

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

1.0 Introduction

Employees are at risk of contracting infectious diseases each time they are exposed to bloodborne pathogens. It is the goal of Radford University to prevent exposure incidents whenever possible. The Occupational Health and Safety Administration (OSHA) implemented the regulation, “Occupational Exposure to Bloodborne Pathogens,” contained in 29 CFR 1910.1030 to help protect workers from the health hazards associated with occupational exposure to pathogenic organisms present in blood and other body fluids.

The intent of the regulation was to minimize or prevent the transmission of bloodborne diseases including, but not limited to, Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV). To protect employees at Radford University and to comply with OSHA’s Bloodborne Pathogen Standard, the University has established this Exposure Control Plan. The purpose of this plan is to identify occupations, tasks, and procedures where exposure to bloodborne pathogens may occur and to implement controls that will reduce the risk of infection. The plan also includes provisions for affected employees to receive Hepatitis B vaccinations, training, and, if necessary, confidential medical evaluation.

2.0 Scope

This Exposure Control Plan (ECP) has been developed to minimize or eliminate employee occupational exposure. Occupational exposure is any “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” without regard to the use of personal protective equipment (PPE).

While it is recognized that other animals may be a source of human pathogens, this ECP and applicable laws are designed to prevent infection and spread of infection due to human bloodborne pathogens, especially the Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) and the Human Immunodeficiency Virus (HIV), the causative agent of Acquired Immune Deficiency Syndrome (AIDS).

This plan applies to all employees whose work may involve the possible exposure to human blood or other potentially infectious materials as well as other unfixed tissue specimens.

3.0 Definitions

Amniotic Fluid – Fluid from the uterus.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
	Approved By: Avraham Boruchowitz, CSP, CHMM

Blood – Human blood and its components, and products derived 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 and C Viruses (HBV and HCV) and Human Immunodeficiency Virus (HIV).

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

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

Contaminated Protective Clothing – Protective clothing such as lab coats, gowns, or uniforms that have been soiled with blood, or other potentially infectious materials.

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

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

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

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

Handwashing Facilities – A facility providing an adequate supply of running potable water, soap, and single-use towels or air-drying machines.

Hepatitis B Virus (HBV) – A virus that causes inflammation of the liver and may lead to long term liver damage including cirrhosis and cancer.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

Hepatitis C Virus (HCV) – A virus that causes inflammation of the liver and can lead to long term liver damage including cirrhosis and cancer.

Human Immunodeficiency Virus (HIV) – A virus that attacks critical cells of the immune system which leads to Acquired Immunodeficiency Syndrome (AIDS), a life-threatening condition.

Licensed Healthcare Professional – A person whose legally permitted scope of practice allows him or her to independently perform the activities required by Section 7.0 Hepatitis B Vaccination and Section 8.0 Post-exposure Evaluation.

Needless systems – A device that does not use needles for:

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

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

Other Potentially Infectious Materials (OPIM) – Includes:

- The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
- Any unfixed tissue or organ (other than intact skin) from a human (living or dead);
- 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 Exposure – Exposure occurring as the result of piercing mucous membranes or the skin barrier, such as exposure through subcutaneous, intramuscular, intravenous, or arterial routes resulting from needlesticks, human bites, cuts, abrasions, or other mechanical means.

Pericardial Fluid – Fluid surrounding the heart.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

Peritoneal Fluid – Fluid from the abdominal cavity that surrounds the major organs.

Pleural Fluid – Fluid from lung tissue.

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

Sharps – Any glass, metal, or plastic instrument or item that can cut or has the potential to cut, puncture, scratch, or abrade skin, whether it is contaminated or not. This includes, but is not limited to, hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, serological pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included, are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

Regulated Waste – Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling, contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

Sharps with Engineered Sharps Injury Protections (Safer Sharps Devices) – A non-needle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident (e.g. syringes with a sliding sheath that shields the attached needle after use).

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 remain, and individuals who donate or sell blood or blood components.

Sterilize – The use of physical or chemical procedures to destroy all microbial life, including highly resistant bacterial endospores.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

Synovial Fluid – Fluid from the joints, such as the knees or elbows.

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

Work Area – Any research laboratory, clinical laboratory, patient care area, or service area where potentially infectious materials may be stored.

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

4.0 Responsibilities

Supervisors/Managers/Department Heads/Principal Investigators Responsibilities (Department)

Activities delegated to supervisory personnel include but are not limited to:

- Implementing all rules and regulations discussed in this plan.
- Developing site-specific ECP policies and procedure to supplement this general ECP as needed.
- Ensuring that staff members with potential for occupational exposure receive the appropriate Bloodborne Pathogens Exposure Control training.
- Assuring that employees receive on-site training regarding engineering work controls, work practice controls, personal protective equipment (PPE), compliance with safer sharps devices, and proper procedures to follow after an exposure incident.
- Ensuring employees are provided with, and use, appropriate PPE.
- Reporting all exposures to Human Resources using the Employer’s Accident Report (EAR) (Appendix A) and also submit to EHS the Exposure Incident Report Form (Appendix B), and where applicable, the Sharps Injury Report (Appendix C).

Employees

Employees are responsible for following procedures and practices as outlined in the Exposure Control Plan. This includes but is not limited to:

- Attending Bloodborne Pathogens Exposure Control training upon beginning employment at Radford University, and attend annual refresher courses thereafter.
- Conducting all operations in accordance with established work practice controls.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

- Following Universal Precautions.
- Developing and maintaining good personal hygiene habits.
- Reporting all occupational exposure incidents.

Environmental Health and Safety (EHS)

EHS is responsible for developing, implementing, and administering the Bloodborne Pathogens Exposure Control Plan. These responsibilities include:

- Distributing the ECP to all departments and administrative units.
- Providing appropriate Bloodborne Pathogens Exposure Control Training to any employee who may be occupationally exposed.
- Maintenance of training records.
- Periodically review and update this written program.
- Evaluate the overall effectiveness of the program at least annually.
- Assist departments in the implementation of this program.

5.0 Program Components

5.1 – Exposure Determination

The EHS Specialist will evaluate the duties, tasks, and procedures of all employees in each job classification to determine who may have occupational exposure to bloodborne pathogens as part of their job duties. This evaluation and exposure determination will be made without regard to personal protective equipment (PPE). Exposure determinations will be reviewed and updated at least annually by the EHS Specialist.

Job classifications in which all employees have occupational exposure:

- Police Officers – First Aid and Arresting Activities
- Athletic Trainers – First Aid and Medical Care
- Nursing Faculty – Instruction of Medical Care
- Housekeepers – Custodian Duties
- Plumbers – Regular and Preventative Maintenance
- Physicians – Medical Care/Patient Care
- Nurse Practitioners – Medical Care/Patient Care
- Laboratory Technicians – Handling of Potentially Infectious Materials

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

- Environmental Health and Safety – Handling of Potentially Infectious Materials
- Speech Language Pathologists – Handling of Potentially Infectious Materials/Patient Care
- Audiologists – Handling of Potentially Infectious Materials/Patient Care

Job classifications in which some employees have occupational exposure and the procedures that cause them to have occupational exposure:

- Recreation Supervisor – First Aid (Collateral Duty)
- Recreation, Parks, and Tourism Therapists – First Aid (Collateral Duty)
- Dietitians – Phlebotomy (Primary Duty) and First Aid (Collateral Duty)

Tasks and Procedures

The task/procedures listed below cause an Occupational Exposure to the personnel conducting them when employing human blood or other potentially infectious material (OPIM).

- Tissue culture procedures
- Histological/cytological procedures (unfixed tissue)
- Collection of blood and other body fluids (specimens) and tissues
- Transportation of specimens to laboratory areas
- Preparation of blood and other body fluids and tissues specimens for assay or storage
- Phlebotomy
- Patient Care Activities:
 - Direct patient care contact, including emergency first aid
 - Assisting or performing diagnostic or therapeutic patient care procedures
 - Assisting in routine personal care activities
- Handling of Human Blood, Body Fluids or Tissue:
 - Collecting body fluid or tissue specimens
 - Transporting body fluid or tissue specimens
 - Operating laboratory equipment used in blood, blood derivative, or other body fluid testing
 - Performing qualitative and quantitative tests and examination of body fluid or tissue specimens
 - Disposal or storage of body fluid or tissue specimens
- Cleaning Patient Care or Laboratory Areas and Equipment
 - Washing/cleaning laboratory glassware, apparatus, floors, workbenches, or counters

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

- Cleaning and sterilizing equipment and instruments
- Collecting soiled linen
- Cleaning patient care areas
- Handling infectious, or potentially infectious agents, animals, or research material
- Handling potentially infectious regulated medical wastes, including sharps
- Laboratory Bench Work:
 - Centrifuging specimens
 - Vortexing specimens
 - Dispensing/pipetting specimens
 - Separation procedures
 - Isolation procedures
 - Concentration procedures
 - Assay procedures

5.2 – Universal Precautions

All workers will observe universal precautions when performing any task which may result in occupational exposure to blood or other potentially infectious body fluid. Universal Precautions is an approach to infection control that assumes that all human blood and certain other body fluids and tissues are potentially infectious material. Universal Precautions should be applied when handling these materials even when it is believed that the specimens are not contaminated with any infectious agent. Therefore, contact with blood or OPIM must be prevented.

Universal Precautions apply to blood, semen, vaginal secretions, cerebrospinal fluids, synovial fluids, 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 to differentiate between body fluids. Universal Precautions also apply to exposure to unfixed tissues or organs, other than intact skin, from living or dead humans.

5.3 – Engineering Controls

Engineering controls are devices that isolate or remove the bloodborne pathogens hazard from the worker. Engineering controls shall be used in preference to other control methods to eliminate or minimize exposure to blood or other potentially infectious body fluids. Departments will evaluate the effectiveness of existing controls and review the feasibility of instituting more advanced engineering controls that eliminate or reduce exposure to bloodborne pathogens.

The following engineering controls will be in place in all areas of occupational exposure:

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

- Readily accessible handwashing facilities.
- Antiseptic towelettes or antiseptic hand cleanser and towels in areas where it is not feasible to have handwashing facilities.
- Puncture resistant sharps disposal containers.
- Biological Safety Cabinets (*this control will be in place only where appropriate*)
- Appropriate containers for storage, transport, or shipment of blood or other potentially infectious materials (OPIM), regulated waste, and contaminated laundry.

Engineering controls will be inspected periodically and repaired or replaced as needed by a designated person appointed by supervision in affected departments.

Commercially available safer medical devices designed to eliminate or reduce occupational exposure will be evaluated annually and implemented if appropriate. Examples include self-sheathing needles, sharps with engineered sharps injury protections and needleless systems. Documentation of this evaluation will be kept by affected departments.

In the evaluation and selection of safer medical devices, input will be solicited from non-managerial employees who are responsible for direct patient care and potentially exposed to contaminated sharps. Affected departments will maintain documentation of this evaluation.

Sharps Containers

Sharps containers must be:

- Easily accessible to personnel.
- Located close to the immediate area where sharps are used.
- Placed in areas where they can be reasonably anticipated that sharps may be found.

Biological Safety Cabinets

All biological safety cabinets shall be certified:

- When installed.
- Whenever they are moved.
- Annually.

Employees should always check with lab occupants, their supervisor, or EHS if they are requested to work near this type of cabinet. A biohazard warning will be posted on the outside of the cabinet.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

5.4 – Work Practices

Work practice controls reduce the likelihood of exposure by altering the manner in which a task is performed. The following standard work practices are applicable to all work areas or other areas where potentially infectious materials may be stored.

- 5.4.1 Handwashing is the most effective means of preventing the spread of infections. Workers shall wash their hands and other skin surfaces with soap and water as soon as possible after contact with blood or other potentially infectious body fluids. Hands will be washed immediately after removing gloves and other PPE.
- 5.4.2 If handwashing facilities are not readily available, an antiseptic hand cleaner and clean towels or antiseptic towelettes will be used. If these alternatives are used, hands shall be washed as soon as feasible with soap and running water.
- 5.4.3 Workers shall flush mucous membranes with copious amounts of water as soon as possible following contact with blood or other potentially infectious body fluid.
- 5.4.4 All procedures will be performed in a manner that minimizes splashing or spraying.
- 5.4.5 Eating, drinking, smoking, applying cosmetics, or handling contact lenses is prohibited in areas of potential exposure to bloodborne pathogens.
- 5.4.6 Food or drinks will not be stored in areas where blood or OPIM are present.
- 5.4.7 Mouth pipetting/suctioning of blood or OPIM is strictly prohibited.
- 5.4.8 Specimens of blood or OPIM will be placed in a container that prevents leakage during collection, handling, processing, storage, transport, or shipping. The container shall be labeled or color-coded and closed prior to being stored or shipped. If outside contamination occurs or the container is punctured, it will be placed in a labeled or color coded secondary container which prevents leakage.

5.5 – Personal Protective Equipment (PPE)

When engineering controls and work practices are insufficient to control occupational exposure, the University will supply, at no cost to employees, appropriate PPE. This equipment includes gloves, gowns, laboratory coats, face shields or masks, eye protection, mouthpieces, or pocket masts.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

- 5.5.1 Employees will wear PPE when doing procedures in which exposure to the skin, eyes, mouth, or other mucous membranes is anticipated.
- 5.5.2 The affected department supervisor will train employees in the proper use of the equipment. PPE will be purchased in appropriate sizes, maintained, and distributed by affected departments.
- 5.5.3 PPE will be readily accessible at the worksite or individually issued to employees.
- 5.5.4 The University will clean, launder, dispose, repair, or replace PPE at no cost to the employee. Home laundering is not permitted.
- 5.5.5 All PPE will be removed prior to leaving the work site and placed in an appropriately designated area or container. Areas where employee store contaminated items will be determined by affected departments.
- 5.5.6 Workers will wear gloves when it can be reasonably anticipated that hand contact with blood, other potentially infectious body fluids, mucous membranes, or non-intact skin is possible.
- 5.5.7 Disposable (single use) gloves, such as surgical or examination gloves, shall be replaced as soon as practical when contaminated, or as soon as feasible when torn or punctured. Single use gloves will not be washed or decontaminated for re-use.
- 5.5.8 Employee will wear disposable gloves made of vinyl, latex, or nitrile when drawing blood. Gloves will be changed between patient contact and disposed in appropriate containers as contaminated waste.
- 5.5.9 Rubber household utility gloves will be used for housekeeping chores that involve handling items or surfaces contaminated with blood or body fluids to which universal precautions apply. Utility gloves may be washed and disinfected for reuse if necessary, but must be discarded if punctured or torn.
- 5.5.10 Surgical masks, protective eyewear with solid side shields, and/or face shields will be worn whenever splashes, spray, or splatter of blood or OPIM are generated. These devices are not required for routine care.
- 5.5.11 Gowns, aprons, and other protective body clothing will be worn in occupational situations in which exposure is reasonably anticipated. Gowns should be made of, or

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

lined with, fluid resistant material. If a garment is penetrated by blood or other potentially infective fluid, the garment shall be removed immediately or as soon as feasible.

5.5.12 Suitable ventilation devices, such as mouthpieces and resuscitation bags, that minimize contact with saliva will be provided to key personnel, trained in CPR, where the need for resuscitation is likely.

5.5.13 Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated.

5.5.14 Procedures requiring PPE and the recommended protection include:

- Minimal bleeding – Disposable gloves
- Spurting blood – Disposable gloves, gown, mask, protective eyewear
- Blood spills – Disposable utility gloves, protective eyewear
- Blood drawing – Disposable gloves
- Emergency childbirth – Disposable gloves, gown, mask, eye protection
- Oral/nasal suctioning – Disposable gloves
- Starting an IV – Disposable gloves
- Handling and cleaning contaminated equipment – Disposable gloves
- Handling contaminated laundry – Disposable gloves
- Measuring blood pressure – None
- Giving an injection – None
- CPR – One-way valve masks, disposable gloves
- Opening blood or specimen containers – Disposable gloves

5.6 – Housekeeping

The worksite will be maintained in a clean and sanitary condition.

5.6.1 An appropriate written schedule for cleaning and decontaminating will be implemented by affected departments for routine and non-routine tasks. Procedures will give the methods, disinfectant used, and frequency of decontamination of various areas within the department.

5.6.2 Employees will wear appropriate PPE during all cleaning of blood or OPIM.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
	Approved By: Avraham Boruchowitz, CSP, CHMM

- 5.6.3 All equipment and work surfaces shall be properly cleaned and disinfected after completing procedures involving exposure to blood or OPIM. Employees will clean equipment and surfaces:
- When surfaces become obviously contaminated.
 - After any spill of blood or OPIM.
 - At the end of the work shift if the surface may have become contaminated since the last cleaning.
 - When the employee leaves the work area for a period of time.
- 5.6.4 An approved hospital disinfectant that is tuberculocidal or a freshly prepared solution of household bleach diluted 1:10 with water will be used for cleaning surfaces and equipment.
- 5.6.5 Protective coverings used to cover equipment and surfaces will be replaced as soon as feasible when they become grossly contaminated or at the end of the work shift when they become contaminated.
- 5.6.6 All reusable containers such as bins, pails, and trash cans shall be inspected weekly and decontaminated if necessary. Reusable containers will be decontaminated as soon as possible following visual contamination.
- 5.6.7 Broken glassware will be picked up by mechanical means such as a brush and dustpan, or tongs. Broken glassware will not be picked up by hand, even when wearing gloves.
- 5.6.8 Blood spills will be cleaned up by authorized individuals. The following procedures will be used to clean-up spills of blood or other potentially infectious fluids:
1. Secure the area.
 2. Wear appropriate PPE such as rubber gloves, booties, and goggles.
 3. Place disposable or cloth towels or some other disposable absorbent over the spill to soak up gross amounts of fluids.
 4. Place soaked towels or absorbent into a red infectious waste bag.
 5. Wash the area with soap and water.
 6. Use towels to complete the clean-up and place them into the red bag.
 7. Disinfect the area with an appropriate germicide such as a freshly prepared 1:10 solution of bleach (one cup of bleach to nine cups of water) or a hospital disinfectant labeled as tuberculocidal. Do not mix bleach with other cleaning or disinfecting agents.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
	Approved By: Avraham Boruchowitz, CSP, CHMM

8. Leave disinfectant on the spill for 10 minutes (or as prescribed by the disinfectant instructions if using disinfectant other than a 1:10 bleach solution).
9. Place all contaminated materials including gloves into the red plastic bag, seal, and properly label.
10. Contact EHS at 540-831-7790 to arrange disposal of the infectious waste.
11. Dispose of wash water in the sanitary sewer system. Blood on sidewalks or streets may be washed into a sewer or storm drain. Do not wash bleach into a storm drain.
12. Wash hands after removing PPE.

5.6.9 Equipment that may be contaminated will be examined prior to servicing or shipping and decontaminated if possible. The equipment will be labeled indicating which portions are still contaminated.

5.7 – Laundry Practices

Contaminated clothing will be handled as little as possible with a minimum of agitation. Contaminated clothing can be directly disposed as infectious waste or sent for proper laundering.

- 5.7.1 Workers who handle potentially contaminated clothing will wear appropriate PPE such as gloves. Gowns and eye protection will be worn if gross contamination is present.
- 5.7.2 Contaminated clothing will be bagged at the location where it is used and transported in leak-proof containers labeled with the biohazard symbol or in red plastic bags. Laundry will not be sorted or rinsed at the location of use.
- 5.7.3 Contaminated laundry will be laundered on-site by properly trained personnel or picked-up by a commercial laundry service. Washing at a public laundromat is discouraged and may be prohibited. Dry cleaning is acceptable. Contaminated laundry shall not be taken home.

5.8 – Labels

- 5.8.1 All containers of contaminated waste, laundry, refrigerators and freezers, and other containers used to store blood and OPIM will be properly labeled or color coded. Employees will be informed of labeling requirements during training sessions.
- 5.8.2 Individual small containers are exempt from the labeling requirement provided they are stored in larger labeled containers.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
	Approved By: Avraham Boruchowitz, CSP, CHMM

5.8.3 Labels will include the universal biohazard symbol and wording. Labels will be fluorescent orange or orange-red with contrasting lettering.

5.8.4 Red plastic bags or containers may be used instead of labels if all employees understand the meaning of the color code.

5.9 – Sharps

5.9.1 Employees will use appropriate precautions to prevent injuries from needles, scalpel, and other sharp instruments. Contaminated needles shall not be recapped, removed from disposable syringes by hand, or bent as a general practice. Cutting or breaking contaminated needles is prohibited.

5.9.2 If no alternative is feasible or such action is required by the procedure, the contaminated needle may be recapped or removed if a mechanical device or a one-handed technique is used. Justifications for these procedures must be in writing and approved by supervision and the Director of EHS.

5.9.3 Disposable syringes, needles, scalpel blades, contaminated broken glass, and other sharp items will be placed in puncture resistant containers for disposal immediately or as soon as possible after use. Containers will not be cleaned or reused. Sharps containers shall be:

- Easily accessible to employees and located as close as feasible to the immediate area where sharps are used.
- Constructed of a durable, puncture resistant, high impact plastic such as high-density polyethylene.
- Labeled with the biohazard label or color coded.
- Leak-proof on the sides and bottom.
- Maintained upright while in use.
- Replaced when three-quarters (3/4) full.

5.9.4 When moving containers of contaminated sharps the containers will be closed prior to removal and placed in a secondary container if leakage is possible. The secondary containers shall be closeable, leak-proof, and properly labeled or color coded.

5.9.5 Containers for reusable sharps will meet the same requirements as containers for disposable sharps, except that they are not required to be closeable. Contaminated reusable sharps will not be stored in a container in such a manner that requires an

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

employee to reach by hand into the container. Containers will include a wire basket liner or the employee will use tongs to withdraw the contents.

5.10 – Regulated Medical Waste (RMW)

Regulated Medical Waste (RMW) is a waste stream which is regulated by the Department of Environmental Quality (DEQ) and must be disposed of through EHS, even if it has been autoclaved or treated with another form of decontamination.

The particulars of the waste stream are:

- Discarded cultures, stocks, specimens, vaccines, and associated items that may contain organisms likely to be pathogenic to healthy humans.
- Waste consisting of human blood, human blood products, and items contaminated by human blood.
- All human anatomical wastes and all wastes that are human tissues, organs, body parts, or body fluids.
- It is University protocol to include all sharps in the regulated medical waste stream. That is, **all** hollow-bore needles, pipettes, and glassware from biological labs or medical settings.
- Animal carcasses, body parts, bedding, and related waste if the animal has been initially infected with pathogenic organisms and are likely to be contaminated.

The following waste streams are not subject to the requirements of RMW regulations when dispersed among other solid wastes and not accumulated separately:

- Used products for personal hygiene, such as diapers, facial tissues, and sanitary napkins.
- Material, not including sharps, containing small amounts of blood or body fluids, but containing no free flowing or unabsorbed liquid (Band-Aids).

6.0 Training

Employees who are occupationally exposed to blood or OPIM will participate in a general training program as well as a departmental specific training program. General training will be administered by a “knowledgeable” person from EHS, usually the EHS Specialist. The training program shall include the following material:

- Detailed information on HBV, HCV, and HIV (signs, symptoms, treatments, etc.)
- Explanation of Radford University’s ECP and how to obtain a copy

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

- Explanation of methods to recognize task and other activities that may involve exposure to blood or OPIM, including what constitutes an exposure incident
- Explanation of the use/limitations of engineering controls, work practices, and PPE
- Explanation of the basis, types, uses, location, removal, handling, decontamination, and disposal of PPE
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
- Explanation of the procedures to follow if an exposure incident occurs
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- Explanation of signs, labels, and color coding required by the Bloodborne Pathogens Standard and Radford University
- An opportunity for interactive questions and answers with the trainer

Training will be provided during normal working hours at the time of initial assignment and at least annually thereafter. Participants will have an opportunity to ask questions during the training session.

7.0 – Hepatitis B Vaccination

- 7.1 Vaccination for Hepatitis B will be offered at no cost to employees who have occupational exposure to blood or other potentially infectious fluids. Vaccines will be administered at the Student Health Center in Moffett Hall.
- 7.2 Vaccines will not be offered to individuals who perform first aid as a collateral duty to their routine work assignments until after they give aid involving blood or OPIM. Vaccines will be offered within 24 hours after exposure. All first aid incidents must be reported to supervision before the end of the work shift in which the incident occurred. The report will include the name of the first aid provider, description of the incident, date, time, and a determination of whether an exposure incident occurred.
- 7.3 Vaccinations will not be offered to employees who have previously received the complete vaccination series, employees who have immunity as demonstrated through antibody testing, or to employees in which the vaccine is medically contraindicated.
- 7.4 Vaccinations will be offered after employees have received training in bloodborne pathogens.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

- 7.5 Employees may decline the vaccination but can opt to receive the vaccination at a later date should they wish. Employees who decline will sign the OSHA Declination Form.
- 7.6 The University is not obligated to pay for vaccines that are due after an employee leaves the University.
- 7.7 The University will pay for post-vaccination testing for antibody to Hepatitis B for health care workers who are at risk for injuries with sharp instruments or needlesticks. Testing will be done 1-2 months after the vaccine series is completed. Periodic testing to determine antibody concentrations is not indicated.

8.0 Post-Exposure Evaluation

- 8.1 Exposure incidents (e.g. needlestick, cut, splash to eye, mouth, or nasal mucosa, splash to non-intact skin) must be reported to supervision immediately. An exposure incident for workers who may be exposed to blood as a collateral duty is defined as any exposure to blood. As soon as possible, supervisors will make an appointment with Dr. Scott Kincaid or Dr. Daniel Kelly with Carilion Family Medicine (540-731-3200) for a post-exposure evaluation. Supervisors will complete the Employer’s Accident Report (EAR) (Appendix A), the Exposure Incident Report Form (Appendix B), and if applicable, the Sharps Injury Report (Appendix C), and send the reports to Human Resources and EHS. A confidential evaluation will be performed by a physician as soon as possible following a report of an exposure incident. The duties of the employee, route of exposure, circumstances of the incident, and vaccination status shall be provided to the physician.
- 8.2 Laboratory tests will be conducted by an accredited laboratory at no cost to employees. Unless the exposure incident involved a known HIV, HBV, or HCV individual, Workers Compensation will not cover the costs of the medical evaluation. The costs of all tests and the physician’s charge shall be the responsibility of the department.
- 8.3 If feasible, consent will be obtained from the source patient and the blood tested to determine HIV, HBV, and HCV status. Results of the tests will be made available to the exposed employee, source individual, and physician in charge of the exposure incident. No one else has a right to know the results of the source individual or exposed employee testing. If consent is not given or if the source is unknown the physician will document this in writing. If a healthcare provider is involved in an exposure incident, the source individual’s consent is not needed for HIV testing if blood is available. A court order may be obtained to test the source patient if a police officer is involved.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
	Approved By: Avraham Boruchowitz, CSP, CHMM

- 8.4 After consent has been obtained from the exposed employee, a sample of blood will be drawn as soon as possible after the incident to determine HIV, HBV, and HCV status. If the employee does not consent at that time for HIV testing, the sample will be preserved for 90 days. Testing will be done as soon as feasible if the employee decides to have the testing done within the 90-day period.
- 8.5 Repeat HIV testing will be offered to the exposed employee six weeks after the incident and on a periodic basis as determined by the physician to ensure that the employee is not HIV positive. It is the responsibility of the department to pay for the testes even if the employee leaves the University before all tests are completed.
- 8.6 Follow-up of the exposed worker shall include counseling, medical evaluation, and the use of safe and effective post-exposure measures according to recommendations for standard medical practice.
- 8.7 An employee who has been exposed to blood from a known HIV patient should report within two (2) hours to Carilion Family Medicine or to the Emergency Room at the Carilion New River Valley Medical Center.
- 8.8 A copy of OSHA’s Bloodborne Pathogen Standard will be given to the healthcare professional responsible for evaluating an employee after an exposure incident.
- 8.9 A copy of the physician’s written opinion will be given to the employee within 15 days of the completion of the evaluation. The written opinion will document that the employee was informed of the results of the evaluation and told about any medical conditions resulting from the exposure which requires further evaluation or treatment. The report will also identify if the Hepatitis B vaccination was recommended and whether or not the employee received the vaccination. All other findings will remain confidential and not be included in the report. Specifically, HIV, HBV, and HCV status will not be included in the report. Employer access to this report is allowed.
- 8.10 Employee medical records will be kept confidential. Contents will not be disclosed to any person within or outside the workplace without the employee’s written consent, except as required by law.

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

9.0 – Recordkeeping

9.1 A medical record will be established and maintained for each employee with occupational exposure. Records will be maintained in the Student Health Center, RU Clinic, and the EHS Office. The following information will be included in the file:

- Name and social security number of the employee.
- Copy of the employee’s Hepatitis B vaccination status including the dates of all Hepatitis B vaccinations and declination forms.
- Copy of all examinations, medical testing, and follow-up procedures.
- Employer’s copy of the physician’s written opinion concerning an exposure incident.

9.2 The University will ensure that all medical records are kept confidential and not disclosed without the employee’s written consent except as required by law.

9.3 Medical records will be maintained for the duration of employment plus 30 years.

9.4 Training records will be maintained by the EHS Specialist for at least three (3) years. Training records will contain the names and job titles of individuals attending the class, date, contents of the training, and the names and qualifications of the persons conducting the training. Training records will be provided to employees upon request.

9.5 A sharps injury log will be maintained for the recording of injuries from contaminated sharps. Confidentiality of the injured employee will be maintained. The sharps injury log will contain at least the following information:

- The type and brand of device involved in the incident.
- The department or work area where the exposure incident occurred.
- An explanation of how the incident occurred.

10.0 - References

- 29 CFR 1910.1030, Bloodborne Pathogens

11.0 Appendices

- **A – Employer’s Accident Report**
- **B – Exposure Incident Report Form**
- **C – Sharps Injury Report**

Title: Bloodborne Pathogens Exposure Control Plan	Document No.: OCS-302
	Revision No.: 01 Date: February 14, 2017
Approved By: Avraham Boruchowitz, CSP, CHMM	

12.0 Document Revision History

Revision	Section(s) Changed	Change(s) Made:	Date
00	All	Initial Draft	Unknown
01	All	Format changes, additional information, and update.	01/18/17

13.0 Document Author(s): John Crocker, CSP and Nathan Tripp, EHS Specialist

Bloodborne Pathogen Exposure Control Plan - Appendix A

Employer's Accident Report
 (formerly: Employer's First Report of Accident)
 Virginia Workers' Compensation Commission
 1000 DMV Drive Richmond, VA 23220
See instructions on the reverse of this form

The boxes to the right are for the use of the insurer	Reason for filing	VWC file number
	Insurer code or PEO Ref. No. S0225	Insurer location 762
	Insurer claim number	

Employer		
1. Name of employer (trading as or doing business as, if applicable) RADFORD UNIVERSITY	2. Federal Tax Identification Number 546 00 1789	3. Employer's Case No. (if applicable)
4. Mailing address Radford University Dept of Human Resources 314B Tyler Place, P.O. Box 6889 Radford, Virginia 24142	5. Location (if different from mailing address) N/A	
6. Parent corporation /Policy Named Insured (if applicable) or PEO name Commonwealth of Virginia	7. Nature of business State Government	
8. Name and Address of Insurer or self-insurer for this claim Managed Care Innovations P.O. Box 1140, Richmond, VA 23208-1121	9. Policy number Self-Insured	10. Effective date July 1, 1992

Time and Place of Accident				
11. City or county where accident occurred	12. Date of injury	13. Hour of injury a.m. <input type="checkbox"/> p.m. <input type="checkbox"/>	14. Date of incapacity	15. Hour of incapacity
		13a. Time began work a.m. <input type="checkbox"/> p.m. <input type="checkbox"/>		
16. Was employee paid in full of day of injury? <input type="checkbox"/> Yes <input type="checkbox"/> No		17. Was employee paid in full for day incapacity began? <input type="checkbox"/> Yes <input type="checkbox"/> No		
18. Date injury or illness reported	19. Person to whom reported	20. Name of other witness	21. If fatal, give date of death	

Employee				
22. Name of employee (Last, First, Middle)		23. Phone Number		24. Sex <input type="checkbox"/> Male <input type="checkbox"/> Female
25. Address		26. Date of Birth		27. Marital Status <input type="checkbox"/> Single <input type="checkbox"/> Divorced <input type="checkbox"/> Married <input type="checkbox"/> Widowed
		28. Social Security Number		
29. Occupation at time of injury or illness		30. Is worker covered by PEO policy? <input type="checkbox"/> Yes <input type="checkbox"/> No		31. Number of dependent children
32. How long in current job?	33. How long with current employer?	34. Was employee paid on a piece work or hourly basis? <input type="checkbox"/> Piece work <input type="checkbox"/> Hourly		
35. Hours worked per day	36. Days worked per week	37. Value of perquisites per week Food/Meals Lodging Tips Other		
38. Wages per hour \$	39. Earnings per week (inc. overtime) \$	\$ N/A	\$ N/A	\$ N/A \$ N/A

Nature and Cause of Accident				
40. Machine, tool, or object causing injury or illness			41. Specify part of machine, etc.	
42. Describe fully how injury or illness occurred				
43. Describe nature of injury or illness, including arts of body affected			43a. Overnight inpatient hospitalization? <input type="checkbox"/> Yes <input type="checkbox"/> No 43b. Treated in Emergency Room? <input type="checkbox"/> Yes <input type="checkbox"/> No	
44. Physician (name and address)			45. Hospital (name and address)	
46. Probable length of disability	47. Has employee returned to work? <input type="checkbox"/> Yes <input type="checkbox"/> No		If Yes	48. At what wage?
50. EMPLOYER: prepared by (name, signature, title)			51. Date	52. Phone Number
53. INSURER: (name of processor)			54. Date	55. Phone number
56. THIRD PARTY ADMINISTRATOR (if applicable)			57. Address	
			58. Phone number	

This report is required by the Virginia Workers' Compensation Act

Employer's Accident Report
 VWC Form No. 3 (rev. 03/22/02)

NOTE: Detail guidelines for completing the EAR are found at Item #4, Forms and Instructions.

INSTRUCTIONS

Employer's Accident Report VWC Form No. 3

Employer

1. Fill out this form whenever one of your employees is injured or reports a possible work related injury or illness. Provide **all** the information requested, except the information in the top right corner. **Please type if possible. If you print the form please do so legibly in black ink. Do not complete the form in cursive.** Your signature is required at the bottom of the form.
2. Send the original beige form to your insurance carrier or claims servicing agency for processing. If you are self-insured, send it to your organization's designated office for handling workers' compensation claims.
3. If you are an employer subject to OSHA record-keeping requirements, you may retain a copy of this completed form as a supplementary record of occupational injury or illness. Use block #3 (Employer's Case No.) to cross-reference your master log of accidents and illnesses.
4. If you need additional copies of this form, please request them from your insurance carrier or claims servicing agency.

Insurance carriers, self-insured employers, and authorized representatives

1. For accidents meeting one of the seven criteria for establishing a Case File,* submit the original beige form and one copy to Managed Care Innovations (MCI), P.O. Box 1140, Richmond, Virginia 23208-1121. The code for the reason for filing should be written at the top right of the form.
2. When processing these forms prior to transmittal to MCI, please include the information requested at the top right of the form, verify that the carrier name and policy number given by the employer are accurate, and enter your name and phone number, and the date of processing at the bottom of the form.
3. Insurer code at the top right of the form refers to the five-digit code assigned by NCCI. If you are self-insured, it refers to a similar five-digit number assigned by the Virginia Workers' Compensation Commission.
4. Additional copies of this form are available without cost by writing to MCI. Please note that color coding of the forms greatly increases MCI's efficiency in processing claims, and that any alternate versions of the form you develop yourself require prior approval by MCI. Write to "Forms" at the listed MCI.

*The criteria are: (1) lost time exceeds seven days, (2) medical expenses exceed \$1,000, (3) compensability is denied, (4) issues are disputed, (5) accident resulted in death, (6) permanent disability or disfigurement may be involved, and (7) a specific request is made by MCI.

Name of Employee: _____ Employee ID: _____

Date of Incident: _____ Time of Incident: _____ am/pm

Job Site/Location: _____ Department: _____

Job Description (Description of General Duties): _____

Potentially Infectious Material Involved (e.g. blood, etc.): _____

Source of Potentially Infectious Material (e.g. needle-stick, cut, bite, etc.): _____

Circumstances Surround Exposure Incident (e.g. work being performed, etc.): _____

Route of Exposure (e.g. under the skin, unprotected skin, eyes, mouth, etc.): _____

How the Exposure occurred (e.g. equipment malfunction, human error, etc.): _____

Personal Protective Equipment work at time of Incident: _____

Actions Taken at time of Incident (e.g. soap/water clean-up, reporting to supervisor, etc.): _____

Recommendation for avoiding repetition: _____

Signature of exposed individual: _____ Date _____

Signature of exposed individual's supervisor: _____ Date _____

Sharps Injury Report

Please complete all applicable fields. Some fields are required to be completed. These are marked with an asterisk (*).

Employee Last Name*: _____

Employee First Name*: _____

Employee ID*: _____

Date of Incident*: _____

Occupation: _____

Department: _____

Building*: _____

Type and/or Brand of Device: _____

Please provide a brief description of how the injury occurred, including the task which was being performed as well as any protective equipment worn or utilized*:

Was an animal or human involved? Yes or No

Was immediate treatment sought? If so, where: _____

Recommendation for preventing recurrence:

Supervisor's Name*: _____