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*Occupational Safety & Health ♦ Environmental Health ♦ Laboratory Safety ♦ Industrial
Hygiene ♦ Radiation Safety ♦ Hazardous Waste ♦ Pollution Prevention*

Bloodborne Pathogens Exposure Control Plan

Administered by

Environmental Health and Safety Office

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FOREWORD

The written Bloodborne Pathogen Exposure Control Plan exemplifies the commitment by the Administration of Old Dominion University towards protecting the health of all employees who may be exposed to bloodborne pathogens at the University. This document presents a comprehensive guide to fulfilling the requirements of 29 CFR 1910.1030, the OSHA Bloodborne Pathogen Standard.

The pursuit of a safe workplace through the use of all means available is greatly encouraged. The adoption of these policies and procedures is a fundamental part of minimizing the risk of exposure to bloodborne pathogens.

The Administration welcomes input from employees regarding this Plan. Modifications to this Plan which would enhance its effectiveness at a reasonable cost will be taken into consideration.

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OLD DOMINION UNIVERSITY

BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

I. INTRODUCTION

The OSHA/VOSH 1910.1030 Bloodborne Pathogens Standard was issued to reduce the occupational transmission of infections caused by microorganisms sometimes found in human blood and certain other potentially infectious materials (OPIMs). Although a variety of harmful microorganisms may be transmitted through contact with infected human blood, the hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV) have been shown to be responsible for infecting workers who were exposed to human blood and certain other body fluids containing these viruses, through routes like needlestick injuries and by direct contact of mucous membranes and non-intact skin with contaminated blood/materials, in the course of their work.

This exposure control plan has been established by Old Dominion University to minimize and prevent, when possible, exposure of employees to disease-causing microorganisms transmitted through human blood, and as a means of complying with the Bloodborne Pathogens Standard. All employees exposed to blood and OPIMs as a part of their job are included in this program. A discussion of job categories and tasks that have been identified as having exposure is presented in Section II, Exposure Determination. Department-specific information, such as standard operating procedures and department plans, shall be kept in **Appendix A** of this plan. The Bloodborne Pathogen Program Representative shall review the department-specific information in their plan at least annually and update it as necessary. This plan shall be reviewed at least annually and updated as necessary by the Environmental Health and Safety Office. Copies of this plan are available for review by any employee at the following locations:

Environmental Health and Safety Office
Dental Hygiene Clinic
Student Health Clinic
Health Sciences Building (Nursing Dept., Medical Lab Sciences Dept. & Physical Therapy Dept.)
Public Safety Office
Health and Physical Education Building
Mills Godwin Life Sciences Building
Alfriend Chemistry Building
Recreational Sports Office
Child Development and Study Centers
Office of the General Counsel
Facilities Management - Housekeeping Department

Employees may obtain a copy of this plan within 15 days of request to their Bloodborne Pathogen Program Representative or the Environmental Health and Safety Office, or access the plan on-line at www.odu.edu/ehs.

Basic components of this Plan include:

- **Exposure Determination**
- **Methods of Compliance**
- **Hepatitis B Vaccination Policy**
- **Procedures for Evaluation and Follow-up of Exposure Incidents**
- **Employee Training**
- **Recordkeeping Procedures**

II. EXPOSURE DETERMINATION

All job categories in which it is reasonable to anticipate that an employee will have skin, eye, mucous membrane, or parenteral contact with blood or OPIMs shall be included in this plan. Exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment). While students are not employees of the University, similar student categories where students could be exposed to human blood or OPIMs as part of their curriculum or training shall be offered similar protective equipment, inoculation and exposure follow-up. The cost for these items shall be borne by the student.

Other Potentially Infectious Materials (OPIMs):

Body Fluids

- semen
- vaginal secretions
- cerebrospinal fluid
- pleural fluid
- pericardial fluid
- peritoneal fluid
- amniotic fluid
- any body fluid visibly contaminated with blood
- saliva in dental procedures
- breast milk

Other Materials

- any unfixated tissue or organ (other than intact skin) from a human (living or dead)
- HIV/HBV containing cell or tissue cultures, organ cultures and culture medium
- blood, organs, or other tissues from experimental animals infected with HIV or HBV

ALL EMPLOYEES ARE EXPOSED

Employees with the job classifications listed here are included in this plan. Employees with these professional and technical skills, but not in these job categories or positions are not included in this plan.

- | | |
|---|--|
| Student Health Service
Physician
Physician Assistant
Nurse Practitioner
Registered Nurse
Medical Technologist
Medical Assistant | Nursing Department
Faculty
Adjunct Faculty

Medical Technology Department
Faculty
Adjunct Faculty
Technical Support Personnel |
| Dental Hygiene & Dental Assisting Clinic
Full time faculty
Adjunct faculty
Dental technician
Graduate teaching assistant | Public Safety
Police officer
Security officer |

SOME EMPLOYEES ARE EXPOSED

Job classifications in which some employees may have occupational exposure are included in this list. Since not all the employees in these categories are expected to incur exposure to blood or OPIMs, the tasks or procedures that would cause these employees to have occupational exposure are also listed. Employees with the job classifications and associated tasks listed here are included in this plan.

Job Classification	Tasks/Procedures
Student Health Service office/health education staff	administering CPR or first aid
Dental Hygiene office manager	handling regulated medical waste or spill response
Housekeepers	assigned to clean the student health or dental clinics and spill response
Athletic trainer	administering CPR or first aid
Recreational Sports employees	administering CPR or spill response
Child Development/Study Center lead teachers	administering CPR or first aid or handling breast milk
Physical Therapy Department faculty	treating open wounds, spill response
Nuclear Medicine Department faculty	administering injections, handling blood
Environmental Health & Safety staff	handling regulated medical waste or spill response

III. METHODS OF COMPLIANCE

Universal Precautions

All blood or OPIMs described in section II shall be handled as if contaminated by a bloodborne pathogen. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials. Universal precautions shall always be used in such circumstances.

Engineering and Administrative Controls

Engineering and administrative controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used. The following engineering controls shall be utilized:

- Sharps containers shall be used to dispose of needles, pipettes, lancets and other sharps that contain residual human blood and OPIMs. Needles shall not be sheared or bent prior to being placed in sharps containers nor should they be reheated or capped by two hands if designed for reuse. A one handed recapping technique or using a recapping device is acceptable.
- Areas where potential contamination may occur shall be isolated, where practical, and marked with signs to indicate controlled access. If the potential for splashing exists, splashguards shall be placed over or near the process to prevent contact with splashed materials. A gauze pad should be used when opening stoppered blood tubes to prevent splashing or spattering or the tubes may be opened behind a Plexiglas barrier.

The above controls shall be maintained or replaced on a regular schedule. The supervisor responsible for the procedure shall check on a monthly basis, at minimum, to ensure controls appropriate for the procedure are in place and functioning.

Employee Input Regarding Engineering Controls

Supervisors shall solicit input from employees responsible for direct patient care regarding the identification, evaluation, and selection of effective engineering controls, including safe medical devices. Employees selected shall represent the range of exposure situations encountered in the workplace. Supervisors shall document how they received input from employees and keep the documentation with other department-specific information in **Appendix A** of this Plan. This obligation can be met by: listing the employees involved and describing the process by which input was requested; or presenting other documentation, including references to the minutes of meetings, copies of documents used to request employee participation, or records of responses received from employees.

Review of Medical Devices

Supervisors shall review and update their standard operating procedures annually. Changes in technology that eliminate or reduce exposure to bloodborne pathogens shall be considered in the review. Supervisors shall take into account innovations in medical procedure and technological developments that reduce the risk of exposure (e.g., newly available medical devices designed to reduce needlesticks), and document consideration and use of appropriate, commercially-available, and effective safer devices (e.g. describe the devices identified as candidates for use, the methods(s) used to evaluate those devices, and justification for the eventual selection).

No medical device is considered appropriate or effective for all circumstances. Supervisors shall select devices that based on reasonable judgment will not jeopardize patient or employee safety or be medically inadvisable, and will make an exposure incident involving a contaminated sharp less likely to occur.

Hand Washing and Other General Hygiene Measures

Hand washing is a primary infection control measure. Appropriate hand washing must be diligently practiced. Employees shall wash hands thoroughly using soap and water whenever hands become contaminated and as soon as possible after removing gloves or other personal protective equipment. When other skin areas or mucous membranes come in contact with blood or OPIMs, the skin shall be washed with soap and water, and the mucous membranes shall be flushed with water as soon as possible.

A sink with running water shall be present where human blood and OPIMs may be encountered. Antibacterial soap shall also be available. In situations where a sink is not available, such as on athletic fields, a water container (jug, bottle, jerry can) must be available to allow for hand washing after treating open injuries.

Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is reasonable likelihood of exposure to blood or OPIMs.

Food and drinks shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or bench tops where blood or OPIMs are present.

Mouth pipetting/suctioning of blood or OPIMs is prohibited.

Employees shall use practices to minimize splashing, spraying, spattering, and generation of droplets during procedures involving blood or OPIMs. When centrifuging blood and OPIMs, wait until the centrifuge stops before opening the top.

Sharps Management

Contaminated needles and other contaminated sharps shall not be bent, recapped. Shearing or breaking contaminated needles is prohibited.

Use red sharps containers to dispose of contaminated sharps. Sharps containers must be designed to close, to be puncture resistant, labeled or color-coded, and leak-proof on sides and bottom, and maintained upright throughout use. Containers are to be easily accessible to personnel and located as close as feasible to the immediate area where sharps are used.

Contaminated disposable sharps shall be discarded, as soon as possible after use, in a disposable sharps container. Contaminated broken glass is also to be placed in a disposable sharps container. Reusable contaminated sharps are to be placed in a reusable sharps container, as soon as possible after use, until properly decontaminated.

Sharps containers shall be located at the site of use whenever possible. In situations where sharps are used or encountered only on occasion, such as in Public Safety, locate a sharps container centrally and advise staff members of its location.

Overfilling sharps containers creates a hazard when needles protrude from openings. Nearly full containers must be promptly disposed of and replaced, or emptied and decontaminated in the case of reusable sharps.

The supervisor responsible for the area where sharps are used shall ensure full containers are disposed of properly and replacement containers are set up.

Precautions in Handling Specimens

All specimens shall be handled using universal precautions. Specimens of blood or OPIMs shall be placed in a container that prevents leakage during collection, handling, processing, storage, transport, or shipping. The container must be closed before being stored, transported, or shipped. Blood is collected in vacutainers located at collection sites.

Containers must be labeled or color-coded if they go out of the facility. When items are sent to outside laboratories, the container shall be placed in a plastic bag marked with a biohazard symbol in orange and sealed. If outside contamination of the primary container occurs, or if the specimen could puncture the primary container, the primary container shall be placed within a secondary container which prevents leakage and/or resists puncture during handling, processing, storage, transport, or shipping.

Management of Contaminated Equipment

Contaminated equipment shall be decontaminated, if possible, before servicing, shipping, transferring, or turning in to Property Control. Equipment that has not been fully decontaminated must have a label attached to it with information about the parts that remain contaminated.

The supervisor responsible for the equipment shall assess whether or not the equipment became contaminated, and decontaminate the equipment if necessary. Decontamination should include procedures necessary to render inactive potential pathogenic organisms. This may include sterilization, wiping with antiseptic solutions or towelettes or dismantling and cleaning with an antiseptic solution.

Personal Protective Equipment (PPE)

General Guidelines

All PPE shall be provided, repaired, cleaned, and disposed of by the University at no cost to employees. Employees shall wear PPE when doing procedures in which exposure to the skin, eyes, mouth, or other mucous membranes is anticipated. The articles to be worn will depend on the expected exposure. Gloves, gowns, laboratory coats, face shields, masks, eye protection, mouthpieces, resuscitation bags, and pocket masks are available. Employees who have allergies to latex shall be provided with alternative hand protection appropriate for the work being conducted, such as hypoallergenic gloves, cotton glove liners, or powderless gloves.

All PPE will be purchased by and issued within the organizational unit requiring its use. Questions regarding distribution shall be directed to the employee's supervisor.

If a garment is penetrated by blood or OPIMs, the garment shall be removed as soon as possible and placed in a designated container for laundering or disposal. All PPE shall be removed before leaving the work area and shall be placed in assigned containers for storage, laundering, decontamination or disposal.

Contaminated disposable gowns and gloves shall be placed in red bag lined waste receptacles. Non-contaminated disposable gowns and gloves shall be placed in the regular trash. Non-disposable PPE, such as safety goggles and face shields, shall be washed and disinfected if contaminated.

Protection for Hands

Gloves shall be worn in the following situations:

- when it can be reasonably anticipated that hands will contact blood or OPIMs, mucous membranes, and non-intact skin
- when performing vascular access procedures
- when handling or touching contaminated items or surfaces

Specific procedures requiring the use of gloves are listed in **Appendix B**. In situations where the individual is remote to a supply of gloves, such as on athletic fields or in police vehicles, a stock of gloves shall be taken to the site or placed in the vehicle. Gloves stored in vehicles may deteriorate due to adverse environmental factors, so they should be checked occasionally and replaced as necessary.

Disposable Gloves

- Replace as soon as feasible when gloves are contaminated, torn, punctured, or when their ability to function as a barrier is compromised
- Do not wash or decontaminate single use gloves for re-use

Utility Gloves

- Decontaminate for re-use if the gloves are in good condition
 - Discard when gloves are cracked, peeling, torn, punctured or show other signs of deterioration (whenever their ability to act as a barrier is compromised)

Protection for Eyes, Nose and Mouth

Employees shall wear masks in combination with eye protection devices (goggles or glasses with solid side shields) or chin-length face shields whenever splashes, spray, spatter, or droplets of blood or OPIMs may be generated and eye, nose, or mouth contamination can be reasonably anticipated. Examples of situations that would require such protection include bleeding control with spurting blood; intra-oral dental procedures; uncapping blood tubes if a shield is not used or if gauze is not placed over the tube stopper; incision and drainage of cysts and abscesses; and scrubbing contaminated instruments if spattering is anticipated.

Protection for the Body

A variety of garments including gowns, aprons, lab coats, clinic jackets, etc. are to be worn in occupational exposure situations. Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated.

A laboratory coat should be worn during routine clinic and laboratory procedures to reduce the likelihood of contaminating personal clothing. Disposable gowns or fluid resistant gowns shall be worn when there is a high potential for spattered blood or OPIMs. The gown should cover as much exposed skin as possible.

Housekeeping

The workplace shall be maintained in a clean and sanitary condition.

Equipment and Working Surfaces

Clean contaminated work surfaces with an appropriate disinfectant:

- after completing procedures involving the use of blood or OPIMs
- immediately or as soon as feasible when overtly contaminated or after any spill of blood or OPIMs
- at the end of the work shift if the surface may have become contaminated since the last cleaning

Remove and replace protective coverings (e.g. plastic wrap, aluminum foil, etc.) over equipment and environmental surfaces as soon as feasible when overtly contaminated or at the end of the work shift if they may have become contaminated.

Regularly inspect and decontaminate all reusable bins, pails, cans, and similar receptacles that may become contaminated with blood or OPIMs. If these articles become visibly contaminated, they should be decontaminated immediately or as soon as feasible.

Special Sharps Precautions

Clean up contaminated broken glass using mechanical means such as a brush and dustpan, tongs, or forceps and dispose of in a sharps container, **NOT** a waste basket. **DO NOT** pick up sharps directly with the hands.

Reusable sharps containers are not to be opened, emptied, or cleaned manually or in any other manner which will expose employees to the risk of percutaneous injury. **DO NOT** reach by hand into a container which stores reusable contaminated sharps.

Regulated Medical Waste

1. Any solid waste, as defined in this chapter is a regulated medical waste if it is suspected by the health care professional in charge of being capable of producing an infectious disease in humans. A solid waste shall be considered to be capable of producing an infectious disease if it has been or is likely to have been contaminated by an organism likely to be pathogenic to healthy humans, such organism is not routinely and freely available in the community, and if such organism has a significant probability of being present in sufficient quantities and with sufficient virulence to transmit disease. If the exact cause of a patient's illness is unknown, but the health care professional in charge suspects a contagious disease is the cause, the likelihood of pathogen transmission shall be assessed based on the pathogen suspected of being the cause of the illness.

This Includes:

Cultures and stocks of microorganisms and biologicals

Discarded cultures, stocks, specimens, vaccines and associated items that may be pathogenic to humans. Discarded etiologic agents and waste from the production of biologicals and antibiotics that may have been contaminated by organisms pathogenic to humans.

Blood and blood products

Waste consisting of human blood, human blood products (includes serum, plasma, etc.) and items contaminated by free-flowing human blood.

Tissues and other anatomical wastes

All human anatomical wastes that are human tissues, organs, body parts, or body fluids.

Sharps

Used hypodermic needles, syringes, scalpel blades, Pasteur pipettes, broken glass and similar devices likely to be contaminated with organisms that are pathogenic to healthy humans and all sharps used in patient care.

Animal carcasses, body parts, bedding and related wastes

When animals are intentionally infected with organisms likely to be pathogenic to healthy humans for the purposes of research, in vivo testing, production of biological materials or any other reason; the animal carcasses, body parts, bedding material and all other wastes likely to have been

contaminated are regulated medical wastes when discarded, disposed of or placed in accumulated storage.

Miscellaneous waste

Residue or contaminated soil, water, or other debris resulting from the clean up of a spill of any regulated medical waste. Any waste contaminated by or mixed with regulated medical waste.

Waste Containers

Any of the substances listed above must be placed in containers that can be closed and are constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping.

Regulated medical waste receptacles used to collect daily waste at work sites must be plastic, leak-proof containers with lids, lined with a red bag. Waste that is sent off campus for disposal is placed in cardboard boxes with red polyethylene bag liners or carts. Waste boxes and carts are provided by the waste disposal contractor.

Containers must be closed to prevent spillage or protrusion of contents during handling, storage, transport, or shipping. If the outside of the container becomes contaminated, it is to be placed in a second container that has the same characteristics as the initial container.

Waste is disposed of by a commercial contractor. Refer to ODU's Regulated Medical Waste Management Guidelines for specific requirements on packaging, labeling, storage and autoclaving regulated medical waste. A copy of the Guidelines can be found in **Appendix C**. Waste that has been treated is no longer regulated and may be handled as solid waste (trash) after it is labeled appropriately.

Laundry

Lab coats, aprons, and other non-disposable protective body clothing shall be cleaned by a contracted linen service company at no cost to the employee. Coats are never to be taking home.

Employees who handle contaminated laundry are to wear protective gloves and other appropriate personal protective equipment.

Contaminated laundry shall be handled as little as possible with a minimum of agitation. Do not sort or rinse laundry in the location of use. Place laundry in the designated container where it was used. Wet contaminated laundry that may soak through or cause leakage from the bag or container shall be placed and transported in bags or containers that prevent soak-through and/or leakage of fluids to the exterior.

Communication of Hazards to Employees

Employees shall be informed of hazards through a system of color-coding and labeling, as well as through training.

Warning labels shall be affixed to containers of regulated medical waste and entrances to waste storage areas, refrigerators and freezers containing blood or OPIMs, and other containers used to store, transport or ship blood or OPIMs. Contaminated equipment shall also be labeled in this manner. Information about the portions of the equipment that remain contaminated shall be added to the label.

Labels shall be fluorescent orange or orange-red or predominantly so, with lettering or symbols in a contrasting color. The label is either to be an integral part of the container or affixed to the container by a method that prevents loss or unintentional removal of the label. Labels shall include the biohazard symbol and the word "BIOHAZARD".

The labels and color-coding described here are not required in the following instances:

- when containers of blood, blood components, or blood products are labeled as to their contents and have been released for transfusion or other clinical use
- when individual containers of blood or OPIMs are placed in labeled containers during storage, transport, shipment or disposal
- when regulated medical waste or other contaminated material have been sterilized

IV. HEPATITIS B VACCINATION POLICY

General Statement of Policy

All employees who have been identified as having exposure to bloodborne pathogens shall be offered the hepatitis B vaccination series at no cost to them. In addition, these employees shall be offered post-exposure medical evaluation and follow-up at no cost should they experience an exposure incident on the job.

All medical evaluations and procedures including the hepatitis B vaccination series, whether prophylactic or post-exposure, shall be made available to the employee at a reasonable time and place. Medical care shall be performed by or under the supervision of a licensed physician, physician's assistant, or nurse practitioner. Medical care and vaccination series will be according to the most current recommendations of the U. S. Public Health Service. A copy of the OSHA Bloodborne Pathogens standard shall be provided to the healthcare professional responsible for administering hepatitis B vaccinations. All laboratory tests shall be conducted by an accredited laboratory and at no cost to the employee.

Hepatitis B Vaccination

The vaccination is a series of three injections. The second injection is given one month from the initial injection. The final dose is given six months from the initial dose. At this time a routine booster dose is not recommended, but if the U.S. Public Health Service, at some future date recommends a booster, it will also be made available to exposed employees at no cost.

The vaccination shall be made available to employees after they have attended training on bloodborne pathogens and within 10 working days of initial assignment to a job category listed in section II of

this plan. The vaccination series shall not be made available to employees who have previously received the complete hepatitis B vaccination series; to any employee that has immunity as demonstrated through antibody testing; or to any employee for whom the vaccine is medically contraindicated.

Any exposed employee who chooses not to take the Hepatitis B vaccination shall be required to sign a Declination Statement. A copy of the Declination Statement is in **Appendix D**. The Bloodborne Pathogen Program Representative shall forward completed Declination Statements to the Environmental Health and Safety Office.

V. PROCEDURES FOR EVALUATION AND FOLLOW-UP OF EXPOSURE INCIDENTS

An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIMs that result from the performance of an employee's duties.

The procedures to follow when an exposure incident occurs on the job will vary depending on the arrangements that have been made with the University's contracted occupational healthcare provider. The Environmental Health and Safety Office has developed a pamphlet that outlines procedures for evaluation and follow-up of exposure incidents. A copy of the pamphlet shall be kept with this plan. The Environmental Health and Safety Office shall update the pamphlet and distribute it to the Bloodborne Pathogen Program Representatives.

There are two forms that must be completed by the exposed employee and submitted to the Environmental Health and Safety Office for recordkeeping purposes. The forms (BBP-1 and BBP-2) can be found in **Appendix E** of this plan.

When an exposure incident is reported, the employee shall be offered the opportunity for post-exposure medical care. Medical care may be obtained through the University's contracted occupational healthcare provider.

The health care provider shall conduct a confidential medical evaluation and follow-up, as necessary, including the following elements:

- documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred.
- identification and documentation of the source individual, unless identification is not possible.

If the infectivity status of the source individual is unknown, the individual's blood shall be tested as soon as feasible after consent is obtained. If the source individual's blood is available, and the individual's consent is not required by law, the blood shall be tested and the results documented. The exposed employee will be informed of the results of the source individual's testing.

The exposed employee's blood shall be collected as soon as feasible after consent is obtained, and tested for HBV, HCV and HIV serological status. 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.

The exposed employee shall be offered post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service. The exposed employee shall be offered counseling and medical evaluation for any reported illnesses.

The following information shall be provided to the healthcare professional evaluating an employee after an exposure:

- a copy of 29 CFR 1910.1030, OSHA Bloodborne Pathogens Standard
- a copy of BBP-1 and BBP-2
- results of the source individual's blood testing, if available
- all medical records relevant to the appropriate treatment of the employee including vaccination status

The health care provider shall obtain and provide the Environmental Health and Safety Office with a copy of the evaluating healthcare professional's written opinion within 15 days of completion of the evaluation. The written opinion shall be limited to the following information:

- the employee has been informed of the results of the evaluation
- the employee has been told about any medical conditions resulting from exposure to blood or OPIMs which require further evaluation or treatment

NOTE: All other findings shall remain confidential and shall not be included in the written report.

In the event that an employee develops an illness as a result of a work-related exposure, medical bills and lost time will be covered under ODU's Worker's Compensation insurance.

VI. EMPLOYEE TRAINING

Employees shall be trained regarding bloodborne pathogens at the time of initial assignment to tasks where exposure may occur and annually thereafter. Additional training shall be provided whenever there are changes in tasks or procedures that affect employee occupational exposure; this training may be limited to the new exposure situation.

The training approach shall be tailored to the educational level, literacy, and language of the employees. The training plan shall include an opportunity for employees to have their questions answered by the trainer. Training methods may include lecture, demonstration, videotape, transparency, slides, written materials, software programs, etc. or any combination of these methods.

The Bloodborne Pathogen Program Representative is responsible for arranging and/or conducting training for employees in their department. In addition, the Representative is responsible for maintaining the training records in accordance with the section VII of this plan.

The following content shall be included in the training:

- explanation of the bloodborne pathogens standard
- general explanation of the epidemiology, modes of transmission and symptoms of bloodborne diseases
- explanation of this exposure control plan and how it will be implemented
- procedures which may expose employees to blood or other potentially infectious materials
- control methods that will be used at this facility to prevent/reduce the risk of exposure to blood or other potentially infectious materials
- explanation of the basis for selection of personal protective equipment
- information on the hepatitis B vaccination program including the benefits and safety of vaccination
- information on procedures to use in an emergency involving blood or other potentially infectious materials
- what procedure to follow if an exposure incident occurs
- explanation of post-exposure evaluation and follow-up procedures
- an explanation of warning labels and/or color coding
- any department-specific information that relates to the plan

VII. RECORDKEEPING PROCEDURES

Procedures are in place for maintaining both medical and training records. If ODU should cease business, and there is no successor employer to receive and retain the records for the prescribed period, then the Director of the National Institute for Occupational Safety and Health (NIOSH) shall be notified at least three months prior to the disposal of records. The records will be transmitted to NIOSH, if required by the Director, within the three-month period.

Medical Recordkeeping

A medical record shall be established and maintained for each employee with exposure. The record shall be maintained for the duration of employment plus 30 years in accordance with 29 CFR 1910.20. ODU's contracted occupational health clinic shall maintain employee medical records. The records shall include the following:

- name and social security number of the employee
- a copy of the employee's hepatitis B vaccination status with dates of hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination
- a copy of examination results, medical testing, and any follow-up procedures
- a copy of the healthcare professional's written opinion
- a copy of the information provided to the healthcare professional who evaluates the employee for suitability to receive hepatitis B vaccination prophylactically and/or after an exposure incident

The Environmental Health and Safety Office shall maintain records relating to vaccination status and exposure incidents; the records will be marked “confidential” and kept in a secured file cabinet.

Confidentiality of Medical Records

Medical records shall be kept confidential. The contents will not be disclosed or reported to any person within or outside the workplace without the employee's express written consent, except as required by law.

Employee medical records required under 29 CFR 1910.1030 shall be provided upon request for examination and copying to the subject employee and to the Commissioner of the Virginia Department of Labor and Industry in accordance with 29 CFR 1910.20.

Training Records

Training records shall be maintained for 3 years from the date on which the training occurred. A copy of the training record is in **Appendix F**. This record shall be completed on the day of training and a copy shall be sent by the Bloodborne Pathogen Program Representative to the Environmental Health and Safety Office.

Training records shall be provided upon request for examination and copying to employees, Representatives, and to the Commissioner of the Virginia Department of Labor and Industry in accordance with 29 CFR 1910.20.

Sharps Injury Log

The EHSO shall maintain a sharps injury log, which shall include at minimum: the type and brand of device involved in the incident; location of the incident (e.g. department or work area); and a description of the incident. The sharps injury may include additional information as long as an employee's privacy is protected.

VIII. RESPONSIBILITIES

The Administration shall:

- Support the requirements of this plan
- Ensure funding is available for the administration of this plan

The Human Resources Office shall:

- Prepare Worker's Compensation claims for employees
- Provide additional file space for employee records (if needed)

The Environmental Health & Safety Office shall:

- Fund employee hepatitis B vaccines, boosters, antibody testing, post exposure medical care, source individual testing, and regulated medical waste disposal
- Manage contracts and prepare requests for proposals

- Review this plan annually and update it as necessary
- Ensure that this plan is available to employees upon request
- Stay current with all regulations and laws regarding bloodborne pathogens
- Maintain records including participants in the program, training records, vaccination records, declination statements, post exposure records, sharps injury log, and invoices
- Provide training and consultation regarding bloodborne pathogens to the University community upon request
- Comply with all applicable sections of this plan

The Bloodborne Pathogen Program Representative shall:

- Ensure that this plan is available to supervisors and employees upon request
- Forward training records and declination statements to the Environmental Health and Safety Office
- Augment this plan with department-specific information
- Review department-specific information in their plan annually and update it as necessary
- Conduct or arrange for supervisor and employee bloodborne pathogen training
- Notify the Environmental Health and Safety Office when a new or temporary representative is appointed
- Comply with all applicable sections of this plan

The Supervisor shall:

- Ensure that engineering controls and/or administrative controls are implemented to reduce the likelihood of an occupational exposure (if feasible)
- Provide employees with personal protective equipment
- Comply with section V of this plan regarding evaluation and follow-up of exposure incidents
- Attend bloodborne pathogen training as required in this plan
- Allow employees compensated release-time to receive the vaccination series
- Solicit employee input regarding the use of engineering controls and document how the input was obtained
- Comply with all applicable sections of this plan

The Employee shall:

- Complete the vaccination series as scheduled
- Schedule an appointment to receive the vaccination series, at the contracted clinic, if unable to attend the dates scheduled on campus
- Sign the declination statement if the vaccination series is declined
- Attend bloodborne pathogen training as required in this plan
- Comply with section V of this plan regarding evaluation and follow-up of exposure incidents
- Comply with all applicable sections of this plan

IX. DEFINITIONS

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

Bloodborne Pathogens means pathogenic microorganisms that are present in human blood and can cause disease in humans.

Bloodborne Pathogen Program Representative means an employee of the University who volunteers to manage the Bloodborne Pathogen Program for their department. The Representative may also be a student who has been tasked to manage the program for their department (e.g. interns, graduate students). Some departments may have more than one Representative, based on their size and nature of their work. The responsibilities of the Representative are listed in the “Responsibilities” section of this Plan.

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

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

Contaminated Laundry means laundry which has been soiled with blood or OPIMs or may contain sharps.

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

Employee means any person hired by the University or Research Foundation as full or part-time personnel, including administrators, faculty, staff, students and work study students. The responsibilities of the employee are listed in the “Responsibilities” section of this plan.

Engineering Controls means controls that isolate or remove the bloodborne pathogens hazard from the workplace (e.g. sharps disposal containers, self-sheathing needles, and safer medical devices, such as sharps with engineered sharps injury protections and needless systems).

Environmental Health and Safety Office is responsible for ensuring that the University complies with federal, state and local environmental and occupational safety and health laws and regulations. The responsibilities of the Environmental Health and Safety Office are listed in the “Responsibilities” section of this Plan.

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

HBV means hepatitis B virus.

HCV means hepatitis C virus.

HIV means human immunodeficiency virus.

Licensed Healthcare Professional means a person whose legally permitted scope of practice allows him or her to independently perform the activities required for hepatitis B vaccination and post-exposure evaluation and follow-up.

Needless Systems means a device that does not use needles for:

(1) The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (2) The administration of medication or fluids; or (3) Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Occupational Exposure means reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Other Potentially Infectious Materials (OPIMs) means 1) the following human body fluids: semen, vaginal secretions, breast milk, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids 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 tissues from experimental animals infected with HIV or HBV.

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

Personal Protective Equipment (PPE) means 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 PPE.

Regulated Medical Waste means liquid or semi-liquid blood or OPIMs; contaminated items that would release blood or OPIMs in a liquid or semi-liquid state if compressed; items that are caked with dried blood or OPIMs and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or OPIMs. The Commonwealth of Virginia has special guidelines for the management of regulated medical waste, which are outlined in ODU's Regulated Medical Waste Management Guidelines.

Sharps are items that may puncture the skin (e.g. needles, broken glass).

Sharps With Engineered Sharps Injury Protections means nonneedle sharps or needle devices containing built-in safety features that are used for collecting fluids or administering medications or other fluids, or other procedures involving the risk of sharps injury (e.g. syringes with a sliding sheath that shields the attached needle after use, needles that retract into a syringe after use,

shielding or retracting catheters, IV medication delivery systems that use a catheter port with a needle housed in a protective covering).

Source Individual means any individual, living or dead, whose blood or OPIMs may be a source of occupational exposure to the employee. Examples include, but are not limited to, patients at the Student Health Clinic, children at the Child Development Center, human remains and intercollegiate or intramural athletes.

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

Supervisor means an employee who oversees the work of another employee (e.g. Principal Investigator, lab manager, superintendent). The responsibilities of the Supervisor are listed in the “Responsibilities” section of this plan.

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

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

APPENDIX A

DEPARTMENT INFORMATION

APPENDIX B

Recommended Personal Protective Equipment for Worker Protection Against HIV and HBV Transmission¹ in Prehospital² Settings

Guidelines for Prevention of Transmission of HIV and HBV to Health Care and Public Safety Workers
Reprinted from DHHS (NIOSH) Centers for Disease Control, 1987, HHS Publications No. 89-107, Table 4, Page 28

<u>Task or Activity</u>	Disposable		<u>Mask</u> ³	<u>Protective Eyewear</u>
	<u>Gloves</u>	<u>Gown</u>		
Bleeding control with spurting blood	Yes	Yes	Yes	Yes
Bleeding control with minimal bleeding	Yes	No	No	No
Emergency childbirth	Yes	Yes	Yes if splashing is likely	Yes if splashing is likely
Blood drawing	Yes	No	No	No
Starting an intravenous (IV) line	Yes	No	No	No
Endotracheal intubation, esophageal obturator use	Yes	No	No, unless splashing is likely	No, unless splashing is likely
Oral/nasal suctioning, manually cleaning airway	Yes ⁴	No	No, unless splashing is likely	No, unless splashing is likely
Handling and cleaning instruments	Yes	No, unless soiling is likely	No	No
Measuring blood pressure	No	No	No	No
Measuring temperature	No	No	No	No
Giving an injection	No	No	No	No

¹ The examples provided in this table are based on application of universal precautions. Universal precautions are intended to supplement rather than replace recommendations for routine infection control, such as hand washing and using gloves to prevent gross microbial contamination of hands (e.g. contact with urine or feces).

² Defined as setting where delivery of emergency health care takes place away from a hospital or other health care facility.

³ Refers to protective masks to prevent exposure of mucous membranes to blood or other potentially contaminated body fluids.

⁴ While not clearly necessary to prevent HIV or HBV transmission unless blood is present, gloves are recommended to prevent transmission of other agents (e.g. Herpes Simplex)

APPENDIX C

**REGULATED MEDICAL WASTE
MANAGEMENT GUIDELINES**

Guidelines for Disposal of Regulated Medical Waste

Below are the guidelines for disposal of Regulated Medical Waste at approved locations, be sure to review prior to dropping off waste:

1. MGB/BSSF Medical Waste Guidelines:

- a. <https://www.odu.edu/content/dam/odu/offices/environmental-health-safety/docs/bssf-medical-waste-guidelines.pdf>

2. Chemistry Medical Waste Guidelines:

- a. https://www.odu.edu/content/dam/odu/offices/environmental-health-safety/docs/chem_medwaste_guidelines.pdf

3. IRP / CBE Medical Waste Guidelines (No autoclave)

- a. https://www.odu.edu/content/dam/odu/offices/environmental-health-safety/docs/iro-cbe_%20medwaste_guidelines.pdf

Unauthorized Items

The following materials should never be autoclaved:

- Flammable, reactive, corrosive, toxic, or radioactive materials even if mixed with biological waste.
- Solvents or volatiles.
- Bleach or any liquids containing bleach (sodium hypochlorite).
- Mixed waste materials (Radioactive / Chemical).
- Liquids in sealed containers.
- Resin plastics that will melt (e.g., high-density polyethylene (HDPE), low-density polyethylene (LDPE), polyethylene terephthalate (PET), or polyethylene terephthalate glycol-modified (PET-G)).
- Animal carcasses / anatomical remains.

LIQUID WASTE

Labs that bring their liquid waste to BSSF - MGB 207:

- Please **label all** submitted liquid waste with the agents contained in the waste. Primary containers must be placed into an autoclavable sterilization tray prior to submitting the liquid for autoclaving.
- Liquid waste will be accepted for treatment on any weekday except Wednesday.
- It will be the responsibility of the individual labs to retrieve their trays once they have been sterilized and to dispose of the waste.

All other locations, treat liquid waste with bleach and dispose of after minimum of **20 minutes**.

SHARPS WASTE

1. All sharps must be submitted in a closed, approved sharps container, seal with 1 piece of autoclave tape.
 2. If Sharps container is broke or missing lid(s), place entire container into a larger container. Do not attempt to tape broken lids or entire top of container. Empty defective containers should be placed in trash.
 3. All sharps containers must have the following information clearly labeled on the container, **prior** to submission to B.S.S.F/Health Sciences/Chemistry:
 - Generators name
 - Room number and building.
 - If agents are used indicate the genus on the sharps container.
 4. Once sterilized, ODU must send sharps off campus to a contracted vendor for incineration.
-

Plastic Pipettes

Plastic serological pipettes must be placed in bins or trays, prior to autoclaving in one of the approved autoclave facilities. During pipette collection, these bins or trays should contain an appropriate disinfectant which is to be drawn up into the pipette. The bins or trays containing pipettes should never be more than 3/4 full with pipettes.

Prior to transporting Pipettes to autoclave location, drain liquid (after allowing required disinfecting time) down the sink with copious amounts of water. Transfer pipettes to approved autoclave tray (Except IRP location - double bag and place in MedWaste bins) and cover with aluminum foil and labeled with the following information:

- PI's name
- Room Number
- List of all agents used

Pipettes and will be accepted for treatment per location schedule:

- BSSF: Any day except Wednesday
- CHEM: availability of Autoclave
- Health Sci: Discretion of Autoclave operator

Approved sharps containers

Are rigid, leak-proof, puncture resistant boxes of various sizes made of hard red plastic, with a lid that can be securely sealed to keep contents from falling out, and clearly marked with the biohazard symbol.



Approved sterilization tray:

- Fisher Scientific (Cat. #13-359-20B) - Thermo Scientific Nalgene Large Polypropylene Sterilizing Pans
- If there's another tray that could be an option, have it approved through EH&S prior to ordering.



Transport of waste

- All bagged or liquid waste and serological pipettes must be placed in the approved sterilization trays, covered with foil for pipettes and placed on a cart for transport to MGB 207 / Health Science/ Chemistry for sterilization.
- Never hand carry any Regulated Medical Waste outside of the labs.
- Pipettes and liquid waste will be accepted for treatment on any weekday except Wednesday (BSSF).



APPENDIX D

**HEPATITIS B VACCINATION
ACCEPTANCE/DECLINATION FORM**



Hepatitis B Vaccination Acceptance or Declination Form

Instructions:

Complete the Employee/Student information below. Determine whether or not you wish to receive the vaccine at no charge. Check either the "Acceptance" or "Declination" section and forward to the EHS Office by fax or email at (757) 683-6025 or ehsdept@odu.edu

Name _____ UIN _____
Department _____ Date _____

Are you an: Employee: _____ Student: _____ (submit this form to your Instructor, not EHS)

Please Check One of the Following:

I Accept the Hepatitis B Vaccination

I have been informed of the biological hazards that exist in my workplace, and I understand the risks of exposure to blood or other potentially infectious materials involved with my job. I understand that I may be at risk of acquiring hepatitis B virus (HBV) infection. I acknowledge that I have been provided information on the hepatitis B vaccine, including information on its effectiveness, safety, method of administration and the benefits of being vaccinated. I have been given the opportunity to be vaccinated with the hepatitis B vaccine at no charge to myself.

I understand that I am responsible for scheduling and keeping my appointments to receive the Hepatitis B vaccine in accordance with the recommended series (three vaccination series; second vaccine one month after first vaccine; and third vaccine within five months of second vaccine). ***EH&S will provide you with an "Authorization Letter" to obtain vaccine for no charge.***

I Decline the Hepatitis B Vaccination

I understand that due to my occupational exposure to blood or other potentially infectious material (OPIM) 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 OPIM and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Please check one of the following if you are declining:

 I am declining because I have previously completed the hepatitis B vaccination series.

 I am declining because I choose not to have the hepatitis B vaccination series. I am also aware that I may change my mind at a later date.

APPENDIX E

**BBP-1
EXPOSURE INCIDENT REPORT FORM
&
BBP-2
POST-EXPOSURE MANAGEMENT RECORD**

BBP-1
EXPOSURE INCIDENT REPORT FORM

Employee Name _____
(please print)

UIN _____

Department _____

Date _____

Supervisor Name _____

Description of Incident: (be specific and include date, approximate time and place)
Use back of sheet if needed

Immediate Actions Taken: _____

Source of Blood or OPIMs (include name of source individual, if known): _____

Personal Protective Equipment Worn: _____

Hepatitis B Vaccination Status: ___ declined vaccine ___ complete ___ 1st shot ___ 2nd shot

Employee Signature _____ Date _____

BBP-2
POST-EXPOSURE MANAGEMENT RECORD

Employee Name _____
(please print)

UIN _____

Employee Information

- _____ Employee refuses post-exposure medical care
- _____ Employee will seek post-exposure medical care but refuses to contribute baseline blood or allow testing
- _____ Employee will seek post-exposure medical care and will contribute baseline blood to be stored at least 90 days, but refuses testing
- _____ Employee will seek post-exposure medical care and will agree to contribute blood and grants permission for HIV, Hepatitis B and Hepatitis C testing and follow-up evaluation and treatment

Source Individual Information

- _____ Source individual could not be identified
- _____ Source individual identified but refused to contribute blood
- _____ Source individual identified and grants permission for HIV, Hepatitis B and Hepatitis C testing

Healthcare Professional Selected _____

I acknowledge that I have been provided with complete information and consultation regarding my exposure incident and options for post-exposure medical care

Employee Signature _____ **Date** _____

<p>This section to be completed by the Environmental Health & Safety Office</p>
<p>Immediately following the exposure incident occurring on _____ the healthcare professional selected by the employee was provided with:</p>
<ul style="list-style-type: none">_____ Copy of 29 CFR 1910.1030_____ Copy of BBP-1_____ Description of the employees duties_____ Medical records relevant to treatment and vaccination status
<p>BBP Program Coordinator Signature _____ Date _____</p>
<p>Within 15 days of completion of the evaluation of the employee, a written opinion, as specified in section V of this plan, was obtained from the healthcare provider.</p>
<p>BBP Program Coordinator Signature _____ Date _____</p>

APPENDIX F
TRAINING RECORD

