



UNC CHARLOTTE

**Environmental, Health and Safety**

# **Bloodborne Pathogens Exposure Control Plan**

**January 2014**

## Table of Contents

I. Introduction.....	1
II. Scope .....	2
III. Program Administration .....	2
IV. Exposure Determination .....	2
V. Methods of Compliance.....	3
VI. Hepatitis B Vaccination .....	7
VII. Post Exposure Incident .....	7
VIII. Communication of Hazards to Employees .....	8
IX. Record Keeping.....	9
APPENDICIES.....	11
APPENDIX I - JOB CLASSIFICATIONS	
APPENDIX II – New Employee Bloodborne Pathogens/Hepatitis B Vaccination Information	
APPENDIX III – INFORMATION TO BE PROVIDED TO HEALTH CARE PROFESSIONAL	
APPENDIX IV – DEFINITIONS	
APPENDIX V – Housekeeping Bloodborne Pathogens Clean Up Standard Operating Procedure	

## I. Introduction

The University of North Carolina at Charlotte is committed to providing a safe and healthful work environment for our entire staff. In pursuit of this goal, the following exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with [U.S. Department of Labor Occupational Safety and Health Administration Bloodborne Pathogen Standard \(29 CFR 1910.1030\)](#).

This standard applies to all employees whose duties involve an occupational exposure to "human blood or other potentially infectious material" (bloodborne pathogens). "Human blood" includes blood components and products made from human blood.

"Other potentially infectious material (OPIM)" includes:

- Human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood, and all body fluids in situations where it is difficult to differentiate between body fluids.
- Any unfixed tissue or organ (other than intact skin) from a human.
- Human immunodeficiency virus (HIV)-containing cell or tissue cultures, organ cultures, and HIV-or hepatitis B virus (HBV)-containing culture medium.
- Blood, organs, or other tissues from experimental animals infected with HIV or HBV.

The ECP is a key document to assist our organization in implementing and ensuring compliance with the standard, thereby protecting our employees. This ECP includes:

- Determination of employee exposure
- Implementation of various methods of exposure control, including:
  - Universal precautions
  - Engineering and work practice controls
  - Personal protective equipment
  - Housekeeping
  - Hepatitis B vaccination
  - Post-exposure evaluation and follow-up
- Communication of hazards to employees and training
- Recordkeeping
- Procedures for evaluating circumstances surrounding exposure incidents

Implementation methods for these elements of the standard are discussed in the subsequent pages of this ECP.

## II. Scope

The Exposure Control Plan (ECP) is designed to eliminate or minimize employee exposure to bloodborne pathogens. This exposure control plan applies to all UNC Charlotte employees whose duties involve an occupational exposure to “human blood or other potentially infectious material. This exposure control plan will be reviewed or updated at least annually or whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

## III. Program Administration

Environmental Health and Safety Office – (704) 687-1111

The Environmental Health and Safety Office is responsible for development and dissemination of the ECP. The Environmental Health and Safety Office will maintain, review, or update the ECP at least annually, or whenever necessary to include new or modified tasks and procedures.

### Affected Departments

Affected Departments are responsible for implementing the ECP by training employees, purchasing necessary equipment and enforcing safe work practices.

### Affected Employees

Those employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this ECP.

## IV. Exposure Determination

- A. The exposure determination consist of a listing of all job classifications in which all employees have occupational exposures; a listing of job classifications in which some employees have exposures; and a listing of those tasks and procedures involved (See Appendix I – Job Classifications).
- B. The EH&S Office assist Department Managers in making exposure determinations.
- C. Adjustments to the exposure listings will be made for:
  - 1. New or modified tasks and procedures.
  - 2. New or revised employee positions.

## V. Methods of Compliance

- A. Universal precautions shall be observed to prevent contact with blood and other potentially infectious materials.
- B. Engineering and Work Practice Controls shall be used to eliminate or minimize exposure.
  - 1. Handwashing facilities shall be readily accessible or where not feasible, antiseptic hand cleanser and clean towels provided. Hands shall be washed as soon as feasible after using alternate cleaning methods.
  - 2. Hands shall be washed as soon as feasible after removal of gloves or other personal protective equipment (PPE).
  - 3. Hands and other skin shall be washed with soap and water immediately after contact with blood or potentially infectious material.
  - 4. Mucous membranes shall be flushed with water immediately after contact with blood or potentially infectious material.
  - 5. Contaminated needles and other sharps
    - a. Contaminated needles and other sharps shall not be broken, sheared, bent, recapped, or removed.
    - b. Where recapping or needle removal is medically required, a one-handed technique or mechanical device shall be used.
    - c. Where applicable needles and/or sharps shall be substituted with a safer device (e.g. plastic plastic transfer pipets for Pasteur pipets, blunt needles for hypodermic needles for syringe filtration, disposable scalpels, etc.).
  - 6. Immediately after use, contaminated reusable sharps must be placed in appropriate containers which are puncture resistant, leak-proof, biohazard labeled, color coded with standard, and which do not require hand retrieval from inside the container.
  - 7. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lens are prohibited in exposure areas.
  - 8. Food or drink shall not be stored or kept where blood or potentially infectious materials are present.
  - 9. Blood and potentially infectious material shall be handled in such a manner as to minimize splashing, spraying, spattering, or generation of droplets.

10. Mouth pipetting/suctioning is prohibited.
11. Blood and potentially infectious materials specimen containers for storage or transport shall be leak-proof, properly closed, and biohazard labeled.
12. Secondary containers are required if the primary container becomes contaminated or could punctured.
13. Equipment which may become contaminated shall
  - a) Be examined before servicing or shipping.
  - b) Be decontaminated as necessary.
  - c) Be labeled stating which portions remain contaminated.
  - d) Have appropriate information conveyed to affected employees and servicing personnel before allowing handling.

#### C. Personal Protective Equipment (PPE)

1. Provisions: When there is an anticipated risk of occupational exposure, the appropriate department shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, lab coats, face shield or masks and eye protection, mouthpieces, resuscitation bags, pocket masks, or other ventilation devices shall be provided.
2. Use: PPE shall be worn unless under rare and extraordinary circumstances, in the employee's professional judgment it would pose an increased hazard to the delivery of health care, public safety services, and/or would posed an increase hazard to the employee or to co-workers. In those circumstances a thorough investigation shall be made to document whether changes must be made to prevent any recurrences.
3. Accessibility: Each Department with a job classification listed in Appendix I is responsible for ensuring that appropriate PPE in the appropriate sizes is readily available on site or is issued to their employees. Hypo-allergic gloves, glove liners, powder less gloves or other similar alternatives shall be readily accessible to those individuals who are allergic to the gloves normally provided.
4. Cleaning, Laundering, and Disposal: All contaminated items shall be red bagged and placed in a leak proof red biohazard container. Departments should follow standard operating procedures for proper disposal of biohazard waste.
  - a) If garments are penetrated by blood or potentially infectious material, the garment shall be removed as soon as feasible. A change of clothing should be available (depending upon exposure).

- b) All PPE shall be removed prior to leaving the work area, using care not to expose the wearer to contaminations from the equipment itself.
  - c) When PPE is removed, it shall be placed in an appropriate designated area or container for disposal, cleaning, decontamination or storage.
  - d) In laboratories where specific PPE is required, the disposal container needs to be present at the degown site (doorway, out of the room, etc.). Potentially contaminated lab coats should not be worn outside the immediate use area.
5. Gloves shall be worn when hand contact with blood, potentially infectious material, mucous membranes, or non-intact skin can be reasonably anticipated; when performing vascular access procedures; and when touching contaminated items or surfaces.
- a) Disposable gloves shall be replaced as soon as practical after contamination and soon as feasible if torn, punctured, or compromised.
  - b) Wash hands with soap and water.
  - c) Disposable gloves shall not be washed or decontaminated for re-use.
  - d) Utility gloves may be decontaminated for re-use if the gloves integrity is not compromised.
6. Masks with eye protection shall be worn whenever splashes, spray, splatter or droplets may be generated and eye, nose, or mouth contamination can be reasonably anticipated.
7. Gowns, aprons, lab coats, clinic jackets or similar outer garments shall be worn in exposure situations (with the type depending on the task and quantity of exposure).
8. Surgical caps/hoods and shoe covers/boots shall be worn when gross contamination can reasonably be anticipated.

#### D. Housekeeping

- 1. Work areas shall be routinely cleaned and sanitized.
- 2. All equipment and work surfaces shall be decontaminated.
  - a) After completion of procedures.
  - b) Immediately after overt contamination or spills.
  - c) At the end of the work shift, or daily, if potentially contaminated.

3. Contaminated disposable coverings such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper, shall be replaced as soon as feasible when they become overtly contaminated or at the end of the work shift.
4. Contaminated reusable containers shall be decontaminated as soon as feasible.
5. Contaminated broken glassware shall not be picked up directly by hand. It shall be cleaned removed using mechanical means, such as a brush, dust pan, tongs, forceps etc.
6. Contaminated reusable sharps may not be stored or processed in a manner requiring reaching by hand into containers.

#### E. Regulated Waste

##### 1. Contaminated sharps

- a) Contaminated sharps shall be discarded as soon as feasible into containers which are closable, puncture resistant, leak-proof, and labeled or color-coded in accordance with the biohazard label.
- b) Containers shall be located as close as feasible to immediate area of use, be kept upright, and not overfilled.
- c) When moved from the area of use, containers shall be
  - (1) Closed prior to removal to prevent spillage.
  - (2) Placed in secondary containers (closable, leak proof, labeled/color-coded, closed prior to removal) if leaks are possible.
- d) Reusable disposal containers shall not be opened, cleaned, or emptied by hand or in any manner which could expose the employee to risk of percutaneous injury.

##### 2. Other Regulated Waste

- a) Regulated waste shall be placed in containers which are closable, constructed to prevent leaks, labeled, and closed prior to removal.
- b) If outside contamination occurs, the container shall be placed in a second container (closable, leak proof, labeled/color-coded, closed prior to removal).

##### 3. Disposal of Regulated Waste shall be in compliance with all applicable regulations.

#### F. Laundry

##### 1. Contaminated laundry

- a) Shall be handled as little as possible with minimal agitation.
  - b) Shall be bagged or containerized at the location of use and properly labeled.
  - c) Shall not be sorted or rinsed at the location of use.
  - d) Shall be placed in leak-proof containers when wet.
2. Employees having contact with contaminated laundry shall wear protective gloves and other appropriate protective equipment.

#### H. HIV and HBV Research Laboratories and Production Facilities

Research Laboratories engaged in the culture, production, concentration, experimentation, and manipulation of HIV and HBV require a specific review and control strategy. The Research and Economic Development Department should be contacted for biosafety risk assessments, protocol submission, policy and training.

### VI. Hepatitis B Vaccination

1. Hepatitis B vaccinations shall be available at no cost to all employees who have occupational exposure. The New Employee Bloodborne Pathogens/Hepatitis B Vaccination Information (Appendix II) provides detail information on how to obtain the Hepatitis B vaccination.
  - a) Vaccinations shall be available within 10 working days of initial assignment and after appropriate training.
  - b) Vaccinations may be omitted for employees who have previously received the complete series, who test immune, or where the vaccine is medically contraindicated.
  - c) If an employee initially declines the hepatitis B vaccination, but at a later date while employed by the University decides to accept the vaccination, the University shall make available hepatitis B vaccination at that time.
  - d) University employees who decline the hepatitis B vaccination must sign the Hepatitis B Declination Form (See Appendix II).
  - e) Future recommendations by the U.S. Public Health Service regarding booster dose (s) of hepatitis B vaccine shall be followed.

### VII. Post Exposure Incident

- A. Following an exposure incident a confidential medical evaluation and follow-up shall be provided.

1. Notify the University Environmental Health and Safety Office (704-687-1111) immediately.
2. Document the circumstances and route of exposure.
3. Identify the source individual where feasible.
  - a) After consent, the source individual's blood shall be tested as soon as feasible for HBV and HIV infectivity.
  - b) If consent is not obtained, but not required by law, the source individual blood, if available, shall be tested.
  - c) Results of the test shall be made available to the exposed employee along with applicable laws concerning disclosure of the identity and status of the source individual.
4. After consent, the exposed employee's blood shall be collected as soon as feasible and tested for HBV and HIV status.
5. If the employee does not consent to serologic testing, the sample shall be preserved for at least 90 days to allow for future testing.
6. Post-exposure prophylaxis, when medically indicated, shall comply with U.S. Public Health Service recommendations.
7. Counseling and evaluation of reported illnesses shall be provided.
8. Healthcare professionals providing Hepatitis B vaccinations and post-exposure care shall be provided relevant information (See Appendix III).
9. The healthcare professionals' written opinion shall be provided to the employee within 15 days of the completion of the evaluation (See Appendix III).

## **VIII. Communication of Hazards to Employees**

### **A. Labels and Signs**

1. Warning labels should be affixed to containers of regulated waste, refrigerators and freezers containing blood or potentially infectious materials, and other containers used to store or transport such materials.
2. Labels shall include the standard BIOHAZARD symbol.



3. Red bags or red containers may be substituted for labels.

4. Labels shall be florescent orange or orange-red with letters and symbols in a contrasting color.
5. Labels shall be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.

#### B. Information and Training

1. Training shall be provided at no cost:
  - (a) At the time of initial assignment.
  - (b) When modification of tasks or procedures may affect exposure.
  - (c) Annually
2. A copy of the Exposure Control Plan shall be accessible to employees in the appropriate department. The ECP can be found at the Environmental Health and Safety's website.
3. Training Requirements The training program shall consist of the following elements:
  - a) A copy of the OSHA Bloodborne Pathogens Regulatory text standard 1910.1030.
  - b) A general explanation of the epidemiology and symptoms of bloodborne disease.
  - c) An explanation of the modes of transmission of bloodborne pathogens.
  - d) An explanation of the University exposure control plan.
  - e) An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
  - f) An explanation of the use and limitations of methods that will prevent or reduce exposure.
  - g) Information on types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.
  - h) An explanation on the basis for selection of personal protective equipment.
  - i) Information on Hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated and that the vaccine and vaccinations offered free of charge.
  - j) Information on the appropriate action to take and persons to contact in an emergency involving blood or other potentially infectious materials.
  - k) An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up.
  - l) Information on the post-exposure evaluation and follow-up.
  - m) An explanation of the signs and labels and/or color coding.
  - n) An opportunity for interactive questions and answers with the person conducting the training sessions.
  - o) The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in this training program as it relates to the workplace.

## IX. Record Keeping

1. Medical Records shall be established and maintained for each employee with occupational exposure in accordance with the OSHA Medical Records Access Standards.

2. Medical Records shall be kept confidential except as required by this standard or as required by law.
3. Training Records shall be maintained for 3 years from the date of training.
4. The availability and transfer of records shall be completed in accordance with OSHA Bloodborne Pathogens Standard.
5. Sharps injury log shall be maintained to record percutaneous injuries from contaminated sharps.

## APPENDICIES

## APPENDIX I - JOB CLASSIFICATIONS

### Department of Athletics

Job classifications in which employees may have occupational exposure:

1. Full-time Athletic Trainers
2. Part-time Athletic Trainers
3. Student Employee Trainers

### Department of Biology

Job classifications in which employees may have occupational exposure (and tasks producing the exposure):

1. Faculty / Lab Technicians / Graduate Students

(Instructing and supervising research that involves the use of human blood, unfixed tissue, cell lines and handles laboratory instruments, utensils, etc. that may be contaminated with infectious materials.)

### Facilities Management

Job classifications in which employees may have occupational exposure (and tasks producing the exposure):

1. Building Environmental Technician (Building Environmental Services Technician I, Building Environmental Services Technician II) and
2. Building Environmental Supervisors (Building Environmental Services Supervisors)

(Responds to emergency spills and accidents to clean up possible infectious materials. Supervises the cleaning of restrooms and public areas where possible contact with infectious materials is likely to occur. Collect potentially infectious used needles from residents for disposal. Handles uniforms and laundry items that may contain infectious materials.)

3. Facilities Maintenance

(Part of labor pool that repairs and maintains toilets or sewer systems.)

## **Housing and Residence Life**

Job classifications in which employees may have occupational exposure:

- 1) Building Environmental Technicians (Housekeeping Assistants) and
- 2) Building Environmental Supervisors (Housekeeping Supervisor)
  - i. (Responds to emergency spills and accidents to clean up possible infectious materials. Supervises the cleaning of restrooms and public areas where possible contact with infectious materials is likely to occur. Collect potentially infectious used needles from residents for disposal. Handles uniforms and laundry items that may contain infectious materials.)
- 3) Maintenance Mechanic (Part of labor pool that repairs and maintains toilets or sewer systems.)
- 4) Conference Assistant (Collect potentially infectious used needles from residents for disposal. Handles uniforms and laundry items that may contain infectious materials.)
- 5) Plumber Supervisor
- 6) Plumber (Repairs and maintains toilets or sewer systems.)

## **Student Union, Activities and Recreation (SUAR)**

### **Cone University Center**

Job classifications in which employees may have occupational exposure:

1. Building Environmental Technicians (Building Services Technicians) and
2. Building Environmental Supervisors (Building Services Supervisors)

(Responds to emergency spills and accidents to clean up possible infectious materials. Supervises the cleaning of restrooms and public areas where possible contact with infectious materials is likely to occur. Collect potentially infectious used needles for disposal. Handles uniforms and laundry items that may contain infectious materials.)

### **Student Union**

Job classifications in which employees may have occupational exposure:

1. Building Environmental Technician (Building Services Technician) and
2. Building Environmental Supervisor (Building Services Supervisor)

(Responds to emergency spills and accidents to clean up possible infectious materials. Supervises the cleaning of restrooms and public areas where possible contact with infectious materials is likely to occur. Collect potentially infectious used needles for disposal. Handles uniforms and laundry items that may contain infectious materials.)

3. Maintenance Supervisor
4. Maintenance Technician

(Part of labor pool that repairs and maintains toilets or sewer systems.)

## **Recreational Services**

### **Building Services (Belk Gym)**

Job classifications in which employees may have occupational exposure:

1. Building Environmental Technician (Building Services Technician) and
2. Building Environmental Supervisor (Building Services Supervisor)

(Responds to emergency spills and accidents to clean up possible infectious materials. Supervises the cleaning of restrooms and public areas where possible contact with infectious materials is likely to occur. Collect potentially infectious used needles for disposal. Handles uniforms and laundry items that may contain infectious materials.)

3. Maintenance Supervisor
4. Maintenance Technician

(Part of labor pool that repairs and maintains toilets or sewer systems.)

## **Fitness Programs**

Job classifications in which employees may have occupational exposure:

1. Personal Trainer
2. Group Fitness Instructor
3. Fitness Assistant

(Required to response to accidents and injuries that may involve contact with human blood or other potentially infected bodily fluid)

## **Intramurals**

Job classifications in which employees may have occupational exposure:

1. Lifeguard

## 2. Intramural Supervisor

(Required to respond to accidents and injuries that may involve contact with human blood or other potentially infected bodily fluid)

### **College of Nursing**

Job classifications in which employees may have occupational exposure:

1. Faculty ( Assistant to the Director, Lecturer, Associate Dean, Director, Assistant Professor, Assistant Clinical Professor, Associate Director, Professor, Senior Lecturer, Adjunct Lecturer)

(Clinical courses requiring direct patient care)

(Clinical laboratory courses with exposure to contaminated equipment and human body fluids)

2. Work Study Students -In laboratories handling contaminated equipment
3. Graduate Teaching Assistants -Direct patient care, exposure to contaminated equipment, and human body fluids
4. Graduate Research Assistants -Direct patient care, exposure to contaminated equipment, and human body fluids.

### **Police and Public Safety**

Job classifications in which employees may have occupational exposure:

1. Public Safety Officer
2. Public Safety Supervisor
3. Public Safety Deputy Director
4. Police Chief/Director

### **Student Health Center**

Job classifications in which employees may have occupational exposure:

1. Housekeeper
2. Medical Laboratory Technician
3. Medical Nursing Assistant
4. Licensed Practical Nurse
5. Nurse Supervisor
6. Nurse Clinician
7. Nurse Director
8. Nurse Practitioner
9. Physician Assistant

10. Physician
11. Professional Nurse

## **Venture**

Job classifications in which employees may have occupational exposure:

1. Director
2. Associate Director
3. Assistant Director, Programs
4. Assistant Director, Trips
5. Graduate Assistant
6. Temporary Outdoor Program Assistant
7. Trip Leader (Student)
8. Senior Trip Leader (Student)
9. Challenge Course Instructor (Student)

## **Psychology Laboratory – Stress Waves Biobehavioral Research Lab**

Job classifications in which employees may have occupational exposure:

1. Faculty - Assistant Professor of Health Psychology
2. Research Assistants

## **Laboratories –**

Job classifications in which employees may have occupational exposure:

1. Faculty/Lab Technicians/ (Instructing and supervising research that involves the use of human blood, unfixed tissue, human cell lines and handles laboratory instruments, utensils, etc. that may be contaminated with infectious materials.)

## APPENDIX II – NEW EMPLOYEE BLOODBORNE PATHOGENS/HEPATITIS B VACCINATION INFORMATION



Environmental, Health and Safety

**TO:** «First\_Name» «Last\_Name»

«Department\_Name»

**FROM:** Environmental Health and Safety Office (EH&S)

**SUBJECT:** Bloodborne Pathogen/Hepatitis B Vaccination Information

In accordance with the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens standards your job classification has been identified in UNC Charlotte's Bloodborne Pathogens Exposure Control Plan as having potential for occupational exposure to bloodborne diseases.

Therefore the following requirements must be completed immediately:

1. Employee must complete Skillport Online Bloodborne Pathogens training module and supervisor reviews any specific standard operating procedures as outlined in EH&S training checklist.
2. Employee must review enclosed Hepatitis B (HBV) vaccination fact sheet.
3. Employee must make a decision to take HBV vaccination or decline HBV vaccination
  - a. If employee elects to take HBV vaccination he/she should call Student Health Services at 704-687-7401 to schedule an appointment. Employee must take "Hepatitis B Vaccination Record" at the time of appointment.
  - b. If employee elects to decline the vaccination series, he/she should complete the "Hepatitis B Vaccination Declination Form" and return to EH&S.

Any request for medical records or any questions regarding this program should be referred to the Environmental Health and Safety office at 704-687-1111 or [ehsoffice@uncc.edu](mailto:ehsoffice@uncc.edu).

# HEPATITIS B VACCINE FACT SHEET

## Patient Information Sheet

### **WHAT IS HEPATITIS B?**

Hepatitis B is an infection of the liver caused by the hepatitis B virus (HBV). The term viral hepatitis is often used for and may include hepatitis B and other similar diseases which affect the liver but are caused by different viruses.

Acute hepatitis generally begins with mild symptoms that may or may not become severe. These symptoms may include loss of appetite, a vague feeling of oncoming illness, extreme fatigue, nausea, vomiting, stomach pain, dark urine, and jaundice (yellow eyes and skin). Skin rashes and joint pain can also occur.

In the United States about 300,000 persons, mostly young adults, catch hepatitis each year. About one-fourth will develop jaundice, and more than 10,000 will need to be hospitalized. About 250 people die each year from severe acute hepatitis B. Between 6 and 10 of every 100 young adults who catch hepatitis B become chronic carriers (have HBV in their blood for 6 or more months) and may be able to spread the infection to others for a long time period. Infants who catch hepatitis B are more likely to become carriers than adults. About one-fourth of these carriers go on to develop chronic active hepatitis. Chronic active hepatitis often causes cirrhosis of the liver (liver destruction) and death due to liver failure. In addition, HBV carriers are much more likely than others to get cancer of the liver. An estimate 4,000 persons die from hepatitis B-related cirrhosis each year in the United States and more than 800 die from hepatitis B-related liver cancer.

The risk of catching hepatitis is higher in certain groups of people due to occupation, lifestyle, or environment. Because of the risks of serious problems associated with hepatitis B infection, vaccination to help prevent infections is recommended for these groups.

### **WHO SHOULD GET HEPATITIS B VACCINE?**

The vaccine is recommended for persons at high risk of HBV infection who are or may be unprotected. These groups include:

1. Persons with occupational risk. Health care and public safety workers, who are exposed to blood or blood products or who may get accidental needle sticks, should be vaccinated.
2. Clients and staff of institutions for the developmentally disabled. The special behavioral and medical problems of these persons make this a high-risk setting. Risk in institutions is related to contact with blood, bites, skin lesions and other body fluids containing HBV. Clients and staff of group and foster homes where a known carrier is present should also be vaccinated.
3. Hemodialysis patients. Although the hepatitis B vaccine is less effective in these patients, it should still be offered to all hemodialysis patients. Higher doses and/or special preparations are required for these persons.
4. Homosexually active men.
5. Users of unlawful injectable drugs. Sharing needles is an extremely high-risk activity for transmitting hepatitis B.
6. Recipients of certain blood products. Persons such as hemophiliacs who receive special products to help their blood clot are at high risk.
7. Household and sexual contacts of HBV carriers. When HBV carriers are identified, household and sexual contacts should be offered the vaccine.
8. Adoptees from countries with high rates of HBV infection. Families with orphans or unaccompanied minors from such areas should have the child checked for HBV carriage, and, if positive, family members should be vaccinated.



## Frequently Asked Question

**1. How much does the Hepatitis B vaccination cost?**

Free of charge to all employees having reasonably anticipated exposures. A list of job classification is included in the Bloodborne Pathogens program.

**2. If I decline the vaccine today can I take request the vaccine tomorrow?**

Yes, you may request the vaccination even after you completed the vaccination declination form.

**3. Who should I report blood exposure to?**

Report any exposure to bloodborne pathogens to your immediate supervisor as soon as possible.

**4. As a supervisor, how do I handle an employee who reports an bloodborne pathogen exposure?**

Follow proper incident/accident reporting procedures and escort employee to Student Health Center immediately.

**5. When are booster shots required?**

At present, booster shots are not required. However, they will be offered if recommended at a later date by the U.S. Public Health Service.

**UNC CHARLOTTE**  
**HEPATITIS B VACCINE RECORD**

**NAME (PRINT)** \_\_\_\_\_ **UNCC ID** \_\_\_\_\_  
                             First Name                      Middle Initial                      Last Name

**DEPARTMENT** \_\_\_\_\_ **TELEPHONE** \_\_\_\_\_

The Hepatitis B Vaccination (is) (is not) indicated for the above listed employee.

HEPATITIS B VACCINE	DATE	SITE	GIVEN BY
Engerix B			
<b>INITIAL INJECTION</b>			
<b>SECOND INJECTION</b>  Due:			
<b>THIRD INJECTION</b>  Due:			
<b>BOOSTER</b>			

**Comments: List any reported reaction or delayed injection information: Results of lab tests for immunity.**

Healthcare Professional

## 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 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.

\_\_\_\_\_ HBV Vaccination series previously completed (attach HBV Vaccination record if available).

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Department

\_\_\_\_\_  
Date

## **APPENDIX III – INFORMATION TO BE PROVIDED TO HEALTH CARE PROFESSIONAL**

### **A. For Hepatitis B Vaccination**

1. Information provided to Healthcare Professional
  - Copy of the Bloodborne Pathogen Standard
  
2. Healthcare Professionals' Written response is limited to
  - Whether vaccination is indicated for employee
  - Whether employee has received vaccination

### **B. For Post-Exposure Incident Evaluation**

1. Information provided to Healthcare Professional
  - Copy of Bloodborne Pathogen Standard
  - Description of employee's duties related to exposure
  - Documentation of route of exposure and circumstances
  - Results of source individual's blood testing
  - All relevant medical records including vaccination status
  
2. Healthcare Professionals' written response is limited to the following information
  - That the employee has been informed of the results of the evaluation
  - That the employee has been made aware of any medical conditions resulting from the exposure that require further evaluation or treatment
  - (Other findings or diagnoses shall remain confidential and shall not be included in the written report.)

## APPENDIX IV – DEFINITIONS

**Blood:** human blood, human blood components, and products made from human blood.

**Bloodborne Pathogens:** pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

**Clinical Laboratory:** a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

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

**Contaminated Laundry:** laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

**Contaminated Sharps:** any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

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

**Engineering Controls:** controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazard from the workplace.

**Engineered Sharps:** Sharps with engineered sharps injury protections means a nonneedle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

Exposure Control Plan (ECP):

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

**Handwashing Facilities:** a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

**Licensed Healthcare Professional:** a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

**HBV:** hepatitis B virus.

**HIV:** human immunodeficiency virus.

**Occupational Exposure:** 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.

**Other Potentially Infectious Materials:**

(1) The following body fluids: semen, vaginal secretion, 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, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;

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

(3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Parenteral:** piercing mucous membranes or skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

**Personal Protective Equipment (PPE):** specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

**Production Facility:** a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

**Regulated Waste:** 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; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

**Research Laboratory:** a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

**Source Individual:** any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

**Sterilize:** the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

**Universal Precautions:** 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.

**Work Practice Controls:** controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

# APPENDIX V- Housekeeping Bloodborne Pathogens Clean Up Standard Operating Procedure

## HOUSEKEEPING BLOODBORNE PATHOGENS CLEAN UP STANDARD OPERATING PROCEDURE

The Clean-Up Procedures below are to be used on **Solid Surfaces** only. If blood or other potentially infectious material (OPIM) are found on carpet or fabric, please consult the EH&S Office, **7-1111**, for proper instructions.



