



BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

**Reviewed and Updated
August 2008**

INTRODUCTION

Piedmont Virginia Community College (PVCC) is committed to providing the safest possible work environment for all employees, including faculty, staff, and student employees.

The OSHA/VOSH 1910.1030 Bloodborne Pathogens Standard was issued to reduce the occupational transmission of infections caused by microorganisms sometimes found in human blood and certain other potentially infectious materials. Although a variety of harmful microorganisms may be transmitted through contact with infected human blood, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV) have been shown to be responsible for infecting persons who were exposed in the course of their employment to human blood and certain other body fluids containing these viruses.

This Exposure Control Plan has been established by Piedmont Virginia Community College (PVCC) to minimize and to prevent, when possible, the exposure of PVCC employees to disease-causing microorganisms transmitted through human blood and to meet the requirements of the OSHA Bloodborne Pathogens Standard.

This plan will be reviewed annually and updated as necessary by the Vice President for Finance and Administrative Services with the assistance of the Human Resources Officer and the Division of Math, Science and Human Services.

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I. GENERAL PROGRAM MANAGEMENT

A. RESPONSIBILITIES

The following offices and individuals shall have the responsibility for the effective implementation of PVCC's Exposure Control Plan:

Office of the Vice President for Finance and Administrative Services;

Human Resources Office;

Division deans and supervisors;

Division of Math, Science and Human Services;

PVCC employees.

The roles of each of these groups are defined below.

1. Vice President for Finance and Administrative Services

Maintaining overall responsibility for implementing the Exposure Control Plan;

Working with the administrators and supervisors to develop and administer any additional policies and practices related to bloodborne pathogens;

Reviewing and revising the Exposure Control Plan as necessary;

Acting as facility liaison during OSHA inspections.

2. Human Resources Office

Maintaining medical and training records:

Administering the Hepatitis B vaccination program;

Implementing exposure incident response actions listed in Appendix B.

3. Division Deans

Division deans and supervisors are responsible for exposure control in their respective areas. They shall work directly with the Vice President for Finance and Administrative Services and PVCC employees to ensure that proper exposure control procedures are followed. They are also responsible for assuring that all new employees receive orientation training with respect

to the bloodborne pathogens program.

4. Division of Math, Science and Human Services

Assisting with employee education and training programs;

Conducting periodic engineering controls inspections.

5. Employees

PVCC employees have the most important role in PVCC's bloodborne pathogens compliance program because the ultimate execution of much of the Exposure Control Plan rests in their hands. In this role they are responsible for the following activities:

Knowing what tasks they perform that have occupational exposure;

Attending the bloodborne pathogens training sessions;

Planning and conducting all operations in accordance with PVCC policies and procedures and work practice controls;

Developing good personal hygiene habits.

B. AVAILABILITY OF EXPOSURE CONTROL PLAN

PVCC's Exposure Control Plan will be made readily available to employees who have the potential for exposure due to the nature of their job duties. Such employees will be briefed on the plan during the new employee orientation. Copies of the plan will be maintained in the Office of the Vice President for Finance and Administrative Services; Human Resources Office; Office of the Vice President for Instruction and Student Services; Division of Math, Science and Human Services; Building and Grounds; Nursing Department; Security Office; Receptionist Desk; and the Betty Sue Jessup Library.

C. REVIEW AND UPDATE OF THE PLAN

The plan shall be reviewed and updated by the Vice President for Finance and Administrative Services in coordination with the Human Resources Office and the Division of Math, Science and Human Services as follows:

Annually, on or before May 30 of each year;

Whenever new or modified tasks and procedures are implemented which affect occupational exposure of employees;

Whenever any tasks of any position are revised such that new instances of occupational exposure may occur;

Whenever new functional positions are established at PVCC that may involve exposure to bloodborne pathogens.

II. EXPOSURE DETERMINATION

A. GENERAL DETERMINATION

All job categories in which it is reasonable to anticipate that an employee will have skin, eye, mucous membrane or parenteral contact with blood or other potentially infectious materials (listed below) shall be governed by this plan. Exposure determination is made without regard to the use of personal protective equipment.

Other Potentially Infectious Materials (OPIM) as defined by OSHA

Body fluids:

Semen

Vaginal secretions

Cerebrospinal fluid

Pleural fluid

Pericardial fluid

Peritoneal fluid

Amniotic fluid

Any body fluid visibly contaminated with blood

Saliva

Other materials:

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

HIV/HBV containing cell or tissue cultures, organ cultures and culture medium

Blood, organs or other tissues from experimental animals infected with HIV or HBV

Unless they contain blood, OSHA does not list the following body fluids as HIV/HVB transmission sources: urine, feces, mother's milk, vomit, or tears.

B. JOB CATEGORIES

All employees who have the potential of being exposed to bloodborne pathogens due to the nature of their employment duties are subject to the Exposure Control Plan. The plan does not include students other than those employed by the college.

The job categories that fall under this plan include, but are not limited to:

Faculty members, instructional assistants, lab managers, and student employees in health sciences, biology and natural science, chemistry, and physical education

Maintenance and housekeeping personnel

Security officers

Any other faculty member, staff member, or student employee who may be exposed to body fluids as a result of his/her occupational duties.

Division deans and supervisors are responsible for identifying their at-risk positions and informing the Human Resources Office.

III. METHODS OF COMPLIANCE

A. UNIVERSAL PRECAUTIONS

At PVCC, all blood or other potentially infectious materials (as described in Part II, Exposure Determination) shall be handled as if contaminated by a bloodborne pathogen. When circumstances prevail which makes the differentiation between body fluid types difficult or impossible, all body fluids shall be considered potentially infectious materials.

B. ENGINEERING CONTROLS

The following engineering controls are used throughout the college where there is

the possibility of exposure to bloodborne pathogens.

Handwashing facilities that are easily accessible to the areas where there is the possibility of exposure to bloodborne pathogens. Where handwashing facilities are not available, germicidal towelettes or other disinfecting controls will be available.

Containers for contaminated sharps that are:

- Puncture-resistant;
- Leak-proof on the sides and bottom;
- Color-coded or labeled with a biohazard label.

Specimen containers that are:

- Puncture-resistant when necessary;
- Leak-proof;
- Color-coded or labeled with a biohazard label.

The college shall use equipment such as sharps disposal containers, ventilating laboratory hoods and biologic safety cabinets as appropriate. Personal protective equipment shall also be used when appropriate.

A representative from the Safety Committee will conduct periodic inspections to identify:

- Areas where engineering controls are currently used;
- Areas where engineering controls can be updated;
- Areas which are not using engineering controls currently, but where they would be beneficial.

C. WORK PRACTICE CONTROLS

In addition to engineering controls, work practice controls shall be used to eliminate or minimize employee exposure to bloodborne pathogens. The Vice President for Finance and Administrative Services, deans, and supervisors shall ensure that employees have adopted the following work practice controls.

1. Handwashing and Other Hygiene Measures

Employees shall wash their hands thoroughly using soap and water or germicidal towelettes whenever hands become contaminated and as soon as possible after removing gloves or other personal protective equipment.

When other skin areas or mucous membranes come in contact with blood or other potentially infectious materials, the skin shall be washed with soap and water, and the mucous membrane shall be flushed with water as soon as

possible.

Eating, drinking, smoking, applying cosmetics or lip balm and handling contact lenses are prohibited in work areas where there is a potential for exposure to bloodborne pathogens.

Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

Employees shall use practices to minimize splashing, spraying, spattering and generation of droplets during procedures involving blood or other potentially infectious materials.

2. Management of Sharp Objects

Shearing or breaking of contaminated needles is prohibited. Contaminated needles and other contaminated sharp objects shall not be bent, recapped or removed unless:

- (a) It can be demonstrated that there is no feasible alternative; or
- (b) The action is required by specific medical procedures.

In the above circumstances, recapping or needle removal is accomplished only through the use of a mechanical device or a one-handed technique.

Sharp object containers shall be closable, puncture resistant, labeled with a biohazard label or color-coded in red, leakproof on the sides and bottom, and maintained upright as long as they are in use. The containers shall be located where they are easily accessible to personnel and as close as is feasible to the immediate area where sharps are used.

Contaminated disposable sharp objects and contaminated broken glass shall be discarded as soon as possible after use in disposable sharp object containers, sealed and disposed of by cremation or other effective means.

Reusable contaminated sharp objects shall be placed in a reusable sharps container and will be decontaminated by autoclaving or otherwise properly processed as soon as feasible.

Maintenance and housekeeping personnel will be advised not to handle or empty sharp object containers.

3. Handling Specimens

Specimens of blood or OPIM shall be placed in a container that prevents leakage during collection, handling, processing, storage, transport or shipping. The container must be closed before being stored, transported or shipped. Containers shall be labeled with a biohazard label if they leave the facility. All specimens at PVCC shall be handled using universal precautions. Therefore, labeling is not necessary for those specimens used in-house.

If the outside of the primary specimen container becomes contaminated or punctured, it shall be placed inside a secondary container which prevents leakage and resists puncture during handling, processing, storage, transport or shipping.

4. Management of Contaminated Equipment

Equipment will be assessed for contamination and decontamination, if possible, before servicing or shipping. Any equipment that has not been fully decontaminated will be labeled as to which parts remain contaminated. The Facilities Manager will be responsible for assuring that equipment is assessed and decontaminated and the procedure that is to be used.

D. PERSONAL PROTECTIVE EQUIPMENT

Division deans and supervisors will identify and provide personal protective equipment for employees in their respective areas and will inform their respective vice presidents of personal protective equipment needs.

All personal protective equipment will be provided, repaired, cleaned and disposed of by PVCC at no cost to the employees. This equipment includes, but is not limited to:

Gloves

Aprons

Laboratory Coats

Face Shields

Masks

Eye Protection

Mouthpieces

Pocket Masks

Employees will wear personal protective equipment when performing procedures in which exposure to the skin, eyes, mouth or other mucous membrane is anticipated.

Employees shall be instructed during their initial training session in the use of appropriate personal protective equipment for their job classifications and tasks or procedures they perform. Additional training shall be provided for new employees if an employee takes a new position or new job functions are added to his/her current position. To determine whether additional training is needed, the employee's previous job classification and tasks shall be compared to those for any new job or function that they shall undertake. Additional training shall be provided by the employee's supervisor.

To ensure that personal protective equipment is used as effectively as possible, employees shall adhere to the following practices:

All personal protective equipment shall be inspected periodically by supervisors and repaired or replaced as needed;

All garments or equipment penetrated by blood or other potentially infectious materials shall be removed immediately, or as soon as feasible;

All personal protective equipment shall be removed prior to leaving the work area and will be disposed of or laundered at the facility.

Gloves shall be worn when:

There is a possibility of hand contact with blood or OPIM;

Employees perform vascular access procedures;

Handling or touching contaminated items or surfaces.

Disposable gloves are replaced as soon as practical after contamination or if they are torn, punctured or otherwise lose their ability to function as an "exposure barrier."

Utility (reusable) gloves shall be decontaminated for reuse unless they are cracked, peeling, torn or exhibit other signs of deterioration, in which case they will be disposed of properly.

Masks and eye protection of face shields shall be used whenever there is the possibility of splashes, sprays or droplets of blood or OPIM.

Protective clothing shall be worn whenever potential exposure to the body is anticipated.

E. MAINTENANCE AND HOUSEKEEPING

Maintaining facilities in a clean and sanitary condition is an important component of an effective exposure control program. In addition to the information below, the PVCC Maintenance Plan contains routine procedures which custodial and maintenance personnel are to follow in order to meet this objective on a continual basis. Supervisors are also responsible for assuring that employees maintain the workplace in a clean and sanitary condition.

1. Equipment and Working Surfaces

Equipment and working surfaces that are contaminated will be cleaned with an appropriate disinfectant:

- (a) After completing procedures;
- (b) Immediately or as soon as feasible after any spill of blood or other possible contaminated material; and
- (c) At the end of the work shift if the surface may have become contaminated since the last cleaning.

2. Special Sharp Object Precautions

Broken glass which may be contaminated will be cleaned up using mechanical means, such as a brush and dustpan, tongs or forceps.

Employees **SHALL NOT** pick up sharp objects directly with their hands.

Reusable containers shall not be opened, emptied or cleaned manually or in any other manner which could expose employees to the risk of percutaneous injury. Employees **SHALL NOT** reach by hand into a container of reusable contaminated sharp objects.

3. Regulated Waste

Regulated waste includes:

Liquid or semi-liquid blood or other potentially infectious materials;

Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed;

Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling.

These substances will be placed in containers that are closeable, puncture-resistant, leakproof, if necessary and labeled with the biohazard label or color-coded in red. The containers will be maintained upright and not allowed to overflow.

Waste containers will be disposed of in accordance with the Virginia's Department of Waste Management's Infectious Waste Management Regulations.

4. Laundry

Employees who handle contaminated laundry will wear protective gloves and other personal protective equipment. It will be handled as little as possible and will not be sorted or rinsed where it is used.

Employees will not take contaminated laundry home for cleaning.

Contaminated laundry will be cleaned by a contractor as designated by the Business Office.

IV. LABELS AND SIGNS

The most obvious warning of possible exposure to bloodborne pathogens is the use of labels and signs. PVCC will use biohazard labels (red-orange or fluorescent orange in color with the biohazard symbol and the text "**BIOHAZARD**" in a contrasting color) where appropriate, and bags and equipment that are color-coded in red.

Warning labels will be attached firmly to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious materials, and any other containers used to store, transport or ship blood or other potentially infectious materials.

V. HEPATITIS B VACCINATION EXPOSURE INCIDENT PROCEDURES

PVCC recognizes that exposure incidents can occur even though all exposure prevention practices are strictly followed. Therefore, the college will implement a Hepatitis B vaccination program, as well as procedures for post-exposure evaluation and follow-up, should exposure to bloodborne pathogens occur.

A. HEPATITIS B PROGRAM

All employees who have been identified as having exposure to bloodborne pathogens will be offered the Hepatitis B vaccination series at no cost to them. The

vaccination consists of a series of three injections over a six month period. If a routine booster dose of Hepatitis B vaccine is recommended or required, it will also be made available to the identified employees at no cost.

The vaccination will be made available to the appropriate employees after they have attended training on bloodborne pathogens and within ten working days of assignment to a job category with exposure.

The vaccination series will not be made available to:

Employees who have previously received the complete Hepatitis B series;

Any employee who has demonstrated immunity through antibody testing;

Any employee for whom the vaccine is medically contraindicated.

The Human Resources Office will administer the program and maintain employee vaccination records.

B. EXPOSURE INCIDENT PROCEDURES

An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials resulting from the performance of an employee's duties. A list of the procedures to follow in the case of an exposure incident is provided in Appendix B and is to be posted in all areas where there is the possibility of an exposure incident.

C. POST-EXPOSURE EVALUATION AND FOLLOW-UP

The division dean or appropriate supervisor shall investigate every exposure incident that occurs at PVCC within 24 hours of the incident and shall report the incident and the results to the Vice President for Finance and Administrative Services on the appropriate form (Appendix C). This investigation will include:

The date and time that the incident occurred;

Where the incident occurred;

What potentially infectious materials were involved in the incident (blood, amniotic fluid, etc.);

Identification and documentation of the source individual, if possible;

Under what circumstances the incident occurred, including the type of work being performed;

The cause of the incident, whether by accident or an unusual circumstance such as an equipment malfunction, power outage, etc.;

The type of personal protective equipment being used at the time; and

The actions taken as a result of the incident.

If the infectivity status of the source individual is unknown, the blood will be tested as soon as feasible after the individual's consent is obtained. If the source individual's blood is available and the individual's consent is not required by law, the blood shall be tested and the results documented. The exposed employee shall be informed of the results of the testing.

The exposed employee's blood will be collected as soon as feasible after consent is obtained and will be tested for HBV and HIV serological status. If the employee does not give consent at the time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as possible.

The exposed employee shall be offered post-exposure prophylaxis, when medically indicated, as well as counseling and medical evaluation of any reported illnesses.

Blood collection, testing, post-exposure prophylaxis, counseling and medical evaluation will be provided by a designated healthcare facility within reasonable proximity to the campus where the employee works. These services will be provided under Worker's Compensation.

The following information will be provided to the healthcare professional evaluating an employee after an exposure:

A copy of the bloodborne pathogens standard;

A description of the exposed employee's duties as they relate to the exposure incident;

The documentation of the route of exposure and the circumstances under which the exposure occurred;

The results of the source individual's blood testing, if available;

all medical records relevant to the appropriate treatment of the employee, including vaccination status.

The Human Resources Office will obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the

completion of the evaluation. The written opinion will be limited to the following information:

The results of the evaluation;

Any medical conditions resulting from exposure to blood of other potential infectious materials which require further evaluation or treatment.

NOTE: All other findings are confidential and shall not be included in the written report.

D. MEDICAL RECORDKEEPING

The Human Resources Office is responsible for keeping all medical records pertaining to the Bloodborne Pathogens Exposure Control Plan. These records include:

Name of employee;

Social security number of employee;

Employee's Hepatitis B vaccination status;

Copies of the results of examinations, medical testing and follow-up procedures which took place as a result of the employee's exposure to bloodborne pathogens.

The records shall be maintained for the duration of employment plus 30 years.

VI. EMPLOYEE TRAINING

Employees of the college who are assigned tasks where exposure may occur will receive periodic training as outlined below. Training will also be conducted for new employees as appropriate during their orientation. Additional training will be provided by supervisors whenever there are changes in tasks or procedures which affect an employee's occupational exposure.

The training approach will be tailored to the needs of the employees. Each training session shall include an opportunity for employees to have their questions answered by the trainer. The Human Resources Office is responsible for scheduling and providing the appropriate training.

A. TRAINING TOPICS

The topics covered in the employee training programs will include, but are not limited to:

An explanation of the Bloodborne Pathogens Standard;

The epidemiology, modes of transmission and symptoms of bloodborne diseases;

PVCC's Exposure Control Plan;

Procedures which may expose employees to blood or other potentially infectious materials;

Engineering controls and work practice controls to be used at PVCC;

Selection and use of personal protective equipment, including the types available, proper use, location within the facility, removal, handling, decontamination and disposal;

Visual warnings of biohazards, including labels, signs and color-coded containers;

Information on the Hepatitis B vaccination program, including the benefits and safety of vaccination;

Information on procedures to use in an emergency involving blood or other potentially infectious materials;

The procedures to follow if an exposure incident occurs;

An explanation of post-exposure evaluation and follow-up procedures;

How to inspect equipment for contamination and how to decontaminate it.

B. TRAINING METHODS

Several training techniques shall be used during the training sessions including, but not limited to:

An interactive classroom atmosphere providing ample opportunity for employees to ask questions;

Videotape programs;

Training manuals and employee handouts;

Overhead slides.

C. RECORDKEEPING

The Human Resources Office shall document the training process and maintain training records containing the following information:

Dates of the training sessions;

Contents or a summary of the training sessions;

Names and qualifications of the trainer(s);

Names and positions of attendees.

The records will be kept for three years from the date the training took place.

APPENDIX A

**MANDATORY HEPATITIS B VACCINATION
DECLINATION FORM**

MANDATORY HEPATITIS B VACCINATION DECLINATION FORM

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.

NAME _____

POSITION _____

DATE _____

WITNESS _____

DATE _____

APPENDIX B

BLOODBORNE PATHOGENS EXPOSURE INCIDENT PROCEDURES

These procedures shall be posted in all areas at Piedmont Virginia Community College where there is the possibility of an exposure to bloodborne pathogens resulting from the performance of an employee's duties.

**** BLOODBORNE PATHOGENS EXPOSURE INCIDENT PROCEDURES ****

In the event of an exposure incident (a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials), the following procedures shall be followed.

- (1) The exposed employee shall **IMMEDIATELY** wash the affected skin with soap and water or germicidal towelette and/or flush mucous membrane with water.
- (2) The scene of the incident, including any equipment, floors and sinks, shall be immediately and thoroughly cleaned and disinfected with an appropriate disinfectant.
- (3) The employee shall inform his/her supervisor of the incident as soon as possible.
- (4) The supervisor shall advise the division dean who shall notify the Human Resources Officer and the Vice President for Finance and Administrative Services.
- (5) The Human Resources Officer shall:
 - (a) Arrange for the employee to receive a Hepatitis B vaccination if the employee has not received one previously. If the employee declines the vaccination, he/she shall be required to sign a declination statement.
 - (b) Upon consent of the employee, arrange to have the employee's blood collected for testing at the designated healthcare facility.
 - (c) Arrange to have the blood of the source individual tested, if a specimen is available or upon consent of the source individual, if the infectious status is unknown.
 - (d) Assure that the employee is informed of the results of the source individual's blood test.
 - (e) Arrange for the employee to have post-exposure prophylaxis, counseling and medical evaluation if necessary.
 - (f) Provide the employee with a copy of the healthcare professional's written opinion within 15 days of the evaluation.
- (6) The division dean will investigate the exposure incident within 24 hours and will report the results to the Vice President for Finance and Administrative Services.

APPENDIX C

BLOODBORNE PATHOGENS EXPOSURE INCIDENT REPORT

The attached form is provided to standardize and facilitate reporting of any exposure incident in accordance with OSHA standards.

**BLOODBORNE PATHOGENS
EXPOSURE INCIDENT REPORT**

Potentially Exposed Employee: _____

Date of Incident: _____ Time: _____

Potentially Infectious Materials Involved (Blood, mucous, etc.): _____

Source Individual: _____

Circumstances under which incident occurred (including type of work being performed):

Describe the cause of the incident (i.e. accident or by unusual circumstance):

Personal Protective Equipment Used at the Time of Incident:

Actions Taken as a Result of the Incident:

Investigator's Signature

Date