at CSUB. A signed Contractor Illness and Injury Prevention Program certification form must be provided to the university prior to the start of work.

CALIFORNIA STATE UNIVERSITY
BAKERSFIELD | Safety and Risk Management

California State University, Bakersfield
Bloodborne Pathogen Exposure Report

Use this form to document **all incidents involving blood or potentially infectious material** that may have resulted in personnel exposure. **When in doubt, use this form and report the incident as soon as possible to the immediate supervisor**, but no later than the end of the work shift.

This form and a copy of the Supervisors Report of Injury should be provided to the attending physician. The physician should send the completed form to the **Office of Human Resources** to be filed with the employees' occupational medical records.

Name: _____ Location Where Injury Occurred: _____

Date of Injury: _____ Time of Injury: _____ Type of Injury: _____

INCIDENT DESCRIPTION: See attached Supervisor's Report of Injury.

Has the employee previously received the full Hepatitis B Vaccination series? ☐ Yes ☐ No

---

For Medical Provider: In compliance with California Code of Regulations, Title 8, Section 5193, an exposure incident refers to an 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. The medical provider is to examine the reported facts of the incident and determine whether sufficient exposure potential exists to warrant prophylaxis, and the components of any prescribed treatment.

Did an exposure occur? ☐ Yes ☐ No

When an exposure has occurred, CSUB shall make the necessary immune serum globulin and/or Hepatitis B vaccination series immediately available to the exposed employee when medically indicated. The prophylaxes shall be made available as soon as possible, but in no event later **than** 24 hours after the incident occurred.

If the employee refuses recommended medical prophylaxes, please indicate below and have the employee sign as documentation of declination and forward this completed form to the address above or FAX to 661-654-2299.

Prophylaxis Recommended: ☐ Yes ☐ No
☐ Hepatitis B ☐ ISG ☐ Other_____

Prophylaxis Provided: ☐ Yes ☐ No ☐ Declined treatment

Signature declining treatment_____ Date: _____

Physicians Name: _____ Facility: _____

Physicians Signature: _____ Date: _____

Telephone Number: _____

CALIFORNIA STATE UNIVERSITY
BAKERSFIELD

Safety and Risk Management

Supervisors Instructions:

Complete all sections of this form.

Make a photocopy for your own records; and send original to Human Resources

Employees Name	CSUB ID #	Employee Telephone
Department	Supervisor	Supervisors Telephone
Job Classification	Location Where Injury Occurred (Building # or Address)	

Date of Injury	Time of Injury	Location of Injury
Body Part Injured		
Procedure Being Performed at Time of Injury		
Describe How Incident Occurred		
Sharps Information: Type	Brand	Model
Did the Device Being Used Have Engineered Sharps Protection? ☐ Yes ☐ No		
Was the Protective Mechanism Fully Activated? ☐ Yes ☐ No		
Was the Protective Mechanism Partially Activated? ☐ Yes ☐ No		
Exposure Occurred ☐ Before ☐ During ☐ After Activation of Protective Mechanism.		
If the Sharp Had no Engineered Sharps Protection, Could Such a Mechanism Have Prevented the Injury? ☐ Yes ☐ No		
Could Any Other Engineering or Administrative, or Safe Work Practice Control Have Prevented the Injury? ☐ Yes ☐ No		

Supervisors Signature: _____