May 28, 2013

Bloodborne Pathogens Exposure Control Program
1.0 Purpose

The purpose of this program is to comply with the Federal and State law and regulations regarding Bloodborne pathogens in the workplace and to minimize exposure of employees, students, and volunteers to blood and other potentially infectious body fluids and materials that may transmit bloodborne pathogens and lead to disease or death, while engaged in work and learning activities.

2.0 Statement and Procedure

All employees who could be reasonably anticipated as the result of performing job duties to come in contact with blood and other potentially infectious materials are covered by the OSHA Bloodborne Pathogens Standard.

This procedure covers all employees who could be reasonably anticipated to come into contact with blood and other potentially infectious material as a result of performing their employment or learning activities.

“Occupational exposure” is the potential contact with blood or other potentially infectious materials that may result from the performance of an employee’s duties. Universal precautions shall be in force at all times as follows: in dealing with the cleaning or decontamination of any blood or body fluid, all blood, body fluid and potentially infectious material shall be handled as if infected. The University shall adhere to the program standards for the control of potential exposure to HIV and HBV as outline in the OSHA regulation “Occupation Exposure to Bloodborne Pathogens” standard 1910.1030 or as amended.

3.0 Responsibilities

The Exposure Control Officer (ECO) (Environmental Health & Safety Officer) shall ensure that:

1. All elements of the Exposure Control Plan, including but not limited to exposure determination, work practice standards, Hepatitis B vaccination procedures, training requirements, and recordkeeping are met.
2. Assure that all faculty, staff, students, volunteers and contract workers have access to a copy of UNC Asheville procedure and exposure control plan, pursuant to the State and Federal law and regulations. The Plan will be maintained in the EHS Office.
3.1 Employee’s Responsibilities

It shall be the duty of each employee to be familiar with the provisions of this procedure/program and to comply with the provisions thereof.

Unless an employee’s primary job duties require such employee to perform first aid duties, or is required through regulatory definition, the University does not expect other employees, student, volunteers or contract workers to provide first aid assistance to anyone unless they voluntarily choose to do so. Therefore, such voluntary assistance is not considered “reasonably anticipated occupational exposure,” as set forth in this Procedure.

3.2 Definitions

**Bloodborne Pathogens:** means pathogenic micro-organisms 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).

**Contaminated:** means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

**Decontamination:** means the use of physical or chemical means to remove, inactivate or destroy bloodborne pathogens on a surface or item to the point where either are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

**Engineering and Work Practice Controls** - Engineering and work practice controls are designed to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used.

**Exposure Control Compliance Officer** - The EHS Officer is responsible for implementing the ECP and ensuring compliance with it and the Standard.

**Exposure Incident:** means a specific eye, mouth, other mucous membrane, non-intact skin, or potential contact with blood or other potentially infectious materials that results from the performance of an employee’s duties.

**Exposure Incident Investigation** - An exposure incident investigation form will be completed each time an exposure incident occurs. See Appendix C for form.

**Personal Protective Equipment (PPE):** is specialized clothing or equipment worn by an employee for protection against a hazard.

**Potentially Infectious Materials:** means the following human body fluids: semen, vaginal secretions, saliva in dental procedures and/or 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.

**Universal Precautions:** is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

### 4.0 Exposure Control Plan Updates

The ECO will maintain and update the University’s written Exposure Control Plan at least annually and whenever necessary to include new or modified tasks and procedures. A copy of the ECP is included in the UNC Asheville Safety Manual.

### 5.0 Exposure Determination

UNC Asheville has identified and classified the following employees in one of the three exposure categories listed below. Classification was based on the understanding of routine work performed by individuals and whether performing tasks that involve the potential exposure to blood and body fluids is considered a condition of employment.

#### 5.1 Exposure Categories:

**Category I**  Employees and employees who routinely work at tasks that involve exposure to blood, body fluids or tissues. All procedures or other job-related tasks that involve an inherent potential for mucous membrane or skin contact with blood, body fluids, or tissues, or a potential for spills or splashes of them, are Category I tasks.

**Category II**  Employees whose normal work routine does not include tasks that involve exposure to blood, body fluids, or tissues, but whose employment may require performing unplanned Category I tasks.

**Category III**  Employees who’s routine work does not include tasks that involve exposure to blood, body fluids, or tissues. These individuals are not called upon as part of their employment to provide or assist in emergency medical care or first aid, or to be potentially exposed in some other way.

**Job titles classified under each exposure Category:**

The following employees have been identified as having the highest potential for exposure to Bloodborne pathogens in the course of fulfilling job requirements.
Category I  Nurses and other Health Care employees, Housekeeping, University Police, Athletic Trainers, Coaches, Pool Lifeguards, Facility Plumbers.
Category II  Trades employees, Grounds employees, Laboratory instructors, Campus Recreation.

5.2 Tasks and Procedures

It is to be understood that universal precautions and personal protective equipment shall be used to prevent contact with Bloodborne pathogens when the job tasks require:
   a. Care of minor injuries, i.e. bloody nose, scrape, minor cuts;
   b. Initial care of injuries that require medical assistance
   c. Care of an injured person during a sport activity
   d. Cleaning tasks associated with body fluid spills
   e. Any job duties and /or assignment that may expose employees to body fluids and infectious waste.

6.0 Method of Implementation and Control

The following methods of compliance will be incorporated into this exposure control plan and will help determine standard operating guidelines in the event of Bloodborne pathogens exposure.

6.1 Universal Precaution Procedures

Category I & II employees will perform their duties with the understanding that body fluids and medical waste may be infectious. When performing tasks that involve these materials employees will adhere to the following Universal Precaution procedures:

1. Treat all situations involving potential contact with blood body fluids or medical waste with caution.
2. Wash hands after contact with any bodily substance or articles contaminated with a bodily substance.
3. Wear protective gloves on both hands for anticipated direct hand contact with blood, body fluids, medical waste or contaminated objects or surfaces. Wash hands immediately after removing protective gloves.
4. Wear an impervious apron or tyvek suit if body fluids are in large quantity and likely to get the clothing wet.
5. Wear a mask if splashing of blood or other body fluids is anticipated, to the mucous membranes of the nose or mouth.
6. When unanticipated exposure occurs, remove contaminated substances by washing hands and other skin surface immediately and thoroughly. If splashed in eyes, nose or mouth-flush with water immediately. Notify supervisor of all exposures and complete the exposure control incident form, Appendix C.
7. All employees may take precautions to prevent injuries caused by needles or other sharp instruments. Report any needle punctures to supervisor immediately.

### 6.2 Training

Category I & II employees and employees who have or are reasonably anticipated to have occupational exposure to bloodborne pathogens will receive training conducted by the EHS Officer or other equivalent agencies pre-approved through the EHS Office.

Information to be communicated during this training will include but not be limited to the following information:

- An accessible copy and explanation of the standard
- Epidemiology and symptoms of bloodborne pathogens
- Modes of transmission
- The University’s Exposure Control Plan and how to obtain a copy
- Methods to recognize exposure tasks and other activities that may involve exposure to blood
- Question and answer session
- Work Practices, and PPE
- PPE-types, use, location, removal, handling, decontamination, and disposal.
- Hepatitis B Vaccine-offered free of charge.
- Emergency procedures-for blood and other potentially infectious material
- Exposure incident procedures
- Post-exposure evaluation and follow-up
- Signs and labels-and/or color coding

Training will occur during new employee orientation and within the first month of work crew training. Refresher training will occur annually.

### 6.3 Hand washing

UNC Asheville will provide hand washing facilities which are readily accessible to employee and crew members, or when provisions for hand washing facilities are not feasible, if appropriate hand washing facilities are not readily available then antiseptic hand cleaner in conjunctions with clean cloth/paper towels or antiseptic towelettes will be provided.

Do not reuse disposable gloves!
Personal Protective Equipment (PPE) must be used if occupational exposures remains after institution engineering and work practice controls, or if controls are not feasible. Training will be provided in the use of the appropriate personal protective equipment for community and employees who have been identified in Category I and II. PPE items include but are not limited to:

- Gloves
- Gowns
- Tyvek suits
- Face shields
- Masks
- Eye protection (splash-proof goggles, safety glasses with side shields)
- Resuscitation gabs and mouthpieces

Individuals in need of such items should request them from their supervisor or other designee.

**Personal Protective Equipment Precautions**

As a general rule, all employee and employees using PPE must observe the following precautions:

- Wash hands immediately or as soon as feasible after removal of gloves or other PPE
- Remove protective equipment before leaving the work area and after a garment becomes contaminated.
- Place used protective equipment in appropriately designated area or containers when being stored, washed, decontaminated or discarded.
- Wear appropriate gloves when it can be reasonably anticipated that you may have contact with blood or other potentially infectious materials an when handling or touching contaminated items or surfaces. Replace gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised.
- Following any contact of body areas with blood or any other infectious materials, you must wash your hands and any other exposed skin with soap and water as soon as possible. Employees should also flush exposed mucous membranes (eyes, mouth, etc.) with water.
- Utility gloves may be decontaminated for reuse if their integrity is not compromised. The decontamination procedure will consist of soaking in a chlorine solution 2%, diluted 10:1. Discard utility gloves when they show signs of cracking, peeling, tearing, puncturing or deteriorations.
- Never wash or decontaminate disposable gloves for reuse or before disposal.
Wear appropriate face and eye protection such as a mask with glasses with solid side shields or a chin-length face shield when splashes, sprays, spatters or droplets of blood or other potentially infectious materials pose a hazard to the eye, nose or mouth.

If a garment is penetrated by blood or other potentially infectious materials, the garments must be removed immediately or as soon as feasible. Employees should be trained prior to entering the work area on how to remove tyvek suits to avoid contamination and contact with the outer surface. However, if the amount of blood exposure is such that the blood penetrates the protective clothing and contaminates to the inner surface, not only is it impossible to remove the garment without exposure to infectious material, but the penetration itself would constitute exposure. It may be prudent to train employees to cut such a contaminated garment to aid in removal and prevent any further exposure.

6.5 Labeling and Infectious Waste Disposal

The following labeling method(s) will be used:

- Red bags/labeled bags
- Labeled receptacles such as a sharps container

7.0 Post Exposure Evaluation Procedures

7.1 Following Exposure

IMMEDIATELY FOLLOWING AN EXPOSURE, THE EXPOSED INDIVIDUAL SHOULD:

1. Wash blood or potentially infectious fluid from the contaminated body area(s) with soap and running water.
2. Be evaluated immediately by one of the following to determine if the exposure is significant and needs medical follow-up:
   a. The EHS Officer during regular business hours or by contacting Public Safety in an emergency
   b. Sisters of Mercy Urgent Care located on Patton Ave.
3. If the exposure is determined to be significant, Sisters of Mercy Urgent Care will follow specific procedures to determine if prophylactic medication for Hepatitis B and HIV should be initiated.
4. If exposure is not significant, no further medical follow up is necessary. Documentation of this assessment will be kept in the exposed individual’s health record in the EHS Office.
5. The Supervisor of the exposed individual should be notified as soon as possible and appropriate reports filed with the EHS Office. Appendix C.
7.2 Significant Exposure Criteria

Criteria in both (1) and (2) must be met for the exposure to be considered an emergency medical visit:

1. The body substance exposure is:
   a. Blood, semen, vaginal secretions, an internal body fluid (e.g., cerebrospinal, peritoneal, pericardial, pleural amniotic, joint fluid, OR
   b. Any other body fluid visibly contaminated with blood; OR
   c. Exposure was to a body fluid during a circumstance where it was difficult or impossible to differentiate the fluid type involved and is therefore considered potentially hazardous;
   **AND**

2. The type of injury or contact provided a portal of entry:
   a. Percutaneous exposure (e.g., a penetrating injury with a contaminated implement that went through the skin such as a needle stick or cut),
   b. Mucous membrane contact (e.g., the body fluid splashed in the eyes or mouth),
   c. Non-intact skin contact (e.g., the body fluid came in contact with open skin such as dermatitis or abrasion).

   - If the exposed individual questions or is not satisfied with the determination regarding significant exposure, they should be referred to the Sisters of Mercy Urgent Care or the ER Mission Hospital.
   - If there has been prolonged contact with intact skin or a massive blood exposure, the exposure should be considered significant.

8.0 Housekeeping and Waste Procedures

UNC Asheville holds the highest standard to ensure that the worksite is maintained in a clean and sanitary condition.

A. All equipment, materials, environmental and working surfaces will be cleaned and decontaminated after contact with blood or other potentially infectious materials.

B. Contaminated work surfaces will be decontaminated with an appropriate disinfectant immediately after completion of procedures/task, or as soon as feasible, when surfaces are overly contaminated or after any spill of blood or other potentially infectious materials, and at the end of the work day if the surface may have become contaminated since the last cleaning.

C. Protective covering, such as plastic wrap, aluminum foil, or imperiously-backed absorbent paper used to cover equipment and the environmental surfaces, will be
removed and replaces as soon as feasible when they become contaminated with blood or OPIM, (Other Potentially Infected Material) or at the end of the day when they have become contaminated since the last cleaning.

D. All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials will be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

E. Materials such as paper towels, gauze squares or clothing used in the treatment of blood or OPIM spills that are blood-soaked or caked with blood will be bagged, tied and designated as a biohazard. The bag will then be removed from the site as soon as feasible and replaced with a clean bag. Bags designated as biohazard (containing blood or OPIM contaminated material) bags will be red in color or affixed with at bio-hazard labels and will be brought to the Student Health Center.

F. All major blood or OPIM incidents must be reported immediately so that the area can be cleaned, decontaminated and the material removed to minimize exposure.

G. Broken glass contaminated with blood or OPIM will not be picked up directly with the hands. The glass will be cleaned up using mechanical means, such as a brush and dustpan, tongs, or forceps. All broken glass will be containerized.

H. Contaminated sharps, broken glass, plastic or other sharp objects will be placed into appropriate sharps containers. The sharps containers will be closeable, puncture resistant, labeled with biohazard label, and leak proof. Containers will be maintained in an upright position. Containers will be easily accessible to staff and located as close as feasible to the immediate area where sharps are used or can be reasonably anticipated to be found.

I. Materials contaminated with blood or OPIM will be placed in containers which prevent leaking during collection handling, processing, storage, transport, or shipping. These containers will be labeled with a biohazard symbol or be colored red.

9.0 Hepatitis B Vaccination

Employee and employees in Categories I and II will be offered the Hepatitis B vaccination without charge. Employees who elect not to be vaccinated at that time will be asked to sign a declaration form. See Appendix B.

Employee and employees who have waived the Hepatitis B vaccination may change their minds and receive the vaccine free of charge while still in the employment of the University.
a. UNC Asheville will make the hepatitis B vaccination series available to all employees who have occupational exposure after the employee(s) have been given information on the hepatitis B vaccine, including information about its efficacy, safety, method of administrations and the benefits of being vaccinated. The vaccinations will be offered at no cost to the affected employees and at a reasonable time.

b. The Hepatitis B vaccine series will be administered by the Mission Hospital’s Occupational Medicine through UNC Asheville’s EHS office.

c. If an employee initially declines the hepatitis B vaccination series, but at a later date while still covered under the standard decides to accept the vaccination, the series will be available.

d. The EHS Officer will assure that employees who decline to accept the hepatitis B vaccine offered by UNC Asheville will sign the declination statement established under the standard. See Appendix B.

e. Records regarding HBV vaccinations or declinations will be maintained at the EHS office.

9.1 Informed Consent Information and Training

The Hepatitis B Vaccine currently used is a noninfectious vaccine.

When injected into the deltoid muscle, the hepatitis vaccine has induced protection levels of antibody in more than 90% of the healthy individuals who received the recommended three doses of the vaccine. However, persons with immune-system abnormalities, such as dialysis patients, have less response to the vaccine. Full immunization requires three doses of vaccine over a six month period although some person may not develop immunity even after three doses. However, persons who have been infected with Hepatitis B virus prior to receiving the vaccine may go on to develop clinical hepatitis in spite of immunization. The duration of immunity is unknown at this time but is believed to be for life.

The incidence of side effects is low. Serious effects are rare but have been identified on rare occasions. Some persons experience tenderness and redness at the site of the injection. Low grade fever may occur. Rash, upper respiratory symptoms, nausea, joint pain and mild fatigue are among reported side effects.

9.2 Testing and Examination

Any employee who suspects exposure to a blood or body fluid may request to be tested. The University shall bear the expense of testing for full or part-time employees, provided that the suspected exposure poses a significant risk of exposure.

10.0 Record Keeping and Reporting
After each incident in which employees’ exposure occurs an Exposure Incident report should be filed with the EHS Office. Red Bag material should be promptly delivered to the Student Health Service’s Building for proper disposal. **Under no circumstances shall any red bag material ever be disposed of into a regular trash receptacle.**

10.1 Documentation

The following information must be documented:

1. The routes of exposure and how exposure occurred
2. The source of the body fluid, unless that identification cannot be established
3. If the exposure was significant or not
4. If the individual was referred to an Emergency Department for further evaluation
5. The Physician evaluation the exposed individual will provide a written option to the University. This option is limited to a statement that the community, employee has been informed of the results of the evaluation and told of the need, if an, for further evaluation and treatment. All other findings are confidential.

The EHS Office will maintain and keep accurate training records for three (3) years which will include the following:

- Training dates
- Content or a summary of training
- Media used to provide training
- Names and job titles of trainees
- Accident/Incident Reports

Confidential medical records for each community and crew members with the potential for exposure will be maintained with Health Services in accordance with Bloodborne Pathogens 29 Code of Federal Regulations (CFR) 1910.1030
HEPATITIS B ACKNOWLEDGEMENT OF TRAINING
AND ACCEPTANCE OF HEPATITIS (HBV) VACCINE

I acknowledge that I have been informed of the risk of occupational exposure to blood and other potentially infectious materials in my job.

My employer has provided me with training on these risks, how they may be minimized and made available to me personal protective equipment at no charge.

A copy of the Exposure Control Plan, including instructions on procedures to follow should I have an exposure incident with blood or other potentially infectious materials, has been made available to me.

Signature of Employee: _________________________________ Date: __________

Signature of Trainer: _________________________________ Date: __________
THE UNIVERSITY OF NORTH CAROLINA ASHEVILLE
HEPATITIS B VACCINE DECLINATION

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis-B (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 want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Signature of Employee: _______________________________ Date: __________

Signature of Trainer: _______________________________ Date: __________

Please check one:

☐ I am declining the Hepatitis-B vaccine because I have already received the vaccine.

☐ I am declining the Hepatitis-B vaccine because I do not wish to receive the vaccine.
Appendix C: Exposure Incident Investigation Form

Exposure Incident Investigation Form

Date of Incident: __________________________  Time of Incident: __________

Location: __________________________________________________________

Person(s) Involved: _________________________________________________

Potentially Infectious Materials Involved:

Type: _______________________  Source: _____________________________

Circumstances (what was occurring at the time of the incident):

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

How was the incident caused: (accident, equipment malfunctions, etc.) List any tool, machine, or equipment involved:

__________________________________________________________________
__________________________________________________________________

Personal protective equipment being used at the time of the incident:

__________________________________________________________________

Actions Taken (decontamination, clean-up, reporting, SOG etc.):

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Lessons learned meeting with affected parties scheduled to discuss recommendations for avoiding repetition of incident:

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________