BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

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A. Purpose and Background

The University of North Carolina-Pembroke ensures that all employees with occupational exposure to human bloodborne pathogens and selected students and volunteers are protected from contracting bloodborne disease through implementation of a bloodborne pathogens exposure control plan. This plan follows the requirements established by the North Carolina Department of Labor as adopted from the rules issued by the U.S. Occupational Safety and Health Administration in December, 1991 (29 CFR 1910.1030).

Bloodborne Pathogens

HIV and AIDS: Acquired Immunodeficiency Syndrome (AIDS) is a bloodborne and sexually transmitted disease in which the retrovirus known as the human immunodeficiency virus invades the body. HIV damages the immune system and allows other infectious agents to invade the body and cause disease. It may take several years for an HIV infection to result in the disease AIDS. It is still unknown whether or not an HIV infection always leads to AIDS.

HIV is spread through body fluids, primarily blood, semen, and vaginal fluids. A list of other potentially infectious materials (sometimes referred to as OPIM) is provided in the discussion section to the standard. HIV is transmitted by sexual contact, by needle sharing, and through contaminated blood or blood products. An HIV-infected woman can pass the virus to her fetus. It is not transmitted by casual contact, by touching or shaking hands, by eating foods prepared by a person infected with HIV, or from drinking fountains, telephones, toilets, or other surfaces. It is not transmitted by insects or through air or water.

The occupational risk of being infected with HIV in health care settings is low and is most often associated with the transfer of blood from patients with the HIV infection, primarily through needles stick injuries. Available evidence indicates that the risk of HIV infection following a needle stick exposure to the blood of an HIV infected patient is less than 0.5 percent.

To date, no vaccine is available to prevent AIDS. No antiviral drugs are available to cure AIDS. Some drugs, however, have been found to inhibit the action of the virus, and others are able to fight certain opportunistic infections. Research is receiving high priority. Prevention, however, is currently the only approach to control the virus.

Hepatitis Viruses

Hepatitis is a disease characterized by inflammation of the liver. There are several types of viral hepatitis, known as A; B; C; non-A, non-B and delta. Hepatitis A is spread by fecal contamination and is not considered to be a significant risk, nor is it a “bloodborne pathogen.” The other hepatitis viruses are bloodborne, and the hepatitis B virus (HBV) presents the greatest risk to workers in the health care industry.

HBV is not transmitted by casual contact. The occupational risk of HBV infection directly relates to the extent of worker contact with infected blood or other potentially infectious materials. The risk of HBV infection in health care settings exceeds that for HIV infection.

It is estimated that the risk of acquiring HBV infection following puncture with a needle contaminated by an HBV carrier ranges from 6 percent to 30 percent – far higher than the risk of HIV infection under similar circumstances. This is in part because the higher concentration of hepatitis B virus in the blood.

When symptoms occur they are usually flu-like and include fatigue, mild fever, muscle and joint aches, nausea, vomiting, abdominal pain, diarrhea, and jaundice. Severe infections may be fatal.

Chronic carriers of HBV may develop a chronic hepatitis that may progress to cirrhosis of liver cancer and may be fatal. Carriers remain infectious to others.

An effective vaccine exists to prevent hepatitis B infections. This vaccine must be available to all workers determined to be at risk of exposure under the new standard and must be provided at no cost to these employees.

Non-A, Non-B hepatitis has characteristics similar to that of hepatitis B. Identification of the hepatitis C virus, which can cause non-A, Non-B hepatitis, is very recent. Further research is needed to define the importance of bloodborne transmission of this virus in the workplace.

Other pathogens covered by this standard

Ten other bloodborne pathogens are covered by the standard. These are infectious diseases which are characterized by a phase in which the virus or bacteria causing the disease may circulate in the blood for a prolonged period of time. They are therefore capable of being transmitted through blood or other potentially infectious material. With the exception of syphilis or malaria, they are rare in the United States. The following bloodborne pathogens are covered under this standard.

1. Syphilis
2. Malaria
3. Babesiosis
4. Brucellosis
5. Leptospirosis
6. Arboviral infections (especially Colorado tick fever)
7. Relapsing fever
8. Creutzfeldt-Jakob diseases
9. Human T-lymphotropic Virus Type I
10. Viral hemorrhagic fever

By following the requirements of the standard, occupational exposure to these bloodborne pathogens should also be greatly reduced or eliminated.

B. Oversight Committee

C. Acknowledgements

D. Terms and Definitions

Other Potentially Infectious Materials: Anybody fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids, any unfixed tissue or organ (other than intact skin) from a human (living of dead), and HIV – containing cell or tissue cultures, organ cultures an HIV or HVB – containing culture medium or other solutions.

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

Personal Protective Equipment: 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.

Regulated Waste: Liquid or semi-liquid or other potentially infectious materials; contaminated items that would release blood of other potentially infectious materials in a liquid or semi-liquid state is 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.

Sharps and Contaminated Sharps: A "sharp" is any object that can readily penetrate the skin, including, but not limited to, broken glass, needles, scalpels, broken capillary tubes, and exposed ends of dental wires. For the purpose of this policy, the definition of "contaminated sharps" is limited to those contaminated with blood or other potentially infectious incident.

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 and trauma victims.

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

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).

Good Samaritan Act: An employee rendering assistance to accident victims, and other exposure that cannot be "anticipated" do not constitute occupational exposure.

Universal Blood and Body Fluid Precautions: According to the concept of Universal Precautions, all human blood, semen, vaginal secretions, tissue, and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids are treated as if they are infectious for HIV, HVB, and other bloodborne pathogens.

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

Bloodborne Pathogens: A bloodborne pathogen is a pathogenic microorganism present in human blood that can cause disease in humans. These pathogens include, but are not limited to, Hepatitis

B Virus, (HBV) and Human Immunodeficiency Virus (HIV). Also see *Other Potentially Infectious Materials (OPIM)* below.

Blood Titer: A titer is a semi-quantitative (volume to volume) measurement. For the purpose of this policy, the term "blood titer" refers to the indirect measurement of blood levels of the Hepatitis B antibody through a measurement of the Hepatitis B surface antigen.

Body Fluids (Human Body Fluids): Blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid and saliva in dental procedures.

Clinical Laboratory: A work place 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 other potentially infectious materials on an item or surface.

Contaminated Laundry: Laundry which has been soiled with blood or other potentially infectious materials, on an item or surface.

Decontamination: The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item at 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.

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

Hand Washing Facilities: A facility providing an adequate supply of running water, soap, and single use towels or hot air drying machines.

HBV: Hepatitis B Virus.

HIV: Human Immunodeficiency Virus.

Occupational Exposure: Reasonably anticipated skin, eye, mucous membrane, not-intact skin, or parental contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

Occupational Safety and Health Administration (OSHA): OSHA is to regulate facilities where work is carried out. . . To promote safe work practices in an effort to minimize the incidence of illness and injury experience by employees.

Blood Borne Pathogens Standard: This standard is used to reduce occupational exposure to Hepatitis B Virus (HVB), Human Immunodeficiency Virus (HIV) and other blood borne pathogens that employees may encounter in their workplace.

II. Exposure Determinations

Who is covered?

Any employee who has occupational exposure to blood or other potentially infectious materials is included within the scope of the standard. The standard affects employees in many types of employment and is not restricted to the health care industry. At the same time, employees are not automatically covered unless they have occupational exposure. The standard applies to both private employers and public (governmental) agencies in North Carolina.

Exposure Categories

OSHA has established three (3) categories that may have occupational exposure to blood or other potentially infectious materials. This standard is in no way limited to employees in these jobs, and employees in these jobs are not automatically covered unless they have occupational exposure. These categories are as follows:

Category I:

Include any task that involves exposure to human blood, body fluids, or tissues.

All procedures or other job-related tasks that involve an inherent potential for mucous membrane or skin contact with human blood, body fluids, or tissues, OR a potential for spills or splashes of them are Category I tasks. Use of appropriate personal protective equipment will be required for every employee engaged in Category I tasks.

Category I job classifications shall include: All medical doctors, dentists, nurses, physician's assistants, medical lab technicians, nursing assistants, police officers, security officers', athletic trainers, life guards, designated first aid providers, and child care workers. Also included are researchers, instructors and student employees who work in laboratories or clinics where human blood and other potentially infectious materials are used, regardless of frequency.

Category II:

Tasks that involve no exposure to human blood, body fluids, or tissues but employment may require performing unplanned Category I tasks.

The normal work routine involves no exposure to blood, body fluids, or tissues, BUT exposure or potential exposure may be required as a condition of employment. Appropriate personal protective equipment will be readily available to every employee engaged in Category II tasks.

Category II job classifications shall include: Custodial staff, laundry workers, environmental health staff, laboratory animal caretakers, pharmacists, plumbers (medical facility), resident assistants and veterinarians.

Category III:

Tasks that involve no exposure to human blood, body fluids or tissues, AND Category I tasks are not a condition of employment.

The normal work routine involves no exposure to human blood, body fluids or tissues (although situations may be imagined or hypothesized under which anyone, anywhere, might encounter potential exposure to body fluids). Persons who perform these duties are not called upon as part of their employment to perform or assist in emergency medical care or first aid or to be potentially exposed in some other way.

Category III job classifications shall include: Auto mechanics, accountants, clerical staff, communications workers, computer operators, crafts workers (except plumbers), economists, electronics technicians, engineers, facility repair workers, food service workers, graphic artists, grounds personnel, instrument makers, maintenance mechanics, motor vehicle operators, personnel service staff, photographers, and power plant operators.

Category III tasks and procedures that may result in occupational exposure:

1. Disposing of soiled tissues or other debris soiled with visible blood from classrooms, laboratories, hallways or offices.

2. Physical contact with other employees, students or visitors with exudative lesions or weeping dermatitis.

3. Provision of emergency first aid or CPR until professional help arrives.

It is the policy of the University of North Carolina-Pembroke that all employees shall be classified as either Category I, Category II, or Category III.

III. Written Exposure Control Plan

To protect employees against exposure to human bloodborne pathogenic diseases the following exposure control steps will be undertaken. First, "Standard/Universal Precautions" will be observed to prevent contact with blood or other potentially infectious materials. Second, engineering and work practice controls will be followed to prevent contact with potentially infectious materials. Third, specimens and equipment will be handled under strict guidelines.

Finally, a hazard communication procedure will be followed to alert all employees to the possibility that pathogenic materials are present.

A. UNIVERSAL PRECAUTIONS/ STANDARD

It will be the policy of the University of North Carolina-Pembroke to utilize Standard Precautions. Standard Precautions, formerly referred to as Universal Precautions, is a system of infection control which assumes that all human blood and certain body fluids are treated as if known to be infectious for HIV, HBV and other bloodborne pathogens. Standard Precautions shall be **consistently** used for **all individuals**. Implementation of Standard Precautions does not eliminate the need for other category or disease-specific isolation precautions.

Body fluids which are directly linked to the transmission of HBV and/or HIV to which Standard Precautions apply are blood, blood products, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, saliva in dental procedures and concentrated HIV and/or HVB viruses. Standard Precautions also apply to body tissues and any other human body fluids visibly contaminated with blood.

Although salvia has not been implicated in HBV and/or HIV transmission, to minimize the need for emergency mouth to mouth resuscitation, mouthpieces, resuscitation bags, and other ventilation devices will be available for use in areas in which the need for resuscitation is predictable.

All health care workers and emergency response personnel shall routinely use appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with blood or other body fluids are anticipated.

Example of Protective Barriers

A supply of non-sterile gloves will be made available by the departments employing these personnel and this equipment shall be worn when it is apparent that contact with blood or body fluids is reasonably expected. Other items such as long sleeve gowns, aprons, masks, shoe covers, and eye shields will also be available to health care and emergency response employees.

These protective barriers shall be examined by the supervisor on at least a monthly basis and shall be maintained or replaced on at least an annual basis to ensure their effectiveness.

The type of barrier chosen depends on the situation. In general, the selection of the type of protective barrier or equipment or work practice will include the consideration of the probability of

exposure, the type and amount of blood or body fluid, as well as the route of transmission.

If a procedure or situation is likely to generate splashing, spraying, splattering and generation of droplets of blood and/or body fluids beyond the protective barrier provided by gloves, then it is left to the individual employees discretion (after appropriate training) to obtain the needed protective equipment prior to undertaking the procedure.

In the event that unexpected splashing occurs in an unprotected situation, a change of clothing and shower facilities shall be made available for the employee.

Hands and other skin surfaces shall be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands shall be washed immediately after gloves are removed. It is not acceptable to wash gloves instead of removing gloves, washing hands, and applying clean gloves.

To prevent needle stick injury, contaminated needles or other sharps must not purposely be bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand. They shall be disposed of in sharps containers.

All health care workers and emergency response personnel shall take precautions to prevent injuries caused by needles, scalpels, and other sharp instruments during procedures; when cleaning used instruments or during disposal of used needles; and when handling sharp instruments after procedures. After use, disposable syringes and needles, scalpel blades, and other sharp items shall be placed in puncture-resistant sharps containers for disposal. The puncture-resistant container should be located as close as practical to the use area and identified as biohazardous.

Gloves must be worn if the hands of the caregiver are not intact. Employees who have exudative lesions or weeping dermatitis shall refrain from all direct contact with patients or victims and from handling patient care equipment until the condition resolves.

Implementation of Universal Precautions will be accomplished as follows:

1. Gloves shall be worn when direct contact with blood and visibly blood tinged body substances can reasonably be expected including contact with blood and body fluids, mucous membranes, non-intact skin of individuals, handling of items or surfaces soiled with blood or body fluids, and for performing venipuncture and other vascular access procedures. Gloves shall be changed after contact with each patient or victim.

2. Gloves should be put on prior to beginning a task and removed when the task is complete. Hands must be washed after removal of gloves or other personal protective equipment. Sterile gloves should be worn for invasive aseptic procedures.

3. Gloves shall be worn for all procedures where a potential exists for exposure to blood or body fluids. The procedures will include, but not be limited to:

    - Perineal care

- Catheter care
- Oral care
- Suctioning
- Treatment/dressing changes
- Venipuncture
- Handling of contaminated trash
- Handling of soiled laundry/linens
- Cleaning body fluids spills
- Cleaning blood spills

4. Hand washing with soap and water is mandatory between each patient or victim contact and should be done whenever hands are visibly soiled. Hand cleanser and a clean cloth, paper towel, or antiseptic towelettes will be provided by the employees department. When antiseptic hand cleanser or towelettes are used, hands must be washed with soap and running water as soon as feasible.

5. Gowns and disposable aprons are only needed when it is likely that blood and visibly blood substance will soil clothing or skin.

6. Masks are only needed when it is likely that nose and mouth will be splashed with moist body substances or when personnel are working directly in or around areas of large open wounds.

7. Eye shields, goggles, or face shields are only needed when there is the likelihood that the eyes may be splashed with body fluids.

8. Contaminated needles or other sharps must not be bent, sheared, broken or recapped by hand. Needles and other sharps must be discarded in rigid, leak proof puncture resistant containers for disposal. The puncture-resistant sharps container should be located as close as practical to the use area, and identified as biohazardous. To prevent recapping by hand, re-sheathing of needles may be accomplished with the aid of a re-sheathing instrument, self-sheathing needles or forceps.

9. Linen soiled with blood or blood tinged body fluids must be gathered without undue agitation and placed in a leak-proof bag for transportation to the laundry soiled linen area. Bagging should occur at the location where it was used, however double bagging is not necessary.

10. Containers used for waste containment must be large enough to hold all contents and must prevent leakage of fluids during handling, storage, transport or shipping. If outside contamination of the container occurs, a second container shall be used to encase the first.

11. Housekeeping - Environmental surfaces such as walls, floors, and other surfaces are not associated with transmission of infections to either patients/victims or employees, therefore, attempts to disinfect or sterilize is not necessary. However, changing and removal of soil should be done routinely using products that, according to the manufacturer's instructions are effective for the required sanitation outcome and are registered with the EPA.

12. Laundry- Because the risks of disease transmission from soiled linen is negligible, hygienic, and common-sense storage and processing of clean and soiled linen is recommended. Soiled linens should be handled as little as possible. Linens should be washed with detergent and hot water (at least 60 degrees C for 25 minutes) or if lower temperature cycles are used, with chemicals suitable for low temperature washing at proper use concentration.

13. If an employee has an exposure incident, the employee shall file an accident report with his/her supervisor as soon as feasible and the individual shall be encouraged to be tested for HBV and HIV, as soon as feasible and then at intervals of six (6) weeks, twelve (12) weeks, and six (6) months following the incident.

14. An evaluation of any incident that exposed or potentially exposed an employee (or student or volunteer) to infection with bloodborne pathogens shall be undertaken collaboratively by the Department of University Safety and Assurances, the Student Health Services, Human Resources and the Risk Management Office and a description of the corrective action taken to prevent recurrence of similar exposures shall be recorded.

15. For each incidence of mucous membrane or parenteral exposure to body fluids or tissue, a description of the exposure and any corrective action taken to prevent recurrence shall be documented by the Department of University Safety and Assurances in collaboration with the Human Resources Department. Progressive discipline will occur for any employee that fails to comply with Universal Precautions. Documentation will include the employee infraction and the corrective action taken by the facility to bring the employee into compliance. Standard University disciplinary procedures will be followed.

B. ENGINEERING AND WORK PRACTICE CONTROLS

Engineering and work practice controls will be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment will also be used. Engineering controls shall be examined at least monthly and shall be maintained or replaced at least annually to ensure their effectiveness. The area supervisor shall be responsible for inspections.

The employing department will provide hand washing facilities which are readily accessible to employees. When provision of hand washing facilities is not feasible, the employing department will provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands will be washed with soap and running water as soon as feasible.

The supervisor will ensure that employees wash their hands immediately or as soon as feasible after the removal of gloves or other personal protective equipment.

The supervisor will ensure that employees wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

C. HOUSEKEEPING

The University of North Carolina-Pembroke, through its employing departments, will ensure that worksites involving bloodborne pathogenic materials are maintained in a clean and sanitary condition. For example, the Student Health Services, UNCP Police Department, School of Nursing and all research laboratories utilizing blood and other potentially infectious materials shall prepare written schedules (e.g. infection control plans) for cleaning and the method of decontamination based upon the location in the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area. The schedule shall be followed and it shall be made accessible to employees.

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

Contaminated work surfaces will be decontaminated with an appropriate disinfectant after completion of a procedure; immediately or as soon as feasible when surfaces are overtly contaminated, or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface has become contaminated since the last cleaning.

Disinfection Procedures:

Contaminated equipment or personal items may be disinfected with any quality disinfectant (states effectiveness against HIV on the label) or with a solution of house hold bleach and water (1 ounce of bleach mixed with 10 ounces of water.) Rinse the equipment thoroughly after disinfecting.

Cleaning and Decontamination of Blood or Body Fluid Spills:

Studies have shown that even mild germicides are used, HIV is easily inactivated or destroyed. Once HIV is exposed to the air and dries it dies.

If there is organic matter present (mucous or blood) on the surface, a solution strength of 1 ounce bleach in 10 ounces of water provides a more effective solution. Germicides that are available from local stores may be better for use on some equipment than bleach. Some metals are easily corroded by bleach, especially at the 1:10 dilution.

To clean a spill, wear gloves and use an absorbent cloth or paper towel to blot as much of the spill as possible. After the spill is cleaned, follow with a soak (wet the area) of the disinfectant. The disinfectant should be allowed to air dry since a ten-minute period is usually recommended for maximum destruction of harmful organisms.

Dispose of soiled cleaning materials in leak proof bags.

Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces shall be removed and replaced at the end of the work shift if they became contaminated during the shift. Heavily contaminated coverings may need to be replaced several times during a shift.

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, shall be inspected and decontaminated at least weekly and cleaned and decontaminated immediately, or as soon as feasible, upon visible contamination.

Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up by mechanical means, such as brush and dustpan, tongs or forceps and be disposed of in an appropriate sharps container.

D. SPECIMENS AND EQUIPMENT

All procedures involving blood or other potentially infectious materials will be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

Use of a mouth pipette or suctioning of blood or other potentially infectious materials is prohibited.

Specimens of blood or other potentially infectious materials must be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

The container for storage, transport or shipping shall be labeled biohazardous or color- coded and closed prior to being stored, transported or shipped. When using Universal Precautions in the

handling of all specimens, the label/color-coding of specimens is not necessary provided the containers are recognizable as containing specimens and so long as the specimen remains in the facility. Biohazardous labeling or color-coding is required if and when the specimen container leaves a UNCP facility.

If there is outside contamination of the primary container, the primary container must be placed within a secondary container that is puncture-resistant in addition to the above characteristics.

Equipment that may become contaminated with blood or other potentially infectious material must be examined prior to servicing or shipping and must be decontaminated as needed, unless it can be demonstrated that the decontamination of such equipment or portions of such equipment is not feasible. If the equipment can't be decontaminated, then a readily observable biohazard label must be attached to the equipment stating which portion(s) remains contaminated.

It is the responsibility of all employing departments of the University to ensure that this information is conveyed to all affected employees, to all service representatives, and/or all manufacturer representatives, as appropriate, prior to the handling, servicing, or shipping of contaminated materials, so that appropriate actions can be taken.

E. HAZARD COMMUNICATION

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

Labels required include the *international biohazard symbol*:

The Biohazard label shall be fluorescent orange or orange-red with lettering or symbols in a contrasting color.

Labels must be affixed as close as feasible to the container by string, wire, adhesive or other method that prevents their loss or unintentional removal.

Red bags or red containers may be substituted for labels.

Containers of blood, blood components or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirements.

Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.

Contaminated equipment shall be labeled and state which portions of the equipment remain contaminated.

Regulated waste that has been decontaminated need not be labeled or color-coded.

Section IV. Personal Protective Equipment

Personal protective equipment (PPE) is specialized clothing worn by an employee for protection against a hazard. General work clothes, not intended to function as protection against a hazard, are not considered to be personal protective equipment.

When there is a potential for occupational exposure, the employing department of the University will provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks, eye protection, mouthpieces, resuscitation bags, pocket masks and/or other ventilation devices.

Employee Donning PPE

Personal protective equipment is considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employee's work clothes, street clothes, undergarments, 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 employing department's responsibility to ensure that employees use appropriate personal protective equipment. Under rare and extraordinary circumstances an employee may exercise professional judgment that in a specific situation the use of such equipment would have prevented the delivery of health care or public safety services, and/or would have posed an increased hazard to the safety of the worker or co-worker. When the employee makes such a judgment, it must be

shown that the employee temporarily and briefly declined to use personal protective equipment, and the circumstances must be investigated and documented in order to determine whether changes can be instituted or to prevent such occurrences in the future.

The employing department will ensure the appropriate personal protective equipment, in the appropriate sizes, is readily accessible at the worksite. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives will be readily accessible to those employees who are allergic to the gloves normally provided.

The employing department will clean, launder and dispose of personal protective equipment and will repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the employee.

If a garment is penetrated by blood or other potentially infectious materials, the garment(s) will be removed immediately or as soon as feasible.

All personal protective equipment will be removed prior to leaving the work area, and placed in an appropriate designated area or container for storage, washing, decontamination or disposal.

Gloves will be worn when it can be reasonably anticipated the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures, and when handling or touching contaminated items or surfaces.

Disposable (single use) gloves will be replaced as soon as practical when contaminated, or as soon as feasible if they are torn or punctured, or when their ability to function as a barrier is compromised. Disposable (single use) gloves will not be washed or decontaminated for reuse.

Utility gloves may be decontaminated for reuse if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured or exhibits other signs of deterioration, or when their ability to function as a barrier is compromised.

Masks in combination with eye protection devices, such as goggles or glasses with solid side shields or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated, and eye, nose, or mouth contamination can reasonably be anticipated.

Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats clinic jackets, or similar outer garments will be worn in occupational exposure situations. The type and characteristics will depend upon the task and the degree of exposure anticipated.

Surgical caps or hoods and/or shoe covers or boots need only be worn in situations when gross contamination can be reasonably anticipated.

Employee Donning Mask

NOTE: Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

NOTE: Food and drinks will not be kept in refrigerators, freezers, shelves, cabinets, on counter tops, or bench tops where blood or other potentially infectious materials are present.

Section V. Medical Services

A. Hepatitis B Vaccination

Hepatitis B is a type of viral hepatitis acquired from exposure to human blood and body fluids that result in liver inflammation. While the use of standard / universal precautions helps in the protection from Hepatitis B, the Hepatitis B vaccine is an additional measure offered to all employees in Category I and Category II free of charge through the Student Health Services.

NOTE: The cost of the vaccination for employees is charged back to the employing department. Departments with employees classified as Category I or Category II must establish accounts for the charges with the Student Health Services.

NOTE: Students, volunteers and "good Samaritans" are not eligible for "free" vaccination and must make alternate arrangements with other qualified health care providers.

NOTE: Employees classified as Category I or Category II wishing to obtain HBV vaccination from other sources must assume personal financial responsibility for the cost of the vaccination and must offer acceptable proof of vaccination to the employer.

1. As part of the orientation process, education and training will be provided regarding the Hepatitis B vaccine. These training records must be maintained for a minimum of 3 years from the date on which the training occurred.

   At a minimum, this training will include efficacy, safety, method of administration, benefits of being vaccinated, and the fact that the vaccine is available at convenient times in-house at no charge to any employee where occupational exposure may take place.

   This training will be provided during working hours at no cost to the employee by a health care or safety professional knowledgeable in the subject matter as it relates to the workplace.

2. Following the required training, all employees in Category I and Category II will be offered the Hepatitis B vaccine, free of charge, within 10 working days of initial assignment unless the employee has previously received the complete Hepatitis B vaccination series and antibody testing has revealed that the employee is immune or if the vaccine is contraindicated for medical reasons (e.g. allergic to yeasts).

3. All employees offered the Hepatitis B vaccine will complete the Consent Form for Hepatitis B Vaccination.

4. Once completed, the Consent Form shall be placed in the employee's permanent record.

5. For those desiring the Hepatitis B vaccine, an Employee Immunization Record will be maintained until each of the 3 steps of the vaccination process is complete. (Initial, 30 days from initial and 6 months from initial.)

6. Once the series is complete, the Immunization Record will become part of the employee's permanent record.

7. Vaccines will not be provided for employees that are no longer employed by the University. Employees may choose not to complete the series of 3 inoculations. If an employee leaves the University's employment, they will not receive initial or subsequent inoculations. If the series is not completed, the reason and the employee's signature must be written on the Immunization Record.

8. An employee may initially decline the Hepatitis B vaccine, but at a later date may decide they want the vaccination. If this occurs, the employee must complete a new Consent form and steps 3-6 of this procedure must be followed.

9. If a routine booster dose(s) of Hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, the booster dose(s) will be made available, free of charge to the employee.

10. The Hepatitis B vaccine must be performed by or under the supervision of a licensed physician, or under the supervision of another licensed healthcare professional. .

B. Post-Exposure Evaluation and Follow-Up

Following a report of an exposure incident, the University of North Carolina-Pembroke will immediately make available (through an occupational health provider) a confidential medical evaluation and follow-up, to include at least the following:

1. Documentation of the route(s) of exposure and the circumstances under which the exposure incident occurred.

2. Identification and documentation of the source individual, unless we can establish that identification is infeasible or prohibited by state or local law.

After consent is obtained, the source individual's blood will be tested as soon as feasible in order to determine HBV and HIV infectivity. If consent is not obtained, the University will establish that the legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.

When the source individual is already known to be infected with HBV or HIV, testing for the source individuals known HBV or HIV status need not be repeated.

Results of the source individual's testing will be made available to the exposed employee, and the employee will be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

The exposed employee's blood will be collected as soon as feasible and tested after consent is obtained. Typical scenarios for HBV testing (HIV testing covered under HIV policy).

1. Source individual's HBV status is unknown and the exposed employee has had the complete Hepatitis B vaccination series. The source individual should be tested as soon as feasible to determine HBV status and the exposed employee should be tested as soon as feasible to establish appropriate immunization level.

2. Source individual is known to be HBV positive and the exposed employee has had the complete Hepatitis B vaccination series. A repeat test on the source individual is not necessary, but the exposed employee should be tested as soon as feasible to establish appropriate immunization level.

3. Source individual's HBV status is unknown and the exposed employee has either not received or completed the Hepatitis B vaccination series. The source individual should be, as soon as feasible, tested to determine HBV status and the exposed employee should be tested to establish baseline and again six (6) weeks post exposure, twelve (12) weeks post exposure and six (6) months post exposure to determine seroconversion.

4. Source individual is known to be HBV positive and the exposed employee has either not received or completed the Hepatitis B vaccination series. The source individual need not be tested, but the exposed employee should be tested as soon as feasible to establish baseline and again six (6) weeks post exposure, twelve (12) weeks post exposure and six (6) months post exposure to determine seroconversion.

If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.

Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service includes counseling and the evaluation of reported illnesses.

The University will ensure that the healthcare professional evaluating an employee after an exposure incident is provided with the following information:

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

2. Documentation of the route(s) of exposure and the circumstances under which the exposure occurred.

3. Results of the source individual's blood testing, if available.

4. All medical records relevant to the appropriate treatment of the employee including vaccination status.

The University will obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The healthcare Professional’s written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.

The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to include only that the employee has been informed of the results of the evaluation and that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment. All other findings or diagnoses shall remain confidential and shall not be included in the written report.

In keeping with these principles, the following shows the recommended campus-wide procedure to use for initiating post-exposure follow-up.

Recommended Procedures for Post-Exposure Follow-Up to

Bloodborne Pathogen Exposure at the University of North Carolina-Pembroke

- An employee who experiences an exposure incident must cease work and report it immediately to her/his supervisor, even if the employee does not feel the exposure poses a risk for contracting bloodborne disease;

- The supervisor, together with exposed employee, must immediately fill out the "Employer's First Report of Injury or Disease" and a North Carolina Department of Administration "Occupational Accident and Injury" form; the supervisor does not have the discretion to deny the employee's ability to report the incident;

- The employee next reports to the Department of Human Resources with a copy of the report forms in hand;

- The Human Resources Office confirms that an exposure incident has occurred and ensures that the information recorded on the forms meets the requirements for documenting exposures;

- The Human Resources Office immediately refers the employee to an Occupational Health Provider.

- If possible and applicable, the Human Resources Office (with the assistance, if needed, of the Director of University Safety and Assurances and the Risk Manager) seeks out the source individual and requests consent for serologic testing, and if consent is obtained, refers the source individual to an appropriate health care provider;

- Within a short period of time following the exposure incident, the Human Resources Office, Director of University Safety and Assurances and the Risk Manager review the circumstances surrounding the exposure incident and, if warranted, recommend revision of the Exposure Control Plan to reduce the likelihood of a similar incident in the future.

Hepatitis B Vaccine Consent Form

I have read or have had explained to me the information about Hepatitis B and Hepatitis B vaccine. I have had a chance to ask questions which were answered to my satisfaction. I believe I understand the benefits and risks of the Hepatitis B vaccine and request that it be given to me.

_____ _____

Name Date of Birth

_____

Address

_____ _____

Signature Date

Hepatitis B Vaccine Record

Date of Injection	Site	Nurse Signature	Comments
#1			
#2			
#3			

Trade Name of Vaccine_____

Manufacturer _____

Lot #_____

Consent for Screening of Confirmatory Tests

For Human Immunodeficiency Virus

The undersigned hereby gives their permission and consent to the University of North Carolina at Pembroke to perform a screening or confirmatory test for the human immunodeficiency virus (HIV) as considered necessary or essential for my protection of patients and employees of the University of North Carolina at Pembroke where I am an employee.

I understand that the results of the screening or confirmatory tests will be held in the strictest confidence by the University and will be reviewed only with me, unless I give additional consent for disclosure of the results of such tests.

I further understand that the results of these tests may not be disclosed and that the University may not be compelled to disclose such information or test results involving communicable diseases, except as may be provided under state and federal law.

This consent and authorization is given this _____day of _____, _____.

Employee: _____

The undersigned refuses to give consent or submit any screening or confirmatory tests for any of the communicable diseases set forth and enumerated at the University of North Carolina at Pembroke.

Date: _____

Employee: _____

Confirmatory Tests

For Hepatitis B Virus

The undersigned hereby gives their permission and consent to the University of North Carolina at Pembroke to perform a screening or confirmatory test for the Hepatitis B virus (HBV) as considered necessary or essential for my protection of patients and employees of the University of North Carolina at Pembroke where I am an employee.

I understand that the results of the screening or confirmatory tests will be held in the strictest confidence by the University and will be reviewed only with me, unless I give additional consent for disclosure of the results of such tests.

I further understand that the results of these tests may not be disclosed and that the University may not be compelled to disclose such information or test results involving communicable diseases, except as may be provided under state and federal law.

This consent and authorization is given this _____day of _____, _____.

Employee: _____

The undersigned refuses to give consent or submit any screening or confirmatory tests for any of the communicable diseases set forth and enumerated at the University of North Carolina at Pembroke.

Date: _____

Employee: _____

Non-Employee Consent for Screening of Confirmatory Tests

For Hepatitis B Virus

The undersigned hereby gives their permission and consent to the University of North Carolina at Pembroke to perform a screening or confirmatory test for the Hepatitis B virus (HBV) as considered necessary or essential for my protection of patients and employees of the University of North Carolina at Pembroke where I am an employee.

I understand that the results of the screening or confirmatory tests will be held in the strictest confidence by the University and will be reviewed only with me, unless I give additional consent for disclosure of the results of such tests.

I further understand that the results of these tests may not be disclosed and that the University may not be compelled to disclose such information or test results involving communicable diseases, except as may be provided under state and federal law.

This consent and authorization is given this _____day of _____, _____.

_____

Patient:

_____

Patient's authorized medical representative or responsible party.

The undersigned refuses to give consent or submit any screening or confirmatory tests for any of the communicable diseases set forth and enumerated at the University of North Carolina at Pembroke.

Date: _____ Patient: _____

_____

Patient's authorized medical representative or responsible party.

Section VI. Management of Infectious Wastes, Blood Spills, Contaminated Surfaces and Contaminated Laundry

A. Campus Wide Infection Waste Management

Infectious waste which is disposed of by means other than washing into the sewerage system is regulated by federal, state and local laws and is termed "regulated waste". Regulated wastes will be placed in containers that are closable, constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping. These containers will be labeled biohazardous or color-coded (red bagged) and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

If outside contamination of the regulated waste container occurs, it will be placed in a second container.

The second container will be closable, constructed to contain all contents and prevent leakage of fluids during handling, storage, transport, or shipping and be labeled biohazardous or color-coded. The container must be closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

If regulated waste is stored prior to disposal, it must be stored in a secure area that is locked or otherwise secured to eliminate access by the general public, and must be afforded protection from adverse environmental conditions and vermin.

The following specific procedures and precautions must be followed for the handling, treatment and disposal of regulated infectious wastes:

- All sharps must be disposed of in sharps containers, regardless of other protective features built into the tool such as self-sheathing needles. Sharps containers must meet the criteria established by the Bloodborne Pathogens Rule and must be available wherever sharps are used for University-related procedures. Sharps containers are purchased by Departments or research projects with Departmental or project funds.

- The efficacy of steam autoclaving and chemical sterilization procedures must be verified through methods recommended by the Centers for Disease Control (CDC), for example, the use of suitable indicator strips.

- Liquid infectious wastes shall be disposed in the sanitary sewer only when volumes are so large as to preclude the feasibility of autoclaving and when using the precautions listed:

- a sink must be dedicated for this purpose and set aside from other uses through appropriate signs;

    - personnel must wear gloves, goggles, face shield and splash protection;

- personnel shall be trained in the techniques to minimize the risk of exposure and contamination; in particular, the infectious waste shall be poured in a manner so as to minimize, as much as possible, the generation of aerosols;

- the sink and surrounding surfaces shall be decontaminated with a 1:10 solution of bleach in water (Clorox or equivalent) and the drain shall be flushed with the same solution each time it is used;

- plumbers servicing drain pipes used for infectious waste disposal shall be informed of the potential hazard of liquid infectious waste being retained in the lines and advised to wear suitable personal protective equipment.

- Untreated infectious waste shall not be shipped off-site unless it is hauled by a licensed transporter to a licensed infectious waste treatment facility. Treated infectious waste may only be disposed in the normal trash if labels and markings that identify the waste to be infectious are removed or defaced.

B. Sharps

Contaminated needles and other contaminated sharps must not be bent, recapped or removed unless it can be demonstrated that no other alternative is feasible or that such action is required by a specific medical procedure.

If necessary, recapping or needle removal must be accomplished through a mechanical device or a "one-handed technique". ("One-handed technique" is accomplished by scooping the cap onto the needle while your other hand remains behind your back.)

Shearing or breaking of contaminated needles is strictly prohibited.

One-Handed Technique

Sharps Disposal

Immediately or as soon as possible after use, contaminated reusable sharps will be placed in appropriate containers until properly reprocessed. These containers must be puncture resistant, labeled biohazard or color-coded, leak-proof on the sides and bottom and shall not be stored or processed in a manner that requires employees to reach by hand into the container where the sharps have been placed.

Disposable contaminated sharps will be discarded immediately or as soon as feasible in containers that are closable, puncture resistant, leak-proof on the sides and bottom and labeled "BIOHAZARD" or color-coded.

During use, containers for contaminated sharps will be easily accessible to personnel and located as close as feasible to the immediate areas where sharps are used or can be reasonably anticipated to be found; maintained upright throughout use; replaced routinely and not be allowed to be overfilled.

When moving containers of contaminated sharps from the area of use, the container must be closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

If leakage is possible, a secondary container must be used. The second container must be closable, constructed to contain all contents and prevent leakage during handling, storage, transport or shipping and be labeled "BIOHAZARD". Reusable containers shall not be opened, emptied or cleaned manually, or in any other manner that would expose employees to the risk of percutaneous injury.

C. On-site Treatment

Autoclaving and Chemical Sterilization: Steam autoclaving is a suitable treatment technique for small volumes of infectious wastes. These include used first aid supplies, blood spill cleanup absorbents, liquids, and other small volumes of infectious wastes. Many campus departments already use autoclaves for sterilization of laboratory equipment.

Chemical sterilization is accomplished by use of ethylene oxide, isolyzer compounds or dilute bleach solutions. Ethylene oxide treatment is impractical except in large hospitals. Isolyzer compounds or bleach solutions are practical for small blood spills such as lacerations or bloody noses.

Whatever treatment procedure is used, red bags should not be used for the disposal of TREATED infectious waste in the normal trash as this may cause undo concerns from the campus solid waste hauler or, perhaps, the general public.

Management of Liquid Infectious Waste Via the Sanitary Sewer: The wastewater treatment system is a sufficiently hostile environment for the HIV and HBV viruses and other pathogenic organisms so the DNR allows liquid infectious wastes to be disposed of to the sewer. However, this practice involves a high degree of risk of exposure to personnel conducting the activity. Caution must be observed. The risk to plumbers will be minimal if the drains are flushed with a suitable disinfectant every time they are used.

D. Off-Site Disposal

Licensed commercial infectious waste management contractors must be utilized if off-site disposal is needed. Moreover, new DNR infectious waste transportation regulations prohibit campus employees from transporting infectious wastes to area hospitals or other facilities for disposal.

E. Handling Contaminated Laundry

Contaminated laundry will be handled as little as possible with a minimum of agitation.

Contaminated laundry will be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use. The contaminated laundry will then be placed and transported in bags or containers labeled as "BIOHAZARD" or color-coded (red).

When Universal Precautions are utilized in the handling of all soiled laundry, alternative labeling or color-coding is sufficient, if it permits all employees to recognize the containers as requiring compliance with Universal Precautions. Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through of or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.

The University will ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

If the facility ships contaminated laundry off-site to a second facility which does not utilize Standard Precautions in the handling of all laundry, the facility generating the contaminated laundry must place such laundry in bags or containers which are labeled biohazardous or color-coded (red).

F. Feminine Hygiene Products

OSHA has issued a letter stating that they do not include soiled sanitary napkins and other feminine hygiene products in the definition of regulated waste because they are designed so as to prevent the release of liquid or semi-liquid blood or the flaking off of dried blood. Therefore, employees handling such wastes are not covered by the Bloodborne Pathogens Rule solely due to that duty. However, OSHA does expect that containers for soiled sanitary products be lined with a plastic or wax paper bag and that employees will be provided suitable gloves for removal of the bags from the waste container.

G. Blood Spills

Blood spills on non-porous surfaces can very simply be handled by diluting the spill with an equal volume of 1:10 household bleach solution, or with other EPA registered disinfectants, and then absorbing it with disposable toweling or absorbent pads. This approach is used in hospitals and exceeds the guidelines issued by the CDC. If the spill involves any broken glassware, it must be picked up using a mechanical means, such as a brush and dustpan, tongs or forceps. In cases where the absorbent becomes saturated with blood and bleach, the spill cleanup materials should be autoclaved prior to being disposed of in the normal trash.

There are also a number of "clumping" powdered products (e.g. Vital 1, Isolyzer) that absorb and solidify blood spills and chemically treat them at the same time. While these methods are effective and convenient they are very expensive compared to bleach and absorbent material and have not yet withstood the "test of time". Bleach or other EPA approved disinfectants are most highly recommended.

There are also products that fix sharps in a plastic polymer while treating them by heat and chemical disinfectant (e.g. Isolyzer). While these methods may be convenient and effective, the chemical polymerizing method is no longer considered an effective method of rendering sharps unusable. Please turn in all sharps for destruction and disposal to the Hazardous Waste Program.

H. Contaminated Surfaces

Exact procedures will depend upon departmental activities and needs. In general, the following principles established by the CDC should be followed:

- Decontamination shall be carried out after completion of specified procedures, or as soon as possible, when surfaces are overtly contaminated or after any spill of blood or other potentially infectious material;
- Decontamination shall also be carried out at the end of the work shift if the surface may have become contaminated since the last cleaning;
- The same principles apply to protective coverings on equipment or environmental surfaces (e.g. floors, walls, bench tops);
- All bins, pails, cans and similar receptacles intended for reuse which have a reasonable likelihood of becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon a feasible upon visible contamination.

Section VII. Information and Training

The University of North Carolina-Pembroke will ensure that all employees with occupational exposure participate in a training program that will be provided at no cost to the employee and will be provided during working hours.

Training will be provided at the time of initial assignment to tasks where occupational exposure may take place and at least annually thereafter, within one year of their previous training using material appropriate in content and vocabulary to the educational level, literacy, and language of the employees. The University of North Carolina-Pembroke will provide additional training when changes, such as modifications of tasks, changes in procedures, institution of new tasks or procedures affect the employees' occupational exposure. The additional training will be limited to addressing the new exposures created.

For Level 1 employees and those Level 2 employees with occupational exposure to bloodborne pathogens the training program will contain the following elements:

1. An accessible copy of the regulatory text of this standard and an explanation of its contents.
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 the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.

6. An explanation of the use and limitations of methods that will prevent or reduce exposure, including standard precautions, appropriate engineering controls, work practices and personal protective equipment.

7. Information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment.

8. An explanation of the basis for selection of personal protective equipment.

9. Information on the Hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge (except for students and volunteers).

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

11. An explanation of the procedure to follow if an exposure incident occurs, including the 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 will provide for the employee following an exposure incident.

13. An explanation of the biohazard signs and labels and/or color-coding required by the facility and by law.

14. An opportunity for interactive questions and answers with the person conducting the training.

For Level 3 employees and those Level 2 employees without occupational exposure to bloodborne pathogens the training program will contain the following elements:

1. Basic understanding about the subject of bloodborne diseases and how they are transmitted.

2. Basic training on how employees are expected to respond to situations involving blood, if they unexpectedly encounter it.

3. Basic training of post-exposure follow-up and how it would apply to employees if they were exposed.

4. A video training session supplemented with basic handout material will be the primary training methodology for this group.

The person conducting the training will be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace/facility.

Training records will include the following information:

1. The dates of the training sessions.
2. The contents or a summary of the training sessions.
3. The names and qualifications of the person(s) conducting the training.
4. The signed names and job titles of all persons attending the training sessions.
5. A means of assessing learning.

Training records will be maintained for 3 years from the date on which the training occurred.

Employee training records will be provided upon request for examination and copying to employees and employee representatives, and others as required by law.

Section VIII. Students

Students are, strictly speaking, not covered by the Bloodborne Pathogens Rule. However, it is the mission of the University of North Carolina- Pembroke to provide students with adequate training so they may pursue their studies and eventually their careers safely and knowledgeably. Therefore, the University has identified those curricula which involve reasonably anticipated exposure of students to blood or other potentially infectious materials.

The use of blood must be evaluated in light of its risk to students and the fulfillment of each department's academic mission. When possible, alternatives to the use of blood and other potentially infectious materials must be adopted. Alternatives include the use of non-infectious animal blood, synthetic blood or computer simulations. (Note that "Screened Blood" from a blood bank is not 100% safe, must be handled using Standard / Universal Precautions, and requires the same training, precautions and protective equipment as unscreened blood). For curricula where alternatives are not feasible, the policies of this section (see below) must be followed.

Exposure Control Plan: Departments which require students to work with blood or other potentially infectious materials must follow the UNCP Bloodborne Pathogens exposure control plan (see Section III).

Training: Departments which require students to work with blood or other potentially infections materials must provide at least the same level of training as outlined in the UNCP Bloodborne Pathogens Exposure Control Plan. For students in laboratory or clinical settings (on campus or off) advanced training must be provided by qualified professors and/or instructors.

Personal Protective Equipment (PPE): Departments which require students to work with blood or other potentially infections materials must provide at least the same level of personal protective equipment as outlined in the UNCP Bloodborne Pathogens Exposure Control Plan. Students may

be required to purchase the equipment and should be advised of this requirement well in advance. Moreover, students must be provided training in the proper use of personal protective equipment in advance of its use.

Hepatitis B Vaccination: Departments which require students to work with blood or other potentially infections materials must make available to students a Hepatitis B vaccination as outlined in the UNCP Bloodborne Pathogens Exposure Control Plan. Students may be required to pay for the vaccination and should be advised of this requirement well in advance.

Post Exposure Follow Up: Departments which require students to work with blood or other potentially infections materials must advise students that they should notify their health insurance carriers of their academic activities involving bloodborne pathogenic materials. Neither UNCP departments nor the Student Health Services can assure students that they will fund post-exposure follow up procedures should the student become exposed to bloodborne pathogens.

Management of Infectious Wastes and Contaminated Laundry: Students who are not employees of UNCP must not handle, treat or sewer dispose of infectious wastes, other than to immediately containerize infectious waste generated by their laboratory procedures. Students who are not employees are also prohibited from handling contaminated laundry for University-related purposes. Strict regulations govern the handling, treatment and disposal of infectious wastes, therefore, these activities are restricted to designated employees of the University.

Section IX. Volunteers and Good Samaritans

Volunteers are used widely at UNCP to further University programs. As with students, however, volunteers are not covered by the Bloodborne Pathogens Rule. Therefore, because of their unofficial status, it is expected that volunteers will not be placed in situations where they would be exposed to bloodborne pathogens. However, in rare circumstances where a volunteer may possess special skills or knowledge and where it would be impossible to utilize this expertise without the risk of exposure to blood or other potentially infectious materials, exceptions may be permitted. In these situations the use of blood must be evaluated in light of its risk to the volunteer and the academic mission which requires the volunteer's expertise.

When possible, alternatives to the use of blood and other potentially infectious materials must be adopted. Alternatives include the use of non-infectious animal blood, synthetic blood or computer simulations. (Note that "Screened Blood" from a blood bank is not 100% safe, must be handled using Universal Precautions, and requires the same training, precautions and protective equipment as unscreened blood). For projects where alternatives are not feasible, approval must be obtained from Bloodborne Pathogens Oversight Committee via the Director of University Safety and Assurances or the Risk Manager and the policies of this section (see below) must be followed.

"Good Samaritans" are considered to be employees classified as Category III, students, volunteers, and members of the general public who are not expected to provide first aid or CPR but who may have had first aid or CPR training and wish to provide first aid or CPR services in an emergency.

These individuals are not included in the Bloodborne Pathogens Plan and are not considered eligible for post exposure follow up or HBV vaccination. It is recommended that if these individuals are exposed to blood or other potentially infectious material in the course of rendering first aid or performing CPR that they seek follow up medical attention from a qualified health care provider.

Exposure Control Plan: Volunteers approved to work with blood or other potentially infectious materials must follow the UNCP Bloodborne Pathogens exposure control plan (see Section III).

Training: Volunteers approved to work with blood or other potentially infections materials must receive at least the same level of training as outlined in the UNCP Bloodborne Pathogens Exposure Control Plan. For volunteers in laboratory or clinical settings advanced training must be provided by qualified professors and/or instructors.

Personal Protective Equipment: Volunteers approved to work with blood or other potentially infections materials must be provided with at least the same level of personal protective equipment as outlined in the UNCP Bloodborne Pathogens Exposure Control Plan. Volunteers may be required to purchase the equipment and should be advised of this requirement well in advance. Moreover, volunteers must be provided training in the proper use of personal protective equipment in advance of its use.

Hepatitis B Vaccination: Volunteers approved to work with blood or other potentially infections materials must obtain a Hepatitis B vaccination as outlined in the UNCP Bloodborne Pathogens Exposure Control Plan. Volunteers will be required to pay for the vaccination and should be advised of this requirement well in advance. Volunteers must consult with their personal physician and health insurance carrier as to where they may obtain the vaccination and what it will cost. Proof of vaccination or refusal of vaccination must be on file with the Department of Human Resources.

Post Exposure Follow Up: Volunteers approved to work with blood or other potentially infections materials must be advised that they should notify their health insurance carriers of their academic activities involving bloodborne pathogenic materials. Neither UNCP departments nor the Student Health Services will fund post-exposure follow up procedures should the volunteer become exposed to bloodborne pathogens.

Management of Infectious Wastes and Contaminated Laundry: Volunteers who are not employees of UNCP must not handle, treat or sewer dispose of infectious wastes, other than to immediately containerize infectious waste generated by their laboratory procedures. Volunteers who are not employees are also prohibited from handling contaminated laundry for a University-related purpose. Strict regulations govern the handling, treatment and disposal of infectious wastes, therefore, these activities are restricted to designated employees of the University.

Section X. Recordkeeping

The University of North Carolina-Pembroke will establish and maintain an accurate record for each employee with occupational exposure, to include:

1. The name and social security number of the employee.

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

3. A copy of all results of examinations, medical testing, and follow-up procedures.

4. The University's copy of the healthcare professional's written opinion.

5. A copy of all information provided to the healthcare professional.

The facility will ensure that the employee's medical records are kept confidential and are not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by law.

The facility will maintain the records for employees with occupational exposure for at least the duration of employment PLUS an additional 30 years.

Employee medical records shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee or others as required by law.