



Bloodborne Pathogens Program

San José State University

One Washington Square

San José, California

Facilities Development and Operations Department

Environmental Health and Safety

April 9, 2020

1) Purpose and Scope

The purpose of the Bloodborne Pathogen Exposure Control Program is to protect San José State University employees from the occupational exposure to blood and other potentially infectious materials (OPIM) and from the harmful effects of an exposure to, and not limited to, the Human Immune Virus (HIV), Hepatitis B and Hepatitis C viruses.

2) Standards, Regulations and References

- a) California Code of Regulations,
Title 8, Section §5193. Bloodborne Pathogens.
- b) California Code of Regulations,
Title 8, Section §3204. Access to Employee Exposure and Medical Records.

3) Roles and Responsibilities**a) The University**

The University is committed to and has a duty to provide a safe and healthful work environment for all employees from the occupational exposure to blood and other potentially infectious materials.

b) Environmental Health and Safety

Environmental Health and Safety will ...

- i) Establish, implement and maintain the Exposure Control Plan which is designed to eliminate or minimize employee exposure to bloodborne pathogens.
- ii) Perform an employee exposure determination and document the findings with the collaboration of each department's management.
- iii) Develop and implement campus-wide training requirements and materials. Employee information and training are provided at the time of initial assignment and annually thereafter.
- iv) Coordinate with the Human Resources Department, Risk Management, Workers Compensation, to identify a healthcare provider to perform post-exposure medical examinations and treatment.
- v) Contract with a healthcare provider to administer Hepatitis B vaccine.
- vi) Maintain a record of training given to employees for 3 years.
- vii) Maintain a record of those employees enrolled in the Bloodborne Pathogens and their vaccination status.
- viii) Audit and review the Exposure Control Plan annually.

c) Department Management

Each affected Department will ...

- i) Collaborate with the Environmental Health and Safety in the employee exposure determination process.
- ii) Provide the time and resources to effectively implement the Exposure Control Plan for employees determined to be at risk of exposure to bloodborne pathogens.

- iii) Enable employees who are at risk of exposure and enrolled in the Exposure Control Plan to receive hazard awareness training.
- iv) Offer the opportunity to employees who are at risk of exposure and enrolled in the Exposure Control Plan to receive Hepatitis B vaccination at no cost to the employee.
- v) Develop and enforce work practices and methods designed to control or eliminate the risk of exposure to bloodborne pathogens.
- vi) Provide the necessary work implements, such as tools, gloves, personal protective equipment and cleaning and disinfecting supplies, to employees.
- vii) Investigate reported exposure incidents with the collaboration of the Human Resources Department, Risk Management Workers Compensation.
- viii) Ensure that employees who have experienced an exposure incident receive immediate medical evaluations and necessary treatment.
- ix) Maintain a Sharps Injury Log for 5 years from the date that the exposure incident occurred.

d) Contract Healthcare Provider

The contract healthcare provider when authorized will ...

- i) Provide and administer Hepatitis B vaccinations.
- ii) Perform post-exposure medical examinations and treatment.
- iii) Maintain confidential medical records.

e) Human Resources, Risk Management and Workers Compensation

The Human Resources Department will ...

- i) Identify health care providers who will perform post-exposure medical examinations and treatment in accordance with the workers compensation insurance plan.
- ii) Manage employee exposure incident medical cases in accordance with the workers compensation insurance plan.
- iii) Maintain a record of the results of examinations, medical testing, and follow-up procedures, and the physicians written opinion in the employee's workers compensation medical record in accordance with the workers compensation insurance plan. Records will be maintained for the duration of employment plus 30 years.

f) Employees

Every employee who is at risk of exposure and enrolled in the Exposure Control Plan will ...

- i) Receive hazard awareness training on an annual basis.
- ii) Be offered the opportunity to receive Hepatitis B vaccination at no cost to the employee.
- iii) Be offered the opportunity to decline the Hepatitis B vaccination.
- iv) Be provided with the necessary work implements, such as tools, gloves, personal protective equipment and cleaning and disinfecting supplies, to perform their job safely.
- v) Follow the prescribed work practices and methods designed to control or eliminate the risk of exposure to bloodborne pathogens.

vi) Report exposure Incidents to the supervisor immediately.

4) Program Audit

Environmental Health and Safety will perform a program audit annually and make improvements to the Exposure Control Plan as conditions change.

5) Document History and Control

The San José State University Bloodborne Pathogens Exposure Control Program described herein supersedes all prior written Program documents.

<i>Rev #</i>	<i>Document Revision History</i>	<i>Author</i>	<i>Reviewer</i>	<i>Date</i>
00	Revision No Change Initial Document	David Krack Environmental Health and Safety	Mark Loftus Risk Management	May 23, 2011
01	Review for audit No changes		Matt Nymeyer	12-4-18
02	Annual review and update	Lisa Torralba	Matt Nymeyer	December 20, 2019
03	Added to exposure determination table, housekeeping and regulated waste. Added new section under ECP; spill response.	Lisa Torralba		April 9, 2020

The Bloodborne Pathogens Exposure Control Plan

The University is committed to and has a duty to provide a safe and healthful work environment for all employees from all occupational exposure to blood and other potentially infectious materials (OPIM).

1) The Exposure Control Plan (ECP) is designed to eliminate or minimize occupational exposure to bloodborne pathogens. The ECP includes the following key elements:

- a) Determination of employee exposure
- b) Implementation of various methods of exposure control, including:
 - i) Universal precautions
 - ii) Engineering and work practice controls
 - iii) Personal protective equipment
 - iv) Housekeeping
 - v) Spill Response
 - vi) Regulated Waste Minimization and Disposal
 - vii) Laundry
 - viii) Labels
- c) Hepatitis B vaccination
- d) Post-exposure evaluation and follow-up
- e) Communication of hazards to employees and training
- f) Recordkeeping

2) Definitions

- a) "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), hepatitis C virus (HCV) and human immunodeficiency virus (HIV).
- b) "Contaminated" means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on a surface or in or on an item.
- c) "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.
- d) "Exposure Incident" means a specific eye, mouth, other mucous membrane, non- intact skin, or parenteral contact with blood or other potentially infectious material that result from the performance of an employee's duties.
- e) "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.
- f) "Parenteral Contact" means piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

- g) "Personal Protective Equipment" is specialized clothing or equipment worn or used 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 is not considered to be personal protective equipment.
- h) "Other Potentially Infectious Materials" (OPIM) means:
 - i) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any 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.
 - ii) OPIM includes various contaminated human body fluids, unfixed human tissues or organs (other than skin), and other materials known or reasonably likely to be infected with human immunodeficiency virus (HIV), hepatitis B virus (HBV), or hepatitis C virus (HCV) through cells, tissues, blood, organs, culture mediums, or solutions.
- i) "Regulated Waste" means waste that is any of the following:
 - i) Liquid or semi-liquid blood or OPIM;
 - ii) Contaminated items that:
 - (1) Contain liquid or semi-liquid blood, or are caked with dried blood or OPIM; and
 - (2) Are capable of releasing these materials when handled or compressed.
 - iii) Contaminated sharps.
 - iv) Pathological and microbiological wastes containing blood or OPIM.
- j) "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, HCV, and other bloodborne pathogens.

3) Exposure Determinations

An exposure determination was made of the University staff positions without regard to the use of personal protective equipment (PPE) by the Environmental Health and Safety. It was determined that the following class of employees may have an occupational exposure to blood or OPIM and are enrolled in the SJSU Bloodborne Pathogens Exposure Control Plan.

#	<i>Department Building Location Responsible Administrator</i>	<i>Job Title of Employees at Risk of Exposure</i>	<i>Nature of Exposure Risk</i>
1	Facilities Development and Operations Department Facilities Development and Operations Building and South Campus Director, Environmental Health and Safety	Custodial Staff Grounds and Maintenance Plumbing, facility workers	Handling regulated waste, cleaning up spills or equipment. Performing maintenance and repairs on systems or equipment contaminated with blood, OPIM, or containing used sharps.
2	University Police Department	Police Officers	Responding to incidents or emergencies.

#	Department Building Location Responsible Administrator	Job Title of Employees at Risk of Exposure	Nature of Exposure Risk
			Providing first aid or CPR.
3	Student Housing Services	Custodial Staff Maintenance Plumbing, facility workers	Handling regulated waste, cleaning up spills or equipment. Performing maintenance and repairs on systems or equipment contaminated with blood, OPIM, or containing used sharps.
4	Student Health Services	Physicians Nurses Laboratory Staff Phlebotomists Physical Therapists	Direct patient care. Administering injections, cleaning rooms, disinfecting equipment Handling regulated waste, cleaning up spills or equipment. Handling blood specimens.
5	Research and Innovation	Principle investigator Support technicians	Research samples containing human blood.
6	College of Health and Human Sciences, College of Engineering, College of Science	Faculty Support technicians	Handling of sharps and laboratory materials containing blood specimens. Handling regulated waste, cleaning up spills or equipment.

4) Methods of Implementation and Control

a) Universal Precautions

All employees will follow universal precautions. 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, HCV, and other bloodborne pathogens.

b) Engineering Controls and Work Practices

- i) Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens.
- ii) Sharps disposal containers are inspected and maintained or replaced by the first line supervisor of the affected department whenever necessary to prevent overfilling.

c) Personal Protective Equipment (PPE)

- i) PPE is obtained through the first line supervisor of the affected department.
- ii) PPE is provided to employees at no cost.
- iii) The types of PPE available to employees include gloves, eye protection, and outer garments as necessary.
- iv) Training in the use of the appropriate PPE for specific tasks or procedures is provided by the first line supervisor.

- v) All employees using PPE must observe the following precautions:
- (1) Wash hands immediately or as soon as feasible after removing gloves or other PPE.
 - (2) Remove PPE after it becomes contaminated and before leaving the work area.
 - (3) Wear appropriate gloves when it is 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 or contaminated, or if their ability to function as a barrier is compromised.
 - (4) 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.
 - (5) Never wash or decontaminate disposable gloves for reuse.
 - (6) 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.
 - (7) 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.

d) Housekeeping

- i) All equipment and working surfaces should be cleaned and decontaminated with an appropriate disinfectant as soon as feasible after contact with blood or other potentially infectious materials. A list of EPA-Registered Disinfectants are found here:
<https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants>
- ii) 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.
- iii) Bins and pails (e.g., wash or emesis basins) are cleaned and decontaminated as soon as feasible after visible contamination.
- iv) Broken glassware that may be contaminated is picked up by using only mechanical means, such as a brush and dustpan.

e) Spill Response

- i) Spills containing Bloodborne Pathogens (BBP) refer to the release of any potentially contaminated agent, such as blood or OPIM. Spills may include incidents where a person is impaired, injured, or contaminated.
- ii) For exposures to the skin/body, wash contaminated area with soap and water for at least 15 minutes. If the exposure is to the eyes, rinse eyes in the nearest emergency eyewash station, if available, or sink for at least 15 minutes, removing contacts if worn.
- iii) For an injury, utilize the nearest first aid kit or get assistance from first-aid trained personnel. BBP spills must not be cleaned up without the help of trained personnel.
- iv) In case of medical emergency beyond first-aid dial 911 for paramedic assistance or 924-2222 for University Police Department (refer to the SJSU Injury Illness and Prevention Program).

- v) To clean up a BBP spill, the following materials should be used:
 - (1) EPA Registered Disinfectant (or a 10% household bleach solution).
 - (2) Forceps or tongs (for glass/sharps)
 - (3) Broom and dustpan
 - (4) Absorbent material (e.g. paper towels)
 - (5) Personal protective equipment suitable for the BBP and environment (e.g. gloves, eye or face protection, shoe covers. In a laboratory setting, a coat should also be worn.)
- vi) If you have been trained to clean up a BBP spill and have the support and proper equipment, you should use the cleanup and decontamination procedure below:
 - (1) Close off the area/room for half an hour to allow any aerosols to settle before beginning cleanup activities.
 - (2) Assemble the appropriate spill cleanup materials and put on the proper personal protective equipment.
 - (3) Initiate spill cleanup:
 - (4) Cover spill area with disinfectant soaked paper towels. Avoid splashing or generating aerosol droplets.
 - (5) Leave disinfectant on spill for a minimum contact time of 20 minutes.
 - (6) Decontaminate all objects in spill area (e.g. wipe with disinfectant).
- vii) Use forceps/tongs or a broom to remove broken glass or other solid material (place in sharps container if appropriate).
- viii) Dispose of contaminated materials in the appropriately marked biohazard waste bag or container.
- ix) Decontaminate the area with disinfectant again (then water, if appropriate).
- x) Remove contaminated protective equipment into the biohazard waste container or separately contain contaminated clothing for cleaning and reuse.
- xi) Wash hands and exposed skin areas with soap and water after all protective equipment has been removed.
- xii) Once the cleanup is complete, reinstate the area for use.

f) Regulated Waste Minimization and Disposal

- i) 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.
- ii) During use, containers for contaminated sharps shall be:
 - (1) 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;
 - (2) Maintained upright throughout use; and

- (3) Replaced routinely and not be allowed to overfill.
- iii) Regulated waste disposal is coordinated by Environmental Health and Safety. Service Agreements exist with a company to dispose of regulated waste.
- iv) Care should be taken to minimize the volume of regulated waste generated by the decontamination or destruction of 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.

g) Laundry

- i) Handle contaminated laundry as little as possible, with minimal agitation.
- ii) Place wet contaminated laundry in leak-proof, labeled or color-coded containers before transport. Use bags marked with the biohazard symbol for this purpose.
- iii) Wear PPE when handling and/or sorting contaminated laundry that includes gloves, eye protection and apron.

h) Labels

- i) Red bags with the biohazard label are used.
- ii) Employees are to notify their first line supervisor if they discover regulated waste containers, refrigerators containing blood or OPIM, or contaminated equipment without proper labels. Labels can be obtained through San José State University, Environmental Health and Safety at Industrial Studies Building Room 134 B.

5) Hepatitis B Vaccination

- a) Environmental Health and Safety will provide training to employees on hepatitis B vaccinations, addressing the safety, benefits, efficacy, methods of administration, and availability.
- b) The hepatitis B vaccination series is available at no cost after initial employee training and within 10 days of initial assignment to all employees identified in the exposure determination section of this plan.
- c) Vaccination is encouraged unless:
 - i) Documentation exists that the employee has previously received the series;
 - ii) Antibody testing reveals that the employee is immune; or
 - iii) Medical evaluation shows that vaccination is contraindicated.
- d) If an employee declines the vaccination, the employee must sign a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost.
- e) Documentation of refusal of the vaccination is kept at Environmental Health and Safety located in Industrial Science Building Room 134 B.

6) Post Exposure Evaluation and Follow-Up

- a) When an exposure incident occurs, the exposed employee must report the incident immediately to the supervisor.
- b) Following initial first aid (clean the wound, flush eyes or other mucous membranes), the supervisor must conduct an investigation and perform the following activities:
 - i) Contact the Human Resources, Risk Management and Workers Compensation for assistance in arranging for medical evaluation and treatment by the University's workers compensation health care provider.
 - ii) Investigate and document the routes of exposure and how the exposure occurred.
 - iii) Identify and document the source individual.
- c) Human Resources, Risk Management and Workers Compensation will 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.

- d) A copy of the health care professional's written opinion will be obtained and provided to the employee within 15 days of the completion of the evaluation. It will be limited to whether the employee requires the hepatitis vaccine and whether the vaccine was administered.

7) Employee Training

- a) All employees who have occupational exposure to bloodborne pathogens receive initial and annual training through the online learning management system or by Environmental Health and Safety.
- b) The training will consist of the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. The training will contain the following elements:
 - i) A copy and explanation of the OSHA bloodborne pathogen standard.
 - ii) An explanation of the ECP and how to obtain a copy.
 - iii) An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
 - iv) An explanation of the use and limitations of engineering controls, work practices, and PPE.
 - v) An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE.
 - vi) An explanation of the basis for PPE selection.
 - vii) 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.
 - viii) Information on the appropriate actions to take and persons to contact in an emergency involving an exposure incident to blood or OPIM.
 - ix) 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.
 - x) Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
 - xi) An explanation of the signs and labels and/or color coding required by the standard and used at this facility.
 - xii) An opportunity for interactive questions and answers with the person conducting the training session.
- c) Training courses are available online through the learning management system.

8) Recordkeeping**a) Training Records**

- i) Records are completed for each employee upon completion of training. These documents will be kept for at least three years at San José State University, Environmental Health and Safety, Industrial Studies Building, Room 134 B.
- ii) The training records include:
 - (1) The dates of the training sessions.
 - (2) The contents or a summary of the training sessions.
 - (3) The names and qualifications of persons conducting the training.
 - (4) The names and job titles of all persons attending the training sessions.
- iii) 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 San José State University, Environmental Health and Safety.

b) Medical Records

- i) Medical records are maintained for each employee with occupational exposure in accordance with California Code of Regulations, Title 8, §3204, "Access to Employee Exposure and Medical Records".
- ii) The designated health care provider is responsible for maintaining the required confidential medical records. These confidential records are kept for at least the duration of employment plus 30 years.
- iii) Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days.

c) OSHA Recordkeeping**i) Exposure Incidents**

An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements. This determination and the recording activities are performed by San José State University, Human Resources, Risk Management and Workers Compensation in accordance with the workers compensation plan and medical treatment.

ii) Sharps Injury Log

- (1) In addition to the Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are recorded in a Sharps Injury Log.
- (2) 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.
- (3) All incidences must include at least:
 - (a) Date of the injury
 - (b) Type and brand of the device involved (syringe, suture needle), if applicable.
 - (c) Department or work area where the incident occurred.

(d) Explanation of how the incident occurred.

End

HEPATITIS B VACCINE FORM

I understand that due to my occupational exposure to blood or Other Potentially Infectious Material, 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.

I am potentially exposed to blood and Other Potentially Infectious Materials in my job and would like to receive the series of 3 Hepatitis B vaccine doses given over a 6 month period.

I have received the Hepatitis B vaccination in the past.

The Center for Disease Prevention and Control does not recommend booster shots for people who have completed the vaccination series.

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 OPIM and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Department: _____

Job Title: _____

Employee Name (Print) _____

Employee Name (Signature) _____

Date: _____

Appropriate Administrator Name (Print) _____

Appropriate Administrator Name (Signature) _____

Date: _____

Note: Authority cited: CCR, Title 8, Section §5193. Bloodborne Pathogens.

The original copy of this form is maintained by the Environmental Health and Safety.

End