



San Bernardino
Valley College

San Bernardino Valley College

Blood Borne Pathogens

Exposure Control Program

December 7, 2009

I. PURPOSE

The Blood Borne Pathogens Exposure Control Program (BBP) has been developed by San Bernardino Valley College (SBVC) to promote safe work practices for employees, reduce occupational exposure to Hepatitis Viruses B and C (HBV and HCV) and Human Immunodeficiency Virus (HIV), and ensure compliance with the California Code of Regulations (CCR) Title 8, Section 5193 and Code of Federal Regulations (CFR) 1910.1030, Blood Borne Pathogens – General Industry Standard.

In addition to protecting College employees from the health hazards associated with *blood borne pathogens*, the BBP identifies provisions for the appropriate treatment and counseling of any employee who may become exposed during the course of the work. The College encourages its employees to use safe work practices including but are not limited to the following:

- Being responsible in following safe work practices to minimize exposure to *blood borne pathogens*.
- Never underestimating the risk of exposure to *blood borne pathogens*.

II. PROGRAM REVIEW

To ensure that the Program is kept current, it will be reviewed and updated under the following conditions:

- Annually, at a minimum

- Whenever new or modified work tasks or procedures are implemented which may affect occupational exposure to employees?

This Program is available for review by employees at any time. A written copy of the BPP is located in the Office of the Vice President of Administrative Services, located in the Administration and Student Services Building, Room 206. Copies can also be requested by employees from their immediate supervisor or on the following SBCCD web site: <http://www.sbccd.org/pages/192.asp>

III. PROGRAM RESPONSIBILITIES

Program Coordinator

The Blood borne Pathogens Exposure Control Program Coordinator for the San Bernardino Valley College is the Vice President of Administrative Services. The Program Coordinator is responsible for ensuring that college policies and practices are implemented, employees are provided a safe and healthful work place and that operations are in compliance with the BBP.

Specific Program Coordinator responsibilities include, but are not limited to:

- Working with Administrators, Division Deans, and other managers to administer the policies or practices required to support the effective implementation of this Program
- Providing guidance, resources, and assistance with development of department-specific guidelines
- Working with the college staff to ensure that adequate training, review, and implementation of the BPP has been completed
- Implementing suitable education/training programs for employees
- Maintaining an up-to-date list of college personnel requiring BPP training and the appropriate documentation showing the training was completed
- Reviewing the BBP training programs with the college Facilities and Safety Committee (FASC) on a regular basis to ensure that the BPP is being presented and utilized by employees effectively.

Managers and Supervisors

Employees

It is the responsibility of employees who may become exposed blood borne pathogens during the course of their work to review and acknowledge receipt of the Blood borne Pathogens Exposure Control Program and utilize the following

safety provisions:

- Understanding what tasks they perform that may have occupational exposure to blood borne pathogens.
- Completing and signing all required documents, including immunization forms, if needed.
- Reviewing and acknowledging receipt of information regarding the Hepatitis B vaccination series
- Actively participating in blood borne pathogens training sessions when presented by the College, as required by Cal OSHA
- Following all work practices in accordance with established BBP safety procedures and post-exposure protocol.
- Following good personal hygiene habits.

Contractors

Contractors working on the SBVC campus must meet all regulatory requirements established in T8CCR5193.

IV. Exposure to Infectious Materials

Infectious Materials Definition (see **Appendix A** for additional definitions pertaining to this program)

Infectious materials are defined as follows:

- (a) Human body fluids: blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures and all body fluids including saliva or vomitus in situations where it is difficult or impossible to differentiate between body fluids such as in an emergency response;
- (b) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
- (c) Any of the following:
 - (1) Cell, tissue, or organ cultures from humans or experimental animals;
 - (2) Blood, organs, or other tissues from experimental animals; or
 - (3) Culture mediums or other solutions when it is difficult or impossible to determine content or contamination.

Exposure Risk Determination

Exposure risk determination refers to the process of assessing an employee's exposure to blood born pathogens on the job. Job titles and job descriptions of employees were analyzed by the SBCCD Office of Human Resources to determine the potential for occupational exposure to blood and/or infectious materials. Exposure risks are categorized as regular exposure (Category I), occasional exposure (Category II), or non-exposure (Category III).

Category I (Regular Exposure):

Employees regularly exposed to blood or other potentially infectious material.

- Allied Health Instructors
- Biological Sciences Instructors
- Child Care Instructors and Instructor Aides
- College Police Officers
- Custodians
- Disabled Student Services Coordinator, Learning Disability Specialist, Senior Student Services Technician and Instructional Assessment Technician
- EMF Instructors
- Health Services Center/Health and Wellness Center Director, Coordinator, Nurses and Secretaries
- Maintenance personnel who assist plumbing projects

Category II (Occasional Exposure):

Employees occasionally exposed to blood or other potentially infectious material.

- Health Services Assistants
- Biological Sciences Technicians
- Physiology/Microbiology Laboratory Technicians
- Student Workers (assigned to Category 1 Departments)
- Volunteer Workers (assigned to Category 1 Departments)

Category III (Non-Exposure):

Employees not exposed to blood or other potential infectious materials

Exposure Modes

Exposure modes refer to the activities in which exposure to blood borne pathogens can potentially occur. These activities include:

- Blood drawing and injections

- Sterilizing and disinfecting instruments
- Patient/child or disabled students care (including diapers handling sharps, and handling contaminated clothing)
- Wound treatment
- Clinical laboratory procedures
- Biology laboratory procedures
- Law enforcement and emergency response

V. Methods of Controlling Exposure

SBVC will utilize the following means and methods to limit their exposure to blood borne pathogens:

- **Universal Precautions**

The concept of Universal Precautions treats all human blood and certain human body fluids as if it was infectious for HIV, HBV, HCV, and other blood borne pathogens. SBVC employees should treat all bodily fluids and instruments, environmental surfaces, materials, and laboratory waste potentially contaminated with blood, or other body fluids, as if they are infectious for HIV, HBV, HCV and other blood borne pathogens. Universal precautions include hand washing and the use of personal protective equipment (PPE), such as gloves.

- **Engineering and Work Practice Controls**

When necessary, the College shall use available engineering controls and work practice controls to eliminate or minimize employee exposure to blood borne pathogens.

Engineering controls serve to isolate or remove the blood borne pathogen hazard from the workplace. Examples include:

- hand washing facilities (or antiseptic hand cleansers and towels or antiseptic towelettes)
- needle recapping devices
- sharps containers
- self-sheathing needles
- disposable platforms for lancet devices
- infectious waste bags.

Work practice controls reduce the likelihood of exposure by altering the manner in which tasks are performed. Examples can be found in **Appendix B** of this document and include:

- not allowing needle recapping
- hand washing
- not eating, drinking or applying make-up in areas where there may be infectious materials present
- wearing appropriate personal protective equipment

- proper disinfection of equipment and work areas
 - use of sharps procedures to prevent injury
 - place potentially infectious materials in containers designed to prevent leakage
 - containers that contain such materials will be properly labeled
 - when the potential exists for the specimen to puncture the primary container, the primary container will be placed inside a secondary container that is puncture resistant.
- **Personal Protective Equipment (PPE)**
Appropriate Personal Protective Equipment (PPE) will be available to Category I employees regularly exposed to blood or other potentially infectious materials. PPE may include gloves, gowns, face shield, safety goggles, chemical goggles, as well as CPR shields. When potential for exposure has been identified, the responsible manager or supervisor will determine which type of PPE will be used. It is the college's responsibility to provide proper PPE training and every designated employee who is issued PPE is expected to follow procedures as outlined in this document or prescribed by departmental procedures. Additional information on the use of PPE can be found in **Appendix C** of this document.
- **Clean-Up of Regulated Waste**
Universal Precautions, outlined above, should be employed in the clean-up of regulated waste.
- **Handling Infectious Waste**
It is important that surface areas and equipment be kept clean and sanitary. The following practices should be followed to aid in the elimination of potential exposure hazards:
 - (a) If equipment or its protective covering becomes contaminated, isolate, tag, and notify the appropriate supervisor or manager
 - (b) Any equipment and/or environmental surfaces must be cleaned, and decontaminated after contact with blood or other potentially infectious material.
 - (c) Regulated waste, other than sharps, is required to be placed in a red biohazard container labeled with the appropriate biohazard's warning label. When containers are not located within the immediate area, a red waste disposal bag from the biohazard kit may be used.
 - (d) Discard contaminated sharps immediately in provided sharps containers. Containers should be located as close as possible to the work area where the sharps are used, maintained in an upright position

and replaced routinely so as to not become overfilled.

VI. LABELS AND SIGNS

To effectively minimize exposure to blood borne pathogens, the biohazard warning labeling system is in use to warn employees of possible exposures to blood borne pathogens. These labels, which are red with lettering and symbols in a contrasting color, shall be used in conjunction with the approved red color-coded containers.

The following items shall be labeled:

- Refrigerators or freezers containing potentially infectious materials.
- Containers of regulated waste.
- Other containers used to store, transport, or ship potentially infectious materials.
- Contaminated equipment, PPE or other laundry (equipment sent for repair/maintenance should state on the label which portions of the equipment are contaminated).
- Sharps disposal containers.

VII. EMPLOYEE TRAINING

Employees who have a potential for Category I exposure will be provided with an approved comprehensive BBP training program. This training will occur when:

- the BBP is first established, when modifications and revisions are completed, and annually.
- prior to assignments when potentially exposed to new hazards and when assigned new work tasks.

Employees attending or receiving training mandated by this Program will sign attendance sheets and actively participate in training. The BPP training program shall contain, at a minimum, the following elements:

- Copy and explanation of the BBP
- Epidemiology and symptoms of exposure
- Modes of infectious transmission
- Risk Identification
- Decontamination and disposal procedures
- Use of personal protective equipment
- Hepatitis B vaccination protocol (**Appendix D** of this document)
- Emergency response procedures

- Post-exposure evaluation and follow-up procedures
- Signage and labeling requirements
- Interactive questions and answers.

VIII. RECORDKEEPING

- a) Records of BBP employee training, exposure assessments, and BBP safety and exposure inspections will be maintained for at least 5 years.
- b) BBP employee training records shall include the name of the employees trained, date and type of training provided, and the provider of the training.
- c) Administrators, Division Deans, Department Directors, Managers and Supervisors are responsible for ensuring: (1) employee training records are generated and (2) a copy is sent to the Office of the Vice President of Administrative Services to be maintained on file for five years.
- d) After receiving BBP training, administrators, division deans, department directors, managers and supervisors are responsible for working with the SBCCD Office of Human Resources to identify employees who shall receive training on the BBP and for generating records of Sharps Injuries in their respective areas.
- e) SBCCD Human Resources will maintain a Sharps Injury Log for at least 5 years.
- f) Blood borne pathogen occupational exposure and investigation records are to be retained by SBCCD Human Resources for a period of duration of employment plus 30 years.
- g) All medical information and records, verbal and written, concerning the occupational exposure of a College employee will not be disclosed or released to anyone without the employee's written consent except as required by law. These records will be kept by the **San Bernardino Community College District Human Resources Department.**

**APPENDIX A
DEFINITIONS**

DEFINITIONS

1. **Blood borne 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).
2. **Contaminated:** The presence or the reasonable anticipated presence of blood or other potentially infectious substances/materials on an item or surface.
3. **Contaminated Laundry:** Laundry that has been soiled with blood or other potentially infectious substances/materials or may contain sharps.
4. **Contaminated Sharps:** Any contaminated object that can penetrate the skin including, but not limited to needles, scalpels, broken glass, broken capillary tubes and ends of dental wires.
5. **Engineering Controls:** Controls that isolate or remove the blood borne pathogens hazard from the workplace. Examples: Sharps disposal containers, self-sheathing needles, etc.
6. **Exposure Incident:** A specific eye, mouth, other mucous membrane, non-intact skin or potential contact with blood or other potentially infectious substances/materials that result from the performance of an employee's duties.
7. **Occupational Exposure:** Reasonable anticipated skin, eye, mucous membrane or other potential contact with blood or other potentially infectious substances/materials that may result from the performance of an employee's duties.
8. **Other Potentially Infectious Substances/Materials:**
 - A. The following human body fluids: Semen, vaginal secretions, cerebro-spinal fluids, synovial fluids, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva, 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 (such as in emergency response).
 - B. Any unfixed tissue or organ (other than intact skin) from a human (living or dead).
 - C. HIV-containing cell or tissue cultures, organ cultures and HIV or HBV contaminating culture medium or other solutions; and blood, organs or other tissues from experimental animals infected with HIV or HBV.

9. Parenteral: Piercing mucous membranes or the skin barrier through such events such as needle sticks, human bites, cuts and abrasions.
10. **Personal Protective Equipment:** Specialized equipment worn by an employee for protection against a hazard. General work clothes are not intended to function as protection against a hazard and are not considered personal protective equipment.
11. **Regulated Waste:** Liquid or semi-liquid blood or other potentially infectious substances/materials, contaminated items that would release blood or other potentially infectious substances/materials in a liquid or semi-liquid state if compressed, items that are caked with dried blood or other potentially infectious substances/materials and are capable of releasing these substances/materials during handling, contaminated sharps and pathological and other micro-biological waste containing blood or other potentially infectious substances/materials. Includes "medical waste" as regulated by California Health and Safety Code, Chapter 6.1.
12. **Universal Precautions:** Is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain body fluids are treated as if known to be infectious for HIV, HBV or other blood borne pathogens.
13. **Work Practice Controls:** Controls that reduce the likelihood of exposure by altering the manner in which a task is performed. (Example: Prohibiting recapping of needles by two-handed technique.)

APPENDIX B
SAFE WORK PRACTICE CONTROLS

WORK PRACTICE CONTROLS

1. The Dean of Science shall develop a schedule of disinfection for any work surface, which may become contaminated by the HIV, HCV or HBV virus. The type of chemical utilized shall be approved for the highest antimicrobial activity in order to kill the viruses.
2. Protective coverings shall be replaced as soon as it is feasible.
3. Broken glassware, which may be contaminated, shall not be picked up with bare hands nor shall any employee reach into a container of broken glassware.
4. Regulated waste shall be disposed of in accordance with local, State and Federal regulations.



5. Disposable sharps containers shall be designed according to regulations, not allowed to overfill and be located so that employees shall not have to walk long distances with used syringes.
6. Sharps containers shall be inspected by laboratory faculty and staff members regularly and replaced as required.
7. Other waste containers shall be of a capacity to hold the volume of waste generated between scheduled pickups.
8. All containers shall be inspected by laboratory faculty and staff for leakage potential. Secondary containers shall be available if leakage is possible.
9. All containers holding contaminated material shall comply with CCR, Title 8, Chapter 4.

Sharps Containers must be:

- Completely Leak Proof
- Closable
- Puncture Resistant
- Color Coded and Labeled
- Convenient to Work Areas
- Never Spilled



Sharps Containers

APPENDIX C
PERSONAL PROTECTIVE EQUIPMENT (PPE)

PERSONAL PROTECTIVE EQUIPMENT USE & AVAILABILITY

ITEM	HOW TO OBTAIN	COMMENT
Single-Use Gloves	Request from supervisor	Wear latex gloves whenever there is an opportunity for hand contact with blood, blood products, mucous membranes, non-intact skin, other potentially infectious materials or contaminated items and surfaces. Check for leaks, tears, punctures before each use. Use gloves only one time. Dispose in an appropriate waste container.
Other Gloves	Request from supervisor	Check for leaks, tears, punctures before each use. Dispose in an appropriate waste container.
Lab Coats or Uniforms	Request from supervisor	Check the condition of lab coats before each use. Do not wear lab coats which are obviously soiled. Follow standard laundering or disposal procedures for lab coats, as appropriate.
Masks	Request from supervisor	Wear masks whenever there is a likelihood of splash, sprays, mists or the production of respirable droplets. Ensure that the masks fit properly. Dispose of masks in appropriate containers.
Safety Goggles/ Safety Glasses	Request from supervisor	Wear eye protection whenever there is an opportunity for exposure to blood, blood products or other potentially infectious materials. Clean with appropriate antiseptic agents. Dispose of these items in appropriate containers.
Face Shields	Request from supervisor	Wear face shields whenever there is an opportunity for exposure to large quantities of blood, blood products or other potentially infectious materials. Wear face shields whenever there is a likelihood of splash, sprays, mists or the production of respirable droplets. Clean with appropriate antiseptic agents. Dispose of these items in appropriate containers.
Hoods, Hair Nets	Request from supervisor	Check for leaks, tears and punctures before each use. Dispose in appropriate waste containers.

APPENDIX D

HEPATITIS B VACCINATIONS, POST EXPOSURE & FOLLOW-UP

HEPATITIS B VACCINATIONS, POST EXPOSURE & FOLLOW-UP

1) Vaccination Program

The Hepatitis B vaccination program has been implemented as a precaution for those Category I employees who may be exposed to blood borne pathogens during their routine work tasks. In addition, any employee who has an exposure incident (i.e., needlestick) shall receive the appropriate medical care, including post-exposure inoculation. There is no cost to employees for the vaccinations. The vaccination program consists of a series of three inoculations over a six-month period. As part of their blood borne pathogens training, employees receive information concerning the vaccination, including its safety and effectiveness.

The San Bernardino Community College District Human Resources department is responsible for managing this vaccination program. The vaccinations are to be administered by a qualified medical care facility identified by the Human Resources department

The following steps shall be taken when an employee has been identified as having potential exposure to blood or other potentially infectious materials:

- (a) Unless an employee has already received the vaccine, declines the vaccine, or cannot receive the vaccine because of health problems, he/she will receive the Hepatitis B Vaccination Letter prior to the first day of employment.
- (b) Employees requiring vaccination will be given the Hepatitis B Vaccination Letter and Acknowledgment/Declination form to read, sign and return to the Human Resources Department.
- (c) All employees who refuse to be vaccinated, for whatever reason, must indicate the declination on the Acknowledgement/Declination form. If the employee, at a later date, decides to have the vaccine, it will be provided at no cost.
- (d) A copy of the College Blood Borne Pathogens Exposure Control Program will be provided to healthcare professionals responsible for administering the vaccine and to the physician providing vaccination post-exposure.
- (e) In the event of an exposure incident, the evaluating healthcare professional will send a written opinion stating whether or not they feel a post-exposure inoculation was indicated based on employee lab results and if it was administered.

2) Post Exposure & Follow-Up

If an employee is accidentally exposed to blood borne pathogens during the performance of their work, the following shall be immediately conducted:

- a) Employee must report any exposure incident (i.e., needle stick, scalpel blade cut, blood in the eyes, etc.) immediately to their supervisor, at which time the employee should be given a Blood borne Pathogen Exposure Incident Report form (see Appendix VII) and other Workers' Compensation forms packet. All forms need to be completed and returned to the SBCCD Human Resources Department immediately.
- b) Employee shall be referred to a designated medical facility identified by the Human Resources department, unless they have pre-designated a personal physician prior to an incident. Request forms for the pre-designation of a personal physician are available through the SBCCD Human Resources department.
- c) The responsible supervisor shall complete a Sharps Injury Log and a Supervisor's Accident Investigation Report (Appendix VIII) when applicable, with information provided by the employee, and forwards them to the SBCCD Human Resources department.
- d) The Human Resources Department will review the incident reports to assist with providing recommendations to avoid similar incidents in the future. Recommendations from those reviews, if any, will be submitted in writing to the supervisor and the responsible Site Manager/designee.
- e) If possible, the source individual's blood shall be tested to determine HIV, HBV and HCV infection.

It is important for all persons involved in this process to recognize that much of the information involved in this process must remain confidential to protect the privacy of the employee(s) involved in any exposure incident.

The healthcare professional treating the employee shall be sent all necessary documents describing the exposure incident, any relevant employee medical records and any other pertinent information. The healthcare professional shall provide the SBCCD Human Resources department with a written opinion evaluating the exposed employee's

situation as soon as possible. A copy of this opinion shall be forwarded to the employee within 15 days of completion of the evaluation. After completion of these procedures, the exposed employee should meet with the qualified healthcare professional to discuss the employee's medical status. This includes the evaluation of any reported illnesses, as well as any recommended treatment.

To continue the emphasis on confidentiality, the written opinion shall contain only the following information:

- Whether Hepatitis B inoculations are indicated for the employee.
- Whether the employee has received the Hepatitis B inoculations.
- Confirmation that the employee has been informed of the results of the evaluation.
- Confirmation that the employee has been told about any medical conditions resulting from the exposure incident, which require further evaluation or treatment.
- Confirmation of Hepatitis B titer results

Other findings and diagnoses shall remain confidential and will not be included in the written report.

It is important for all persons involved in the process to recognize that all information, written and verbal, shall be kept strictly confidential.