



# **NORTHEAST STATE**

*We're here to get you there*

## **EXPOSURE CONTROL PLAN**

**May 2022**

**Safety, Security and Plant Operations  
423.354-5224**

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## Purpose of Plan

One of the major goals of the Occupational Safety and Health Administration (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 experienced by employees.” Relative to this goal, OSHA has enacted the Bloodborne Pathogens Standard, codified as 29 CFR 1910.1030. The purpose of the Bloodborne Pathogens Standard is to “reduce occupational exposure to Hepatitis B Virus (HBV), Hepatitis C Virus (HVC) Human Immunodeficiency Virus (HIV) and other bloodborne pathogens” that employees may encounter in their workplace.

## Exposure Control Plan Policy Statement

This plan includes instructions for complying with Tennessee’s Sharps Injury Prevention Law, similar to the Federal Needlestick Safety and Prevention Act. Also included are instructions for maintaining the log of needle stick injuries and new TOSHA reporting procedures.

This plan also establishes a new requirement for performing titer determinations in order to evaluate if vaccinated employees are Hepatitis B surface antibody positive.

This plan requires that employees follow universal precautions, which means that all blood and other potentially infectious material (OPIM) must be treated as though they are infected with HIV, HBV, and HCV. Each department and clinic must determine whether the plan applies to their personnel by performing an occupational exposure determination. If occupational exposure, as defined by this plan, is present, the department or clinic must develop an exposure control plan specific to their exposure. Each plan must address method of implementing engineering controls, work practices, personal protective equipment, housekeeping, HB vaccinations, and training.

Anyone having questions concerning this plan may contact the Safety, Security and Plant Operations Office, 423-354-5224. This plan also mandates practices and procedures for post-exposure follow-up and recordkeeping.

Specific requirements of this plan include:

- Determination of employee exposure:
  - Prescribing procedures which assure the application of Universal Precautions, Engineering Controls and Personal Protective Equipment (PPE)
  - Ensuring proper engineering and work practice controls are followed
  - Providing and ensuring proper personal protective equipment is utilized
  - Assuring proper housekeeping practices are followed
  - Making Hepatitis B vaccination available, at no cost, to potentially exposed employees
  - Providing adequate training to all potentially exposed individuals
  - Ensuring all actual and potential hazards are appropriately labeled or identified
  - Maintaining appropriate prescribed records

This plan complies with the requirements of the OSHA/TOSHA Bloodborne Pathogen Standard. The plan also applies to students and all other individuals who may potentially be exposed to bloodborne pathogens by involvement in university activities.

# PROGRAM MANAGEMENT / APPLICATION

## Responsibilities

There are four major “Categories of Responsibility” that are central to the effective implementation of the Exposure Control Plan. These are:

1. Safety, Security and Plant Operations
2. Department Managers and Supervisors
3. Director of Human Resources
4. Employees

The following sections define the roles of each of these groups in carrying out the plan. Throughout this written plan, employees with specific responsibilities are identified. If a new employee is assigned any of these responsibilities, the Director of Human Resources is to be notified of the change.

## Safety, Security and Plant Operations

The Special Assistant to the President for Safety, Security and Plant Operations will be responsible for the overall management and support of the College’s Bloodborne Pathogens Compliance Program. Activities which are delegated to the Exposure Control Officer typically include, but are not limited to:

1. Overall responsibility for implementing the *Exposure Control Plan* for the entire College.
2. Working with administrators and other employees to develop and administer any additional bloodborne pathogen related policies and practices needed to support the effective implementation of this plan.
3. Assist departments with fulfilling their training requirements including providing training materials.
5. Knowing current legal requirements concerning bloodborne pathogens.
6. Acting as the College liaison during related OSHA inspections.
7. Conducting annual College audits to maintain an up-to-date *Exposure Control Plan*.
8. Review all exposure incident reports.
9. Provide guidance and assistance with infectious waste handling and disposal.
10. Review and update plan annually.

## **Department Managers and Supervisors**

Department Managers and Supervisors are responsible for exposure control in their respective areas. They work directly with the Exposure Control Officer, the Director of Environmental Health, Safety and Sustainability and employees to ensure that proper exposure control procedures are followed.

1. Implement the program within their area of responsibility.
2. Ensure that all departmental personnel / positions with Category A & B exposures have been identified.
3. Ensure that department has the appropriate personal protective equipment.
4. Assure that all affected personnel receive the proper training.
5. Encourage compliance with the hepatitis B vaccination program.
6. Monitor and enforce compliance with Universal Precautions

## **Director of Human Resources**

1. Maintain all medical information / records required by this program for employees identified as having an occupational exposure to blood or other potentially infectious materials.
2. Ensure that all related medical records of employees personnel are kept confidential and information not disclosed without the written consent of the employee.

## **Employees**

As with all College activities, employees have the most important role in the bloodborne pathogens compliance program. Employees must:

1. Know what tasks they perform that have occupational exposure;
2. Complete the bloodborne pathogens training sessions;
3. Plan and conduct all operations in accordance with *College work practice controls*;
4. Maintain good personal hygiene habits

## **Availability of the Exposure Control Plan to Employees**

To assist employees with their compliance efforts, the College's *Exposure Control Plan* is available to them at any time. Information for the Exposure Control plan can be found in the Employee Safety Handbook that will be presented to all new employees. The plan is also available on the Northeast State Community College Environmental Health & Safety webpage under the plans and manuals link.

# Methods of Compliance

## Exposure Determination

One of the keys to implementing a successful *Exposure Control Plan* is to identify exposure situations employees may encounter. To facilitate this at the College, the following lists have been prepared:

1. Job classifications in which all employees have occupational exposure to bloodborne pathogens
2. Job classifications in which some employees have occupational exposure to bloodborne pathogens
3. Tasks and procedures in which occupational exposure to bloodborne pathogens occur (i.e., tasks and procedures performed by employees in the job classifications listed above).

It is the responsibility of supervisors / department managers to provide job descriptions for the exposure lists. The Director of Environmental Health, Safety and Sustainability will work with supervisors and managers to keep these lists updated annually. These lists will be available at the Human Resources Dept. and Environmental Health and Safety Dept. (Appendix A).

## Universal Precautions

At Northeast State the practice of Universal Precautions is observed to prevent contact with blood and other potentially infectious materials. As a result, all human blood and the following body fluids are treated as if they are known to be infectious for HBV, HIV, and other bloodborne pathogens:

1. Semen;
2. Vaginal secretions;
3. Cerebrospinal fluid;
4. Synovial fluid;
5. Pleural fluid;
6. Pericardial fluid;
7. Peritoneal fluid;
8. Amniotic fluid;
9. Saliva (dental procedures); and
10. Any body fluid visibly contaminated with blood.

In circumstances where it is difficult or impossible to differentiate between body fluid types, all body fluids are assumed to be potentially infectious.

## Engineering Controls

One of the key aspects to the *Exposure Control Plan* is the use of engineering controls to eliminate or minimize employee exposure to bloodborne pathogens. As a result, Northeast State utilizes equipment such as sharps disposal containers, self-sheathing needles and ventilating laboratory hoods as appropriate.

The Director of Environmental Health, Safety and Sustainability periodically works with department managers and supervisors to review tasks and procedures performed at Northeast State where engineering controls can be implemented or updated. As a part of this effort, the following factors are considered:

1. Areas where engineering controls are currently employed
2. Areas where engineering controls can be updated
3. Areas currently not employing engineering controls, but where engineering controls could be beneficial

The results of this survey formed the basis to develop the Engineering Control Equipment Log (Appendix C). The log is maintained by the Safety, Security and Plant Operations Office.

The log is re-examined during the annual *Exposure Control Plan* review and opportunities for new or improved engineering controls are identified. Existing engineering controls are also reviewed annually in conjunction with the appropriate department manager or supervisor to identify proper functioning and needed repairs or replacement of equipment.

In addition to the engineering controls identified in the log, the following engineering controls are used throughout Northeast State:

1. Hand washing facilities (i.e., sinks and soap and water or when in the field, antiseptic hand cleansers and towels or antiseptic towelettes)
2. Self-sheathing needles.
3. Containers for contaminated reusable sharps having the following characteristics:
  - a. Puncture-resistant
  - b. Color-coded or labeled with a biohazard warning label
  - c. Leak-proof on the sides and bottom
4. Specimen containers which are:
  - a. Leak-proof
  - b. Color coded or labeled with a biohazard warning label
  - c. Puncture-resistant, if necessary

## Work Practice Controls

In addition to engineering controls, Northeast State uses a number of work practice controls to help eliminate or minimize employee exposure to bloodborne pathogens. Many of these work practice controls have been in effect for some time.

The employees at Northeast State who are responsible for overseeing the implementation of these work practice controls are the Director of Environmental Health, Safety and Sustainability and the Department managers and supervisors are responsible for implementing work practice controls in their organization.

Northeast State has adopted the following work practice controls as part of the Bloodborne Pathogens Compliance Program:

1. Employees wash their hands immediately, or as soon as feasible, after removal of gloves or other personal protective equipment.
2. Following any contact of body areas with blood or any other infectious materials after an exposure incident, employees wash their hands and any other exposed skin with soap and water as soon as possible. They also flush exposed mucous membrane with water.
3. Contaminated needles and other contaminated sharps are immediately disposed of in sharps containers. Sharps containers shall be closable, puncture resistant, labeled or color-coded in accordance with the TOSHA Standard and leak proof.
4. Eating, drinking, smoking, applying cosmetics or lip balm and handling contact lenses are prohibited in work area where there is potential for exposure to bloodborne pathogens.
5. Food and drink are not kept in refrigerator, freezers, on counter tops or in other storage areas where blood or other potentially infectious materials are present.
6. Mouth pipetting/suctioning of blood or other infectious materials is prohibited.
7. All procedures involving blood or other infectious materials should minimize splashing, spraying, or other actions generating droplets of these materials.
8. Specimens of blood or other materials are placed in designated leak-proof containers and the containers are appropriately labeled for handling and storage.
9. If outside contamination of primary specimen container occurs, that container is placed within a second leak-proof container and the container is appropriately labeled for handling and storage. If the specimen can puncture the primary container, the secondary container must be puncture resistant as well.
10. Equipment which becomes contaminated is examined prior to servicing or shipping and decontaminated as necessary. An appropriate biohazard warning label is attached to any contaminated equipment identifying the contaminated portions. Information regarding the remaining contamination is conveyed to all affected employees, the equipment manufacturer, and the equipment service representative prior to handling, servicing, or shipping.

When a new employee is hired at Northeast State, or an employee changes jobs within the College, the following process takes place to ensure that they are trained in the appropriate work practice controls:

1. The employee's job classification and the tasks and procedures that he/she will perform are checked against the Job Classifications and Task Lists which have been identified in the Exposure Control Plan as those in which occupational exposure occurs.
2. If the employee is transferring from one job to another within the College, the job classifications and tasks/procedures pertaining to their previous position are also checked against these lists.
3. Based on this "cross-checking" the new job classifications and/or tasks and procedures which will bring the employee into occupational exposure situations are identified.
4. The Director of Human Resources will provide the names of employees to the Director of Environmental Health, Safety and Sustainability for the appropriate training.
5. The Director of Environmental Health, Safety and Sustainability will notify departmental managers and supervisors the names of employees who need training.
6. Departmental managers and supervisors will insure identified employees receive the proper training and forward all training records to the Director of Environmental Health, Safety and Sustainability.

## **Personal Protective Equipment**

Personal protective equipment is the employees' "last line of defense" against bloodborne pathogens. Because of this, Northeast State provides (at no cost to the employees) the personal protective equipment that they need to protect themselves against such exposure. This equipment includes, but is not limited to:

1. Gloves
2. Gowns
3. Face shield/masks
4. Goggles
5. Mouthpieces
6. Resuscitation bags
7. Pocket masks
8. Hand washing material

Hypo-allergenic gloves, glove liners, and similar alternatives are readily available to employees who are allergic to the gloves Northeast State normally provides.

Department managers and supervisors are responsible for ensuring that all departments and work areas have appropriate personal protective equipment available to employees.

Employees are trained regarding the use of the appropriate personal protective equipment for their job classifications and tasks/procedures they perform by department managers and supervisors. Additional training is provided, when necessary, if an employee takes a new position or new job functions are added to his/her current position.

To determine whether additional training is needed, the employee's previous job classification and tasks are compared to those for any new job or function that they undertake. Any needed training is provided by their department manager or supervisor working with Special Assistant to the President for Safety, Security and Plant Operations.

To ensure that personal protective equipment is not contaminated and is in the appropriate condition to protect employees from potential exposure, Northeast State adheres to the following practices:

1. All personal protective equipment is inspected by department managers and supervisors periodically and repaired or replaced as needed to maintain its effectiveness.
2. Reusable personal protective equipment is cleaned, laundered, and decontaminated as needed. In those instances when off-campus cleaning is required, arrangements must be made through the Business Office and appropriate safe handling of contaminated personal protective equipment must be exercised (use of bio-hazard bags and labeling).
3. Single-use personal protective equipment (equipment that cannot, for whatever reason, be decontaminated) must be disposed of in Biohazard bags.

To make sure that this equipment is used as effectively as possible, employees adhere to the following practices when using their personal protective equipment:

1. Any garments penetrated by blood or other infectious materials are removed immediately, or as soon as is feasible, and the garments must be cleaned, laundered, and decontaminated as outlined in paragraph 2 immediately above.
2. All personal protective equipment is removed prior to leaving a work area.
3. Gloves are worn in the following circumstances:
  - a. Whenever employees anticipate hand contact with potentially infectious materials
  - b. When performing vascular access procedures
  - c. When handling or touching contaminated items or surfaces
4. Disposal gloves are replaced as soon as practical after contamination or if they are torn, punctured, or otherwise lose their ability to function as an "exposure barrier."
5. Utility gloves are decontaminated for reuse unless they are cracked, peeling, torn or exhibit other signs of deterioration, at which time they are disposed of.
6. Masks and eye protection (goggles and face shields) are used whenever splashes or sprays may generate droplets of infectious materials.
7. Protective clothing (gowns) is worn whenever potential exposure to the body is anticipated.
8. Surgical caps/hoods and/or shoe covers/boots are used in any instance where "gross contamination" is anticipated.

## Housekeeping & Waste Disposal

Maintaining facilities in a clean and sanitary condition is an important part of the Bloodborne Pathogens Compliance Program. To facilitate this, a written schedule has been set up for cleaning and decontamination of the various areas of the College. The cleaning schedule (Appendix D) provides the following information:

1. The area (equipment, environmental & working surfaces to be cleaned/disinfected with an appropriate germicide or a 1:10 dilution of sodium hypochlorite after: completion of procedures; when surfaces are overtly contaminated; immediately after and spill of blood or OPIM; at the end of the work shift.
2. Day and time of scheduled work
3. Cleansers and disinfectants to be used as specified on the following departmental cleaning schedules
4. Any special instructions that are appropriate

Using this schedule, housekeeping staff employs the following practices:

1. All equipment and surfaces are cleaned and decontaminated after contact with blood or other potentially infectious materials:
  - a. After completion of medical procedures
  - b. Immediately (or as soon as feasible) when surfaces are overtly contaminated
  - c. After any spill of blood or infectious materials
  - d. At the end of the work shift if the surface may have been contaminated during that shift
2. Protective coverings (plastic wrap, aluminum foil, or absorbent paper) is removed and replaced:
  - a. As soon as it is feasible when overtly contaminated
  - b. At the end of the work shift if they may have been contaminated during the shift
3. All pails, bins, cans, and other receptacles intended for use are routinely inspected, cleaned, and decontaminated as soon as possible if visibly contaminated.
4. Potentially contaminated broken glassware is picked up using mechanical means (dustpan and brush, tongs, and forceps).
5. Contaminated reusable sharps are stored in containers that do not require "hand processing."

The Assistant Director Plant Operations, Department Managers / Supervisors are responsible for setting up the cleaning and decontamination schedule and making sure it is carried out within the College. The schedule is maintained in the respective departments affected.

Care is exercised in handling regulated waste, including contaminated sharps, laundry, used bandages, and other potentially infectious materials. The following procedures are used with all of these types of wastes:

1. They are discarded or “bagged” in containers that are:
  - a. Closeable
  - b. Puncture-resistant
  - c. Leak-proof, if the potential for fluid spill or leakage exists
  - d. Red in color or labeled with the appropriate biohazard warning label
2. Containers for this regulated waste are located in areas as designated on Appendix C. The Biology Labs utilize autoclaving to sterilize contaminated waste so that it may be disposed of safely. Dental labs use autoclaving to sterilize instruments.
3. Waste containers are maintained upright, routinely replaced and not allowed to overfill. Northeast State utilizes Stericycle & Blue Ridge Environmental Services for waste disposal.
4. Contaminated laundry is disposed of by a licensed provider
5. Whenever employees move containers of regulated waste from one area to another, the containers are immediately closed and placed inside an appropriate secondary container if leakage is possible from the first container.

The Department Managers / Supervisors and the Director of Environmental Health, Safety and Sustainability are responsible for the collection and handling of College contaminated waste.

## **HIV AND HBV RESEARCH LABORATORIES AND PRODUCTION FACILITIES**

This Institution recognizes that there are special requirements for HIV and HBV research laboratories and production facilities in the areas of construction, engineering controls, and work practice, the use of contaminated equipment, as well as employee education and training. However, since the laboratories at Northeast State are clinical in nature, these special requirements do not apply. Therefore, the College’s Exposure Control Plan does not address these requirements

### **Hepatitis B Vaccination**

The college will make the Hepatitis B vaccination series available to all current and new employees who have occupational exposure after those employees have received appropriate training and within 10 working days of initial assignment at no cost to the employee unless:

- The employee previously received the vaccination series,
- Antibody testing determines immunity, or
- Vaccination is medically contraindicated.

Employees claiming one of these exemptions need to have documentation supporting the exemption in the medical record.

The following procedure will need to be followed for any employee that desires to receive the Hepatitis B vaccination:

1. Complete Appendix E form and give to their immediate supervisor
2. Supervisor will sign and initiate a purchase order to the Sullivan County Health Department.
3. After the purchase order is submitted, the employee will need to schedule an appointment with the Sullivan County Health Department to receive the vaccination.
4. The supervisor will send the original Appendix E form to the Safety, Security and Plant Operations Office for logging the information on the Bloodborne Pathogen information sheet.
5. Safety, Security and Plant Operations will forward original copy of Appendix E to Human Resources Department for filing in employee's personnel file.

If an employee declines to accept the Hepatitis B Vaccination, the employee shall sign the Hepatitis B Vaccination Declination Statement also on Appendix E. The supervisor and Director of Environmental Health, Safety and Sustainability will follow steps 4 & 5 of the process above. Employees who initially decline the Hepatitis B Vaccine may decide at a later date to receive it. Such employees may receive the vaccine at a reasonable time and place at no charge, provided that they are still working at tasks involving occupational exposure.

## **Post-Exposure Evaluation and Follow-Up**

Following an exposure incident, an Exposure Incident Form (Appendix G) must be completed as soon as possible. The medical facility providing the patient care shall file a confidential medical evaluation and follow-up and make it available to the affected employee.

Once these procedures have been completed, an appointment is arranged for the exposed employee to see a qualified healthcare professional for testing of blood and to discuss the employee's medical status. This includes an evaluation of any reported illness, as well as any recommended treatment.

## **Information Provided to the Healthcare Professional**

To assist the healthcare professionals, the College will forward a number of documents to them including the following:

1. A copy of the Bloodborne Pathogens Standard
2. A description of the exposure incident
3. The exposed employee's relevant medical records (subject to completion of the Release of Information Authorization Form shown in Appendix H)
4. Other pertinent information

## **Healthcare Professionals Written Opinion**

After the consultation, the healthcare professionals provide Northeast State with a written opinion evaluating the exposed employee's situation. The College, in turn, will furnish a copy of this opinion to the exposed employee.

In keeping with this process of emphasis on confidentiality, the written opinion will contain only the following information:

1. Whether Hepatitis B Vaccination is indicated for the employee
2. Whether the employee has received the Hepatitis B Vaccination
3. Confirmation that the employee has been informed of the results of the evaluation
4. Confirmation that the employee has been told about any medical conditions resulting from the exposure incident which require further evaluation or treatment

All other findings or diagnoses will remain confidential and will not be included in the written report.

## **Medical Recordkeeping**

The Director of Human Resources is responsible for setting up and maintaining these records, which include the following information:

1. Name of the employee
2. Social Security number of the employee
3. A copy of the employee's Hepatitis B Vaccination status
  - a. Dates of any vaccination
  - b. Medical records relative to the employee's ability to receive vaccination
4. Copies of the results of the examinations, medical testing, and follow-up procedures which took place as a result of an employee's exposure to bloodborne pathogens
5. A copy of the information provided to the consulting healthcare professional as a result of any exposure to bloodborne pathogens

As with all information in these areas, the College recognizes that it is important to keep the information in these medical records confidential. The College will not disclose or report this information to anyone without the employee's written consent (except as required by law). The records will be maintained for at least the duration of employment plus 30 years.

# **LABELS AND SIGNS**

## **General**

For employees, the most obvious warnings of possible exposure to bloodborne pathogens are biohazard labels. A comprehensive biohazard warning labeling program has been implemented using labels of the type shown in Appendix I, or when appropriate, using red "color-coded" bags or containers. The Director of Plant Operations and Maintenance is responsible for setting up and maintaining this program at Northeast State.

The following items at Northeast State have been labeled:

1. Containers of regulated waste
2. Refrigerators/freezers containing blood or other potentially infectious materials
3. Sharps disposal containers
4. Other containers used to store, transport, or ship blood and other infectious materials
5. Laundry bags and containers
6. Contaminated equipment

On labels affixed to contaminated equipment, those portions of the equipment that are contaminated are also labeled.

The College recognizes that biohazard signs must be posted at entrances to HIV and HBV research laboratories and production facilities. However, the laboratories at Northeast State perform only clinical work, which is not covered by these special signage requirements.

## **HIV and HBV Research Laboratories and Production**

This provision is not considered to be applicable to this Institution.

# **INFORMATION AND TRAINING**

## **General**

Having well informed and educated employees is extremely important when attempting to eliminate or minimize employee's exposure to bloodborne pathogens. All employees who have the potential for exposure to bloodborne pathogens are put through a comprehensive training program and furnished with as much information as possible on this issue.

This program was established to provide employees with the required training. Employees will be retrained at least annually to keep their knowledge current. All new employees, as well as employees changing jobs or job functions, will be given any additional training their new position requires at the time of the new job assignment. Training is available online and in classroom upon request.

The Safety, Security and Plant Operations Office is responsible for providing training for all employees who have potential exposure to bloodborne pathogens. The Department Supervisors / Managers have responsibility of ensuring that employees who have potential exposure complete the training. The Special Assistant to the President for Safety, Security and Plant Operations will be supported by the following:

1. Chief of Police
2. Director of Human Resources
3. Assistant Director of Plant Operations

## **Training Topics**

The topics covered in the training program include, but are not limited to, the following:

1. The Bloodborne Pathogens Standard itself
2. The epidemiology and symptoms of bloodborne diseases
3. The modes of transmission of bloodborne pathogens
4. Exposure Control Plan for Northeast State Community College and where employees can obtain a copy
5. Appropriate methods for recognizing tasks and other activities that may be involved for exposure to blood and other potentially infectious materials
6. A review of the use and limitation of methods that will prevent or reduce exposure, including:
  - a. Engineering controls
  - b. Work practice controls
  - c. Personal protective equipment
7. Selection and use of personal protective equipment including:
  - a. Types available
  - b. Proper use
  - c. Location within the College
  - d. Removal
  - e. Handling

- f. Decontamination
  - g. Disposal
8. Visual warnings of biohazard within the College including labels, signs, and color-coded containers,
  9. Information on the Hepatitis B Vaccine, including its:
    - a. Efficacy
    - b. Safety
    - c. Method of administration
    - d. Benefits of vaccination
    - e. The College's free vaccination program
  10. Plan of action and persons to contact in an emergency involving blood or other potentially infectious materials
  11. The procedures to follow if an exposure incident occurs, including incident reporting
  12. Information on the post-exposure evaluation and follow-up, including medical consultation that the College will provide.

## **Training Methods**

The College will provide online training to those who need Bloodborne Pathogen training.

## **Recordkeeping**

The online training program is set up to schedule employee training and maintains a record of all training completed. Employees are able to print a certificate upon completion of training.

## **EMPLOYEE FACT SHEET**

**Hepatitis** - Hepatitis is a liver disease, initially resulting in possible inflammation of the liver, and frequently leading to more serious conditions including cirrhosis and liver cancer. In the United States there are approximately 300,000 new cases of Hepatitis B Virus (HBV), the most prevalent form of Hepatitis, each year.

Healthcare workers are 20 times more likely to contract Hepatitis B than the normal population. It is estimated that there are as many as 18,000 new cases of HBV each year among healthcare workers, resulting in 200-300 deaths. While there is no cure for Hepatitis B, a vaccine does exist that can prevent infection.

In healthcare settings HBV is most often transmitted through breaks in the skin or mucous membranes. This usually occurs through needle sticks, human bites, or having infectious material (such as blood or other body fluids) get into existing cuts or abrasions.

The symptoms of HBV infection are very much like a mild “flu.” Initially, there is a sense of fatigue, possible stomach pain, loss of appetite, and even nausea. As the disease continues to develop, jaundice (a distinct yellowing of the skin) and darkened urine will often occur. However, people who are infected with HBV will often show no symptoms for some time.

After exposure it can take 2-6 months for Hepatitis B to develop. This is extremely important since vaccinations begun immediately after exposure to the virus can often prevent infection.

**Human Immunodeficiency Virus** - Human Immunodeficiency Virus (HIV) is the “newest” of the major bloodborne diseases. Healthcare workers appear to have a slightly higher risk of contracting the virus than the general population.

Symptoms of HIV infection can vary, but often include:

Weakness	Headaches
Fever	Diarrhea
Sore Throat	Other “flu-like” symptoms
Nausea	

However, many people with the HIV virus can show no apparent symptoms for years after their infection.

In most cases, contracting the HIV virus ultimately leads to the development of Acquired Immunodeficiency Syndrome (AIDS). This results in the breakdown of the immune system so the body does not have the ability to fight off other diseases. Currently no vaccination exists to prevent infection of HIV and there is no known cure.

## **GLOSSARY OF TERMS**

### **A**

**Assistant Secretary** The Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.

### **B**

**Biohazard Label** A label affixed to containers of regulated waste, refrigerator/freezers and other containers used to store, transport or ship blood and other potentially infectious materials. The label must be fluorescent orange-red in color with the biohazard symbol and the word biohazard on the lower part of the label.

**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).

## C

<b>Clinical Laboratory</b>	A workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.
<b>Contaminated</b>	The presence or the reasonable anticipated presence of blood or other potentially infectious materials on an item or surface.
<b>Contaminated Laundry</b>	Laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.
<b>Contaminated Sharps</b>	Contaminated objects that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

## D

<b>Decontamination</b>	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.
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## E

<b>Employee</b>	An individual employed in a healthcare, industrial, or other facility or operation who may be exposed to bloodborne pathogens in the course of their assignment.
<b>Engineering Control</b>	Controls (sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne hazard from the workplace.
<b>Exposure Control Officer</b>	An employee who is designated by the employer, and who is qualified by training or experience, to provide technical guidance in the development and implementation of the facility's Exposure Control Plan.
<b>Exposure Incident</b>	A specific eye, mouth, other mucous membrane, non-intact skin, or other potentially infectious materials that results from the performance of an employee's duties.

## H

<b>Hand washing Facilities</b>	A facility providing an adequate supply of running portable water, soap and single use towels or hot air drying machines.
<b>HBV</b>	Hepatitis B Virus.
<b>HIV</b>	Human Immunodeficiency Virus.

## L

### **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" of OSHA's Bloodborne Pathogens Standard

## M

### **Medical Consultation**

A consultation which takes place between an employee and a licensed medical professional for the purpose of determining the employee's medical condition resulting from exposure to blood or other potentially infectious materials, as well as any further evaluation or treatment that is required.

## N

### **NIOSH**

National Institute for Occupational Safety and Health of the Public Health Service of the U.S. Department of Health and Human Services; the Federal agency which assists OSHA in occupational safety and health investigations and research.

## O

### **Occupational Exposure**

Reasonable 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.

### **OSHA**

Occupational Safety and Health Administration of the U.S. Department of Labor; the Federal agency with safety and health regulatory and enforcement authorities for most U.S. industry and business.

### **Other Potentially Infectious Materials**

(1) The following human body fluids; semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural 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);

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

## P

### **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 equivalent worn by an employee for protection against a hazard. General work clothes (uniform, 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.

**R**

**Regulated**

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 micro-biological waste containing blood or other potentially infectious materials.

**Research Laboratory**

A laboratory producing or using research laboratory scale mounts amounts of HIV and HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

**S**

**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 the 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 components.

**Sterilize**

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

**U**

**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.

**W**

**Work Practice Controls**

Controls that reduce the likelihood of exposure by altering the manner in which a task is performed (prohibiting recapping of needles by a two-handed technique).

## Appendix A

### JOB CLASSIFICATIONS IN WHICH ALL EMPLOYEES (CATEGORY A) HAVE EXPOSURE TO BLOODBORNE PATHOGENS

Listed below are the job classifications at the College where all employees handle human blood and other potentially infectious materials which may result in possible exposure to bloodborne pathogens:

JOB TITLE/PROGRAM	LOCATION
Dean, Health Professions	Regional Center for Health Professions
Director, Nursing	Regional Center for Health Professions
EMT / AEMT Paramedic, Faculty/Adjunct Faculty	Regional Center for Health Professions
Dental Assisting Program Faculty	Regional Center for Health Professions
Biology Faculty/Adjunct Faculty / Biology Staff where applicable	Powers Building / Blountville / Northeast State at Elizabethton / Kingsport Center for Higher Education / Northeast State at Johnson City
Cardiovascular Technology Faculty	Regional Center for Health Professions
Medical Laboratory Faculty	Regional Center for Health Professions
Nursing Department, Faculty	Regional Center for Health Professions
Physical Education Faculty/Adjunct Faculty	Blountville
Surgical Technology Faculty	Regional Center for Health Professions
Police/Security Personnel	Blountville Campus and Satellite Teaching Sites

### JOB CLASSIFICATIONS IN WHICH SOME EMPLOYEES (CATEGORY B) HAVE EXPOSURE TO BLOODBORNE PATHOGENS

Listed below are the job classifications at the College where some employees handle human blood and other potentially infectious materials which may result in possible exposure.

JOB TITLE/DEPARTMENT	LOCATION
Custodial Staff	Campus and satellite campus property

**JOB CLASSIFICATIONS IN WHICH SOME CONTRACT EMPLOYEES  
(CATEGORY C) MAY HAVE EXPOSURE TO BLOODBORNE PATHOGENS**

**JOB TITLE**

**DEPARTMENT/LOCATION**

Food Services - Subway

Student Services Building

## Appendix B

### WORK ACTIVITIES INVOLVING POTENTIAL EXPOSURE TO BLOODBORNE PATHOGENS

Listed below are the tasks and procedures at the College in which human blood and other potentially infectious materials are handled and which may result in exposure to bloodborne pathogens:

<b>JOB CLASSIFICATIONS</b>	<b>TASKS/PROCEDURES</b>	<b>DEPARTMENT/LOCATION</b>
Microbiology Laboratory Instruction		Science Division Faculty and Staff
College Cleaning/Maintenance Duties Operations		Custodial/Maintenance Staff Plant
EMT/AEMT & Paramedic Laboratory Instruction		Health Professions Faculty
Physical Education instruction Humanities		Humanities Division Faculty
Dental Assisting Laboratory Instruction		Health Professions Faculty Surgical
Technology Laboratory Instruction		Health Professions Faculty
Cardiovascular Program Laboratory Instruction		Health Professions Faculty
Regional Center for Health Professions		Health Professions Faculty
Medical Laboratory Technology Laboratory Instruction		Health Professions Faculty
Nursing Laboratory Instruction		Health Professions

## Appendix C

### ENGINEERING CONTROL EQUIPMENT LOG

The following areas have or should have, Engineering Control Equipment to eliminate or minimize employees' exposure to bloodborne pathogens. If equipment is needed but not yet installed "None" is indicated in the "Control Equipment" column.

DEPARTMENT/LOCATION	CONTROL EQUIPMENT
Biology Labs B209, B211, B213  (B209 & B211)	Sharps container Clean up kit Hand washing facilities Biohazard waste disposal container
Northeast State at Elizabethton E205	Biohazard waste disposal container Sharps container Hand washing facilities
Regional Center for Health Professions RCHP 144	Biohazard waste disposal container Clean up kit Sharps container Hand washing facilities
Kingsport Center of Higher Education KC 309, 310, 311	Sharps Containers Hand washing facilities Clean up kit Biohazard waste disposal container
WRCPA Building / Fitness Center	Handwashing facilities Clean up kit Hand washing facilities Clean up kit
Plant Operations	Hand washing facilities Clean up kit
Printing & Publications Shop	Biohazard Waste Central Accumulation Area
Northeast State at Johnson City	Sharps Containers Hand washing facilities Clean up kit Biohazard waste disposal container

## Appendix D

### CLEANING SCHEDULE Northeast State Community College

Area	Scheduled Cleaning Day/Time	Cleaner/Disinfectants Used

## Appendix E

### OCCUPATIONAL EXPOSURE TO BLOODBORNE PATHOGENS Northeast State Community College

#### **HEPATITIS B VACCINE - ACCEPTANCE (Yes, I do want the vaccine)**

I want to receive the Hepatitis B Vaccine and I understand it is my responsibility to contact the \_\_\_\_\_ for information on receiving this vaccine.

_____ Name (Print)	_____ Banner ID #	_____ Signature
_____ Department	_____ Date	_____ Witness

#### **HEPATITIS B VACCINE - DECLINATION (No, I do not want the vaccine)**

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.

_____ Name (Print)	_____ Banner ID #	_____ Signature
_____ Department	_____ Date	_____ Witness

#### **IMMUNIZATION/DISEASE STATUS**

History of Hepatitis B: Yes \_\_\_\_\_ No \_\_\_\_\_ Date \_\_\_\_\_  
(If yes, please submit documentation to the \_\_\_\_\_ as soon as possible).

History of Hepatitis B Vaccination:

HBV Date #1	_____
HBV Date #2	_____
HBV Date #3	_____
Titer Date	_____
Booster Date	_____

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## Appendix F

### EXPOSURE INCIDENT INVESTIGATION FORM Northeast State Community College

Name: \_\_\_\_\_ Banner #: \_\_\_\_\_

Date of Incident: \_\_\_\_\_ Time of Incident: \_\_\_\_\_

Date of Birth: \_\_\_\_\_ Telephone: \_\_\_\_\_

Location: \_\_\_\_\_

Potentially Infectious Materials Involved:

Type: \_\_\_\_\_ Source: \_\_\_\_\_

\_\_\_\_\_

Circumstances (work being performed, etc.) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How Incident Was Caused (accident, equipment malfunction, etc.): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Personal Protective Equipment Being Used: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Actions Taken (decontamination, clean-up, reporting, etc.) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Recommendations for Avoiding Repetition: \_\_\_\_\_

\_\_\_\_\_

## Appendix G

### POST - EXPOSURE EVALUATION AND FOLLOW - UP CHECKLIST Northeast State Community College

The following steps must be followed in the case of any employee's exposure to Bloodborne Pathogens: Information obtained should be transmitted to the appropriate individual as noted on this form.

Activity	Completion Date
Employee furnished with documentation regarding exposure incident.	_____
Source individual identified ( _____ ) Source Individual	_____
Source individual's blood tested and results given to exposed employee. _____ Consent not obtained.	_____
Exposed employee's blood collected and tested.	_____
Appointment arranged for employee with healthcare professional. ( _____ ) Professional's Name	_____
Documentation forwarded to healthcare professional.	_____
_____ Bloodborne Pathogens Standard	
- Description of exposed employee's duties.	
_____ Description of exposure incident including routes of exposure.	
_____ Result of source individual's blood testing.	
- Employee's medical records.	

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## Appendix H

### AUTHORIZATION LETTER FOR THE RELEASE OF EMPLOYEE MEDICAL RECORDS INFORMATION

#### Northeast State Community College

I, \_\_\_\_\_, hereby authorize \_\_\_\_\_  
(full name of employee/patient) (individual or  
\_\_\_\_\_ to release to  
organization holding the medical records)

\_\_\_\_\_ (individual or organization authorized to receive the medical information) the  
following medical information from my personal medical records: \_\_\_\_\_

\_\_\_\_\_ (Describe generally the information desired to be released)  
\_\_\_\_\_  
\_\_\_\_\_

I give my permission for this medical information to be used \_\_\_\_\_ Yes \_\_\_\_\_ No  
for the following purpose: \_\_\_\_\_

but I do not give my permission for any other use or re-disclosure of this information.

\_\_\_\_\_  
Full name of Employee or Legal Representative

\_\_\_\_\_  
Signature of Employee or Legal Representative

\_\_\_\_\_  
Date of Signature

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

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## Appendix I

### BIOHAZARD WARNING LABEL



RED OR ORANGE IN COLOR