**ERIE COUNTY MEDICAL CENTER CORPORATION**
**POLICY AND PROCEDURE**

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| **Name/Title of Policy:**<br>**Bloodborne Pathogens (BBP) Exposure Control Plan** | **Policy #**: IC- 003 |
| **Policy Type** (choose one by inserting X)<br>X Administrative<br>__ Clinical Practice | **Prepared by**: Infection Preventionists |
| **Reference:**<br>OSHA blood borne Standard Dec 6, 1991 | **Applies to**: ECMCC Hospital and Long Term Care Staff |

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| Replaces the following P&P(s), if applicable: |

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| Effective Date | 3/92 | | | |
| Review Date | 06/04, 12/05,11/09 | 7/15 | | |
| Revision Date | 11/06. 11/12 | | | |

## I. Policy Purpose, Statement of Policy, and Policy Goals:

This Policy sets forth the minimum standards that must be met with respect to exposures and prevention of contact with bloodborne pathogens. In situations where these hazards exist, it is the responsibility of each entity to minimize or eliminate the potential for worker exposures. This Bloodborne Pathogen Exposure Control Plan is intended to meet the requirements of the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogens Standard: Final Rule 29 CFR 1910.1030.

This plan applies to all ECMCC permanent, temporary, medical staff, and volunteer workers who may anticipate risk of occupational exposure to blood or other potentially infectious materials. Additionally, all contract workers and students working in ECMCC facilities will be covered by this plan. This plan addresses the methods of compliance with the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogens Standard; Final Rule 29 CFR 1910.1030 (Appendix C) through the use of institutional policies and standards of practice. These specific policies and procedures are intended to strengthen Standard Precautions and are consistent with existing policies, as well as the intention of OSHA in publishing the rule and subsequent directives. The focus of this plan is on reducing the risks of bloodborne pathogen exposures throughout ECMC.

Each department will address compliance with the OSHA Standard for specific functions.

## II. Procedure

### A. Introduction

ECMCC has implemented an Exposure Control Plan in order to minimize occupational exposure to diseases transmitted by the bloodborne route. This is accomplished by providing a safe working environment through the practices of:

(1) Exposure Determination
(2) Standard Precautions

(3) Engineering Controls
(4) Hepatitis B Vaccination Program
(5) Post-Exposure Follow-up (Refer to Employee Health)
(6) Housekeeping Practices
(7) Employee Education
(8) Recordkeeping

**B. Program Review**

The Patient Safety Department and , the Hospital Epidemiologist, are primarily responsible for this plan and for it's maintenance, update, and review. However, each department is responsible for maintenance and monitoring of the Bloodborne Pathogens Control Program.

A copy of this Exposure Control Plan is accessible to all employees during working hours on the ECMC intranet.

**METHODS OF COMPLIANCE:**

**C. Standard Precautions**

All employees will utilize standard precautions. Standard precautions are designed to reduce the risk of transmission of pathogens by workers assuming that all human blood and body fluids are infectious for Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and other pathogens, and must be handled accordingly. Protection can be achieved through adherence to work practices designed to minimize or eliminate exposure and through use of PPE (i.e., gloves, masks, and protective clothing) which provide a barrier between the worker and the exposure source.

**D. Engineering and Work Practice Controls**

Policies and Procedure will define physical controls utilized by the department (i.e. splash guards, etc.), specimen handling controls, locations where food and drink are or are not permitted, and any other specific work practices or engineering controls utilized by the department to minimize the likelihood of exposures.

1. Hand Hygiene: Handwashing facilities must be readily accessible. Waterless hand Sanitizer will also be provided as an alternative when hands are not visibly soiled. Hands hygiene shall be performed under the following conditions:

    a) Immediately or as soon as feasible after the removal of PPE.
    b) Following contact with blood or other potentially infectious materials. Any other skin or mucous membranes that have contact with these materials shall be washed as soon as feasible.

2. Spill Clean-up: Precautions should be taken when cleaning potentially infectious spills:

    a) Obtain necessary supplies – disposable absorbant towels, PPE, appropriate disinfectant, and wet floor warning sign if necessary.
    b) Never pick up contaminated glass or sharp objects with the hands. Use a dustpan and brush, clamps, or other device for this purpose. Dispose of sharp materials in sharps container (i.e., broken glass tube).
    c) Absorb liquid material with towels and dispose of in the appropriate receptacle (soiled disposable towels – biohazard bag, any soiled linen would go in a plastic linen bag). Apply appropriate disinfectant to spill area. Let set for designated dwell time of disinfectant. Place wet floor warning sign in front of wet area if appropriate.

d) Wipe over areas with cleaning solution following the manufacturers recommendations to complete the cleaning process.
e) Dispose of PPE in appropriate receptacle.
f) WASH HANDS.

3. Sharps Injury Prevention Policy

Review of Safer Devices: ECMCC has processes in place to regularly review appropriate, commercially available safety devices and implement those that prove to be effective at eliminating or minimizing worker exposures and injuries. ECMC Percutaneous Exposure Prevention Committee includes representation from various clinical settings and departments. This group reviews exposure data, identify trends in injuries, and explore safer medical device options. An injury and sharps log is maintained by Employee Health.

Employee Health maintains the sharps injury log for recording percutaneous injuries from contaminated sharps. The sharps injury log contains:

a. The type and brand of device involved in the incident;
b. The department or work area where the exposure incident occurred;
c. A description of how the incident occurred.

a) Recommendations of this team are forwarded to the Value analysis Committee for review. The Committee, with representatives from different disciplines, make product standardization decisions for ECMCC. If a device (or several devices) appears to meet the corporations needs to prevent injuries, it is evaluated through pilot testing in multiple departments. Based on the outcome of a product evaluation, the Committee may make a determination on product standardization for the system and facilitate the adaptation of a safer device.

b) Sharps Handling – Contaminated sharps shall not be:

1) Bent
2) Sheared
3) Recapped
4) Removed by hand

When recapping or needle removal is required, it shall be performed using a mechanical device (e.g., forceps, recapping device, or the one-handed "scoop technique). Recapping or removing contaminated needles should only be performed when there is no feasible alternative or when it is required by a specific procedure. Instances of recapping or manipulation of needles may include injections performed by nuclear medicine or some aspects of anesthesia.

c) Sharps Disposal – Contaminated sharps shall be discarded immediately, or as soon as possible, in a container that is:

1) Labeled with a "Bio-Hazard Label"
2) Color Coded
3) Puncture Resistant
4) Leak-proof
5) Placed as close as feasible to the area of use.

These containers must never be overfilled. They must be kept upright and closed immediately prior to removal or replacement to prevent spillage.

4. Work Area Restrictions: Eating, drinking, smoking, applying cosmetics or lip balm, and the handling of contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure. This includes laboratory work areas, patient and treatment rooms, and other patient care areas. Personnel are to eat and drink only in areas designated for these purposes (clean areas such as cafeteria, lounges, and break rooms). In addition, food and drink shall not be kept in refrigerators, freezers, shelves, or bench tops where blood or other potentially infectious materials are kept.

5. Procedures: All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances (e.g., cleaning contaminated instruments, irrigations). Specific measures taken should be identified in department-specific written procedures. Mouth pipetting or suctioning of blood or potentially infectious material is prohibited.

6. Specimen Handling: All containers used to contain specimens of blood or other potentially infectious materials shall prevent leakage during collection, handling, storage, transport, or shipping. Biohazard labels must be attached to carriers designed to transport multiple specimens. If the outsides of the specimen containers are soiled with blood or other potentially infectious materials, the primary containers must be placed in a secondary container that prevents leakage during all phases of handling. The secondary container shall also be puncture resistant. If the transport container becomes contaminated, the person identifying the leakage shall promptly clean up the spill according to protocol.

7. Contaminated Medical Equipment: All equipment which may become contaminated during use shall be examined prior to servicing or shipping and shall be decontaminated as necessary and when possible. Prior to sending equipment that may be decontaminated to Engineering or after initiating service call, it shall be decontaminated with hospital approved disinfectant. When it is not possible or feasible to decontaminate the equipment, the parts that are contaminated must be labeled with a biohazard symbol stating which portions may be contaminated. Those who perform maintenance on potentially contaminated equipment must observe Standard Precautions and wear appropriate PPE when handling contaminated equipment. If it is necessary to ship equipment that has not been decontaminated to a manufacturer, the company representative or the manufacturer must be notified of the biohazard prior to shipping and appropriate labels must be affixed to the equipment.

8. Personal Protective Equipment:

    a) Provision. When there is a risk of occupational exposures, personal protective equipment (PPE) such as, but not limited to gloves, fluid resistant gowns, face shields, masks, or respirators, will be provided at no cost to employees. PPE will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it prevents blood or other infectious material from passing through or reaching worker's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used. It is the responsibility of the employee to inform the manager/supervisor of difficulty or inability to obtain/use specific PPE so that an alternative solution may be determined.

    b) Use. All personnel who have potential for occupational exposure are required to use personal protective equipment when they have reasonable anticipation of exposure. The only exception is in rare circumstances when, in the employee's professional judgement, a specific instance would have

prevented the delivery of care or would have posed an increased hazard to the safety of the worker or co-worker.

c) Accessibility. Appropriate PPE in proper sizes shall be readily accessible at the work site or issued to employees. Persons with allergies or other conditions limiting the ability to use certain PPE shall be evaluated by Employee Health to determine the appropriate solution.

d) Cleaning, Laundering, and Disposal. PPE shall be provided, replaced, cleaned, repaired, laundered, and/or disposed of at no cost to employees. Any time PPE is contaminated by blood or other potentially infectious materials, the garments shall be removed immediately or as soon as feasible, in a manner that prevents contact with non-intact skin and mucous membranes. Disposable PPE is disposed of as appropriately based on presence of visible soilage with blood or body fluids. All used laundry is to be placed in linen bags. Standard Precautions will be used when handling all laundry. All PPE must be removed prior to leaving the work area. If personal protective equipment fails to protect against the soiling of employee personal clothing, the PPE is not appropriate for the tasks being performed. Laundering of personal clothing items may be addressed on a case-by-case basis at each facility. Care shall be exercised in the handling of contaminated personal clothing.

e) Gloves. Gloves shall be worn when contact with blood, mucous membranes, non-intact skin or other potentially infectious material is likely. Disposable gloves must be removed and replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when the barrier properties are compromised. With the exception of reusable utility gloves, gloves should never be washed or decontaminated for reuse. Utility (heavy-duty reusable) gloves are to be decontaminated with approved solution following the last use of the shift. However, they must be discarded if they are cracked, torn, punctured, or exhibit other signs of deterioration. Disposable gloves are for single use only. A variety of gloves, including powderless and hypoallergenic gloves are available. Persons with known allergies to latex gloves must notify Employee Health of their condition to determine the appropriate solution.

f) Masks, Eye Protection, Face Shields. Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, shall be worn whenever splashes, sprays, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated. Eyeglasses without sidepieces are not considered personal protective equipment. Reusable goggles are to be cleaned with hospital provided decontamination solution by the user of the goggles. They shall be thoroughly cleaned and rinsed with water before reuse.

g) Gowns, and other Protective Body Covering. Appropriate protective clothing shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated. In all circumstances the garment chosen will not allow blood or other potentially infectious materials to pass through to the skin or mucous membranes of the person. All used coverings shall be disposed of in appropriate receptacles after use.

h) Surgical Caps or Hoods, Shoe Covers, or Boots. Additional protective clothing shall be worn when gross contamination of the head or feet is reasonably anticipated (e.g., decontamination, obstetrical delivery, urologic procedures).

i) Resuscitation Devices. Barrier devices shall be used in place of mouth to mouth resuscitation. Following use, such items, if reusable, will be decontaminated. Those devices that are disposable will be discarded in the appropriate receptacle.

j) Housekeeping: All ECMCC departments are maintained in a clean and sanitary condition. Written cleaning and decontamination schedules for all facility areas have been determined and are maintained in the Environmental Services Departments or in department-specific written guidance. General housekeeping practices include cleaning and decontaminating equipment and work surfaces after completing procedure, when surfaces are overtly contaminated, immediately after any spill of blood or other potentially infectious materials, and at the end of the work shift. All bins, pails, cans, and similar receptacles intended for re-use that have a potential for becoming contaminated with blood and other potentially infectious materials are inspected and decontaminated as soon as possible upon visible contamination.

Broken glassware that may be contaminated shall not be picked up directly with the hands. It is handled by using mechanical means, such as a brush and dustpan, tongs, or forceps and deposited into a puncture resistant sharps container for disposal.

A facility approved disinfectant is used to clean spills of blood or other potentially infectious materials.

Sharps containers shall be maintained in an upright position and replaced routinely. They should be changed or replaced when three quarters (3/4) full. When removing containers of sharps for disposal, they shall be closed tightly with no protruding of the contents. They shall also be placed in a leak-proof secondary container labeled with a biohazard label. Similar caution shall be taken when handling non-sharp, biohazard trash. This trash shall be in a sealed bag to prevent spillage or leakage and placed in an appropriate container labeled as a "biohazard."

Contaminated laundry will be handled as little as possible. It shall be bagged at the location where it was used and will not be sorted or rinsed at the location of use.

**HEPATITIS B VACCINATION:**

The purpose of the Hepatitis B Vaccination Program is to provide the Hepatitis B vaccine series free of charge to all employees who have a potential risk of occupational exposures or risk of exposures to blood and other potentially infectious materials, and any other employees who request the vaccine, while performing their work duties. This vaccine is offered through Employee Health during their initial employment/ assignment. If an employee chooses to decline the vaccination, they must sign the OSHA-required Declination Statement.

**POST-EXPOSURE EVALUATION AND FOLLOW-UP:**

The purpose of post-exposure evaluation and follow-up is to immediately follow-up all occupational exposures to blood and body fluids, confidentially evaluate the source and circumstances of exposure, and offer prophylactic treatment when necessary.

The post-exposure follow-up procedures and documentation are outlined in the Employee Health Policies. (available on the ECMC intranet)

## COMMUNICATION OF HAZARDS TO EMPLOYEES:

### A. Labels and Signs

Labeling with the biohazard symbol or the use of red bags or containers is used to warn employees of potential hazards. The universal biohazard symbol must always be used in conjunction with the word "biohazard." The warning labels must be fluorescent orange or red in color.

1. The following items must be labeled appropriately as biohazard:

    a) Contaminated equipment

    b) Containers of regulated waste

    c) Refrigerators and freezers to store blood or other potentially infectious materials

    d) Sharps disposal containers

    e) Containers used to store, transport, or ship blood or other potentially infectious materials (e.g., blood drawing trays)

    f) Containers used to transport items contaminated with blood or other potentially infectious materials (e.g., OR case carts, basins, specimen caddy)

2. Labeling is not required for:

    a) Containers of blood, blood components, and blood products labeled as to their contents and released for transfusion or other clinical use because they have been screened for HBV and HIV prior to their release.

    b) Individual containers of blood or other potentially infectious materials that are placed in secondary labeled containers during storage, transportation, shipment, or disposal.

    c) Specimen containers: Standard Precautions are utilized when handling all specimens.

    d) Laundry bags: Standard Precautions are used when handling all laundry.

### B. Information and Training

Training regarding occupational hazards and required personal protective measures will be provided to all new employees at general orientation for employees with risk of occupational exposures. As part of department specific orientation, employees with risk of occupational exposure will receive job specific training prior to beginning activities that may place them at risk of occupational exposure. Retraining must occur on an annual basis within one year of the original training date. Department managers must ensure that employees receive annual training. An individual knowledgeable on the subject matter must conduct the training. Training content must include:

1. An accessible copy of the regulatory text of OSHA standard 29 CFR Part 1910.1030, Bloodborne Pathogens Standard (See attachment to this policy).

2. A general explanation of the epidemiology and symptoms of bloodborne diseases.

3. An explanation of the modes of transmission of bloodborne pathogens.

4. An explanation of the exposure control plan and the means by which the employee can obtain a copy of the written plan.

5. An explanation of how tasks and other activities that may involve exposure to blood or other potentially infectious materials can be recognized.

6. An explanation of methods that will prevent or reduce occupational exposure, including appropriate engineering controls, work practices, and PPE, and the limitations of each.

7. Information on the types, proper uses, location, removal, handling, decontamination, and disposal of PPE.

8. An explanation of the basis for the selection of PPE.

9. Information on the HBV vaccine including efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccination will be offered free of charge through the Occupational Health Department.

10. Information on the appropriate actions to take and persons to contact in an emergency involving exposures to blood or other infectious materials.

11. An explanation of the procedure to follow if an exposure incident occurs, including method of reporting the incident and the medical follow-up that will be made available.

12. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.

13. An explanation of the signs and labels and/or color-coding used to identify hazards.

**RECORDKEEPING:**

**A. Medical Records**

A medical record must be established and maintained for each employee with the potential for occupational exposures. These records will include:

1. The employee's name and employee number, which can be cross-referenced to obtain the employee's social security number.

2. A copy of the employee's hepatitis B vaccination status, including the date of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive the vaccinations.

3. A copy of all results of examinations, medical testing, and follow-up procedures that have been compiled as the result of an occupational exposure.

Employee medical records will be maintained confidentially in a locked file in the Employee Health Department. Contents of the medical record will not be disclosed or reported without the employee's written consent to any person within or outside the workplace except as required by law. Employees can access their medical records by requesting access through the Employee Health Nurse. Medical records may also be released to anyone having written consent of the employee. Medical records must be maintained for the duration of employment plus 30 years.

**B. Training Records**

Training records may be maintained indefinitely but minimally for three years from date of training. Training records will include the following information:

1. The date of training sessions

2. A contents or summary of the training sessions

3. The name and qualifications of persons conducting the training

4. The names and job titles of all persons attending training sessions.

Training records shall be provided to the employee or employee representative upon request for examination or copying.

**C. Transfer of Records**

All facilities will comply with requirements involving transfer of records. If a facility ceases to do business and there is no successive employer to receive and retain the records for the prescribed period of time, the facility's administration must notify the Director of the National Institute for Occupational Safety and Health (NIOSH) at least three months before the records are scheduled for disposal. NIOSH may request that the records be forwarded to them to be maintained for the duration of the prescribed period of time.

## POLICY ENFORCEMENT

To ensure employee adherence with the above plan, supervisors and managers will monitor compliance. Personnel who consistently violate these regulations will be subject to disciplinary action as defined by the facility's corrective action policy.

## CONTRACTED EMPLOYEES

ECMCC is ultimately responsible for providing all aspects of compliance associated with the Bloodborne Pathogen Standard, with respect to employees. Contracted employees will be expected to comply with the policies and practices of the facility in which they are working. Training pertaining to this policy must have been completed prior to the contracted employee performing occupational exposure-prone tasks. Individual contracts will specify training and hepatitis B vaccination provisions.

All contracted employees assigned to areas where occupational exposure may occur must present proof of training and hepatitis B vaccination before being permitted to work in the area. Department managers will assume responsibility for contract employee activities.

Exposure incidents may be handled in accordance with the hospital's Post Exposure Policy. Charges incurred will be the responsibility of the contractor, in accordance with their policies.

Approved By: _____
Dr. John Crane, Hospital Epidemiologist

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Charlene Ludlow, Chief Safety Officer

ECMCC has developed these policies and procedures in conjunction with administrative and clinical departments. These documents were designed to aid the qualified health care team in making clinical decisions about patient care. These policies and procedures should not be construed as dictating exclusive courses of treatment and/or procedures. No health care team member should view these documents and their bibliographic references as a final authority on patient care. Variations from these policies and procedures may be warranted in actual practice based upon individual patient characteristics and clinical judgment in unique care circumstances.