

BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

Scope and Application

This Bloodborne Pathogens Exposure Control Plan (ECP) is designed to minimize the potential for occupational exposure to bloodborne pathogens and other potentially infectious materials (referred to as BBP and OPIM), and to provide direction for correctly responding to incidents that may occur in the workplace.

This policy applies to all locations where the potential for exposure to bloodborne pathogens exists. Occupational exposure exists when maintaining and cleaning public areas including public restrooms.

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. OPIMS include:

- Semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood.
- All body fluids in situations where it is difficult or impossible to differentiate between body fluids.
- Any unfixed tissue or organ (other than intact skin) from a human (living or dead).
- Blood, organs, or other tissues from experimental animals infected with HIV or HBV.

The Montgomery County Government is committed to providing a safe and healthful work environment for our entire staff. Unprotected exposure to body fluids and OPIM presents the risk of infection from several bloodborne pathogens. Through proper employee training, recordkeeping, and engineering controls, we minimize the possibility of infection.

Implementation

It is the responsibility of the Risk Manager to administer this procedure and conduct an annual review of this Exposure Control Plan (ECP). It is the responsibility of any employee or contractor involved to adhere fully to this policy and report any exposures immediately to the Elected Official/Department Head, Supervisor or Risk Manager.

Procedure

Exposure Control Plan (ECP) and Training

- A. Employee exposure determination:
 1. All County employees have potential occupational bloodborne pathogen exposure and are hence, included in the ECP
 2. The Risk Manager is responsible for the implementation and annual review of:
 - a. Exposure Control Plan (ECP). This will reflect changes in regulations and safety technology.
 - b. Selection and review of the use of Personal Protective Equipment (PPE).
 - c. Review of engineering controls, e.g., sharps containers, labels, and disposal bags.
 - d. Ensuring that required medical actions are performed and documented.
 - e. Maintaining employee health and medical records.
 3. The Risk Manager is responsible for training employees.
 - a. Training will be provided to all potentially exposed employees and is free and available during work hours.
 - b. The Safety Coordinator will ensure all training materials available to employees. Training may be conducted live or through online training.
 - c. The Exposure Control Plan (ECP) will be available to all employees.
 - d. Employees are encouraged to give feedback on training as well as any issues, risks, and controls and their effectiveness.
 4. Employees who have potential occupational exposure to bloodborne pathogens will be trained on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. The training program covers, at a minimum, the following elements:
 - a. OSHA bloodborne pathogen standard.
 - b. The County's ECP and how to obtain a copy.
 - c. Methods for recognizing tasks that may involve exposure to blood and other body fluids and what constitutes an exposure incident.
 - d. Use and limitations of engineering controls, work practices, and PPE.
 - e. Proper PPE types, uses, locations, removal, handling, decontamination, and disposal.
 - f. The basis for PPE selection.
 - g. Bloodborne pathogens, such as, Malaria, Syphilis, Brucellosis, Hepatitis B and C, HIV, Severe Acute Respiratory Syndrome (SARS), and Staph (MRSA).
 - h. Hepatitis B vaccine, including information on its efficacy, safety, method of administration, benefits, and stating that the vaccine will be offered free of charge.

- i. Appropriate actions to take and persons to contact in an emergency involving blood or other body fluid.
- j. Procedure to follow if an exposure incident occurs, including the method of reporting the incident and the available medical follow-up.
- k. Post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.

Post-Exposure Follow Up

1. Ensure initial first aid treatment is fully executed.
 - a. Protect yourself or anyone else involved in an exposure response.
 - b. Clean the wound by washing injuries with soap.
 - c. Flush and irrigate with water any splashes to the nose, mouth, skin or other mucous membranes. Caustics and bleach are not recommended.
 - d. Irrigate eyes with clean water, sterile irrigants, or saline solution. Note- There is no scientific evidence to indicate that antiseptics or wound squeezing reduce bloodborne pathogen transmission risk.
 - e. Secure necessary medical attention appropriate to the incident immediately.
 - f. Make a prompt report of the incident to your manager.
 - g. All incidents are to be reported to the Risk Management Department.
2. Post exposure follow up will be conducted by the Risk Manager, Safety Coordinator or Department Supervisor, as applicable, immediately following an incident to determine:
 - a. Engineering controls in use at the time and their effectiveness. Type and brand of device being used.
 - b. Work practices being followed at the time and their effectiveness.
 - c. Protective equipment and clothing being used at the time and their effectiveness.
 - d. Location of the incident.
 - e. Procedure(s) being performed.
 - f. Level of the exposed-employee's training.
3. The Risk Manager will conduct a medical evaluation immediately following initial first aid:
 - a. Document the routes of exposure and how the exposure occurred.
 - b. Identify and document the source-individual (unless identification is infeasible or prohibited by law).
 - c. After obtaining consent, arrange to have the source-individual tested to determine HIV, HCV, SARS, and HBV infectivity where possible. Document that the source-individual's test results were conveyed to the employee's health care provider.

- d. After obtaining consent, immediately send exposed-employee for blood collection and test blood for HBV and HIV serological status.
 - e. If the exposed-employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days. If the exposed-employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.
4. Risk Management will provide to the testing facility the needed information relating to the incident and the individuals involved.

Recordkeeping

Training and medical records must be maintained:

1. The Department for each employee maintains training records.
2. Training records will be available to employees, from the Safety Manager, upon request and within 15 working days.
3. Medical records are maintained by Human Resources/Risk Management for each employee:
 - a. Records are kept confidential.
 - b. Records are maintained for at least the duration of employment plus 30 years.
 - c. Training records are available to employees, from the Safety Manager, upon request and within 15 working days.
4. Sharp's injury log requirements:
 - a. All exposure incidents will be evaluated to determine if they trigger OSHA's recordkeeping requirements and if so the incident and record is to be loaded to the Incident Track application of the Risk Management Center.
 - b. All percutaneous injuries from contaminated sharps will be recorded in the "Sharps Injury Log". Records will include at least:
 - i. Date of the injury.
 - ii. Type and brand of the device involved (syringe, suture needle).
 - iii. Department or work area where the incident occurred.
 - iv. Explanation of how the incident occurred.
 - c. 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:
 - d. If a copy of the report is requested, it will have all personal identifiers removed.

Universal Precautions

This is an approach to infection control.

1. 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, and other bloodborne pathogens.
 - a. All staff are to observe Universal Precautions to prevent contact with blood or other potentially infectious materials (OPIM).
 - i. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.
 - ii. Treat all blood and other potentially infectious materials with appropriate precautions such as use of impermeable gloves, masks, and gowns if blood or OPIM exposure is anticipated.
 - iii. Use specified engineering and work practice controls to limit exposure.
2. The Centers for Disease Control (CDC) recommends **Standard Precautions** for the care of all patients, regardless of their diagnosis or presumed infection status.
 - a. **Standard Precautions** apply to:
 - i. Blood
 - ii. All body fluids, secretions, and excretions, *except sweat*, regardless of whether or not they contain visible blood
 - iii. Non-intact skin
 - iv. Mucous membranes
 - b. Standard precautions are designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection in hospitals.
 - c. Standard precautions include the use of:
 - i. Hand washing
 - ii. Appropriate personal protective equipment whenever touching or exposure to patients' body fluids is anticipated, such as
 1. Gloves
 2. Gowns
 3. Masks
3. Transmission-Based Precautions (i.e., Airborne Precautions, Droplet Precautions, and Contact Precautions) are recommended to provide additional precautions beyond Standard Precautions to interrupt transmission of pathogens in hospitals.
 - a. Transmission-based precautions can be used for patients with known or suspected to be infected or colonized with epidemiologically important pathogens that can be transmitted by airborne or droplet transmission or by contact with dry skin or contaminated surfaces.
 - b. These precautions should be used in addition to standard precautions:
 - i. Airborne Precautions used for infections spread in small particles in the air such as chicken pox.

- ii. Droplet Precautions used for infections spread in large droplets by coughing, talking, or sneezing such as influenza.
 - iii. Contact Precautions used for infections spread by skin-to-skin contact or contact with other surfaces such as herpes simplex virus.
 - iv. Airborne Precautions, Droplet Precautions, and Contact Precautions; may be combined for diseases that have multiple routes of transmission. When used either singularly or in combination, they are to be used in addition to Standard Precautions.
4. Needle stick and other sharps injuries:
- a. Incidents involving sharps occur most often in medical facilities and with medical provider personnel, (e.g., nurses and CAN's).
 - b. Injuries are due to unsafe needles, sharps, sharps containers that allow hands or fingers to enter the container, and their unsafe handling.
 - c. Potential health hazards include exposure to bloodborne pathogens.
 - d. Work practice controls for reducing exposure potential are in place based on the following exposures and include:
 - i. Exposure: Contact with fluids during first aid treatment.
 - 1. Control:
 - a. PPE including latex gloves, safety glasses with side shields, or goggles, CPR mask.
 - ii. Exposure: Handling sharps, blades, needles, etc.
 - 1. Control:
 - a. Only dispose of sharps in mailbox style (or other design that prevents hands or fingers from entering receptacle) **immediately** after use.
 - b. Never use your fingers to push into a container.
 - c. Never push on bags or other non-sharps designated container.
 - d. Do not break contaminated sharps.
 - e. **NEVER** recap, remove or bend needles and sharps unless this is specifically required procedurally!
 - iii. Exposure: CPR and stomach contents
 - 1. Control: CPR mask
 - iv. Exposure: Body fluid spills
 - 1. Control: Cleanup using latex gloves and approved disinfectant.
 - v. Exposure: Contaminated sharps, blades, needles
 - 1. Control:
 - a. Provide approved sharps disposal containers as noted above.
 - b. Keep containers close and accessible to areas where needles or sharps are found and used.
5. Container requirements for regulated waste:

- a. Will be leak proof, closeable, and puncture resistant.
- b. Will not contain loose sharps!
- c. Disposable items such as gauze, towels, cotton products, gloves, and masks will be placed in appropriate waste containers.
- d. Will not be overfilled and will be stored upright.
- e. Will be handled only by ECP trained and authorized staff.
- f. Labeling and signage:
 - i. Bio-hazardous waste container will be red in color.
 - ii. Are labeled with the biohazard symbol:
 1. Will have fluorescent orange label lettering.



- iii. Individual containers do not have to be labeled if they are in a larger, properly labeled, container for shipping.
6. Housekeeping to ensure prevention of exposure to bloodborne pathogens.
- a. Use spray/wipe/spray technique on all touch and splash surfaces. An EPA registered surface disinfectant will be provided to apply to the surfaces to be cleaned.
 - b. A second coat will be applied to these same surfaces and allowed to remain in a moist state for the recommended time as per product instructions.
 - c. Although the areas should remain moist, they should not be dripping wet.

Personal Protective Equipment (PPE)

1. Must be made available to employees and provided at no cost to employees.
2. All PPE to be worn shall be based on a Hazard Assessment done for the tasks and exposures present.
3. A Job Hazard Analysis is required and can be used for creating these documents.
4. Types of PPE available to employees:
 - a. Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

- b. Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments shall be worn in occupational exposure situations.
 - i. The type and characteristics will depend upon the task and degree of exposure anticipated.
 - ii. Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated (e.g., autopsies, orthopedic surgery).
5. Handling precautions:
 - a. Wash hands with antiseptic soap immediately after removing gloves or other PPE.
 - b. Wear gloves specified on your hazard assessment when there is any potential for hand contact with body fluids or OPIIM and when handling or touching contaminated items. Replace gloves if torn, punctured, or contaminated.
 - c. Wear appropriate face and eye protection, gowns, aprons, lab coats, clinic jackets, or similar outer garments specified on your hazard assessment when splashes, sprays, spatters, or droplets of body fluids pose a hazard to the eyes, nose, or mouth.
 - d. Remove PPE after it becomes contaminated and before leaving the work area and dispose of ONLY in properly labeled and designated containers.
 - e. Remove any garment contaminated by body fluids in such a way as to avoid contact with the outer surfaces.
6. Maintenance and care of equipment:
 - a. Used PPE will be disposed of ONLY in properly labeled and designated containers.
 - b. PPE will be disposed of in designated containers for cleaning or disposition.
 - c. Never clean and reuse contaminated disposable gloves.
 - d. PPE to be reused will be cleaned after every use.
 - e. Cleaning will be recorded on the organization's preventive maintenance schedule.
7. Latex allergies can result from sensitivity to latex gloves. Alternate materials are available and must be available and worn.

Illnesses

Hepatitis B Virus

1. Defined: Inflammation of the liver that can lead to liver damage and death.
 - a. It is more transmissible than HIV.
 - b. Infection risk is 6% to 30% for a needle stick.
 - c. 50% of infected people do not know they have it.
 - d. The virus can survive for 1 week in dried blood.

2. Our organization will provide the vaccination for employees that are exposed to blood.
3. The Safety Coordinator will ensure training is available to employees on Hepatitis B vaccinations that addresses:
 - a. Methods of administration and availability.
 - b. Safety: Hepatitis B vaccine and HBIG are considered safe.
 - c. Benefits: Hepatitis B vaccine and HBIG can prevent bloodborne virus infection following occupational exposure.
 - d. Efficacy: the FDA approves hepatitis B vaccine and HBIG.
 - e. Timing following exposure - Preferably within 24 hours, but not later than 7 days.
4. The Hepatitis B vaccination series is available to all exposed employees at no cost to them after initial employee training and within ten days of initial assignment. Vaccination is encouraged unless:
 - a. Documentation exists showing the employee has previously received the series.
 - b. Antibody testing reveals that the employee is immune.
 - c. Medical evaluation shows that vaccination is contra-indicated.
5. Employees may decline the vaccination.
 - a. The declining employee will sign a copy of the Declination form (attached).
 - b. The Department keeps completed Declination forms.
6. Post vaccination:
 - a. Workers will be tested as recommended by County authorized Medical Provider following the vaccine series to ensure that sufficient immunity to HBV is provided.

Hepatitis C Virus (HCV)

1. Hepatitis C is the most chronic bloodborne infection in the U.S.
2. Needle sticks are the most common cause of infection.
3. Infection rate is 1.8% from needle stick occurrences.
 - a. Typically, there are no symptoms.
 - b. Chronic infection can develop, which could lead to liver disease.
 - c. There is no vaccination for HCV.
4. The organization will offer employees a medical evaluation if they are involved in an incident where there was an exposure. A confidential medical evaluation is required after an exposure.

Human Immunodeficiency Virus (HIV)

1. HIV has been reported to occur from skin contact and splashes in the mucous membranes. The most common cause is from needle sticks and cuts.
 - a. Infection rate is 0.3%, or 1 in 3000 cases.
2. Check with the organization about providing post-exposure prophylaxis for HIV to employees who were involved in an exposure incident.
 - a. Be aware that prescription drugs may reduce side affects but still have side effects.
 - b. A confidential medical evaluation is required after an exposure.
 - c. Treatment should begin as soon as possible, preferably within hours.
 - d. The worker should discuss treatment risks and side affects with their physician.
 - e. These drugs are FDA approved for treatment of existing infections only.



Hepatitis B Vaccine Declination Form

Montgomery County Government

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 cost to me. 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 cost to me.

Name: _____

Signed: _____ Date: _____



Appendix B: Sharps Injury Log

Department: _____

Year _____

The Bloodborne Pathogen rule requires that you establish and maintain a Sharps Injury Log to record all contaminated sharps injuries in a facility. The purpose of this log is to help you evaluate and identify problem devices or procedures that require attention.

The Sharps Injury Log needs to do **all** of the following:

- Maintain sharps injuries separately from other injuries and illness kept on the Injury and Illness Log as required.
- Include ALL sharps injuries that occur during a calendar year.
- Be retained for 5 years beyond the completion of that calendar year.
- Preserves the confidentiality of affected employees.

Date	Type of Device (examples: syringe, suture needle)	Brand Name of Device	Work area where injury occurred examples: (Restroom, Lab)	Brief description of how the incident occurred: (examples: procedure being done, action being performed (injection, disposal), body part injured.