



COLORADO
STATE
UNIVERSITY

BLOODBORNE PATHOGEN
EXPOSURE CONTROL PLAN

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COLORADO STATE UNIVERSITY EXPOSURE CONTROL PLAN (V130712)

INTRODUCTION

Colorado State University is committed to providing a safe and healthy work environment for all staff, students and visitors. In pursuit of this goal, the following Exposure Control Plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 *CFR* 1910.1030, "Occupational Exposure to Bloodborne Pathogens." Occupational exposure is defined as reasonably anticipated skin, eye, mucous membrane, or parenteral contact with human blood or other potentially infectious materials (OPIM) that may result from the performance of an employee's duties.

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

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

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

PROGRAM ADMINISTRATION AND RESPONSIBILITIES

Colorado State University and all personnel have the responsibility to be informed of hazards and preventive practices associated with Bloodborne Pathogens. Specific responsibilities include:

Environmental Health Services

Environmental Health Services (EHS) is responsible for the management and administration of the ECP through the Occupational Health Program (OHP) and Biosafety Office (BSO). Activities delegated to EHS include:

- Overseeing implementation of the ECP
- Developing, in cooperation with administrators and departmental authorities, any additional policies and practices needed to support the implementation of the ECP
- Revising, updating, and improving the ECP regularly, and whenever necessary to include new or modified tasks and procedures
- Training will be coordinated by EHS. Exposure control trainers (ECT) will be designated by EHS and trained to provide information and training to all employees who have an anticipated risk of exposure to bloodborne pathogens
- Working with principal investigators or supervisors in the evaluation of employee exposure potential
- Maintaining appropriate training records

- Ensuring the development of suitable education/training programs for employees and ECT's
- Periodically review and update training programs

Departments

Each department that has personnel at risk of coming in contact with a BBP will adopt this ECP and establish a program of compliance. This departmental program will include processes for:

- Ensuring compliance with the contents of the ECP
- The identification of departmental personnel governed by the ECP
- Meeting training requirements
- Ensuring proper record maintenance

Supervisors

Supervisory personnel (managers, directors, supervisors, or principal investigators) are responsible for making appropriate workplace risk assessments and identifying job positions and personnel who may have exposure to human blood, bloodborne pathogens, or other potentially infectious materials during the performance of their assigned duties. The exposure determination will be made without regard for the use of personal protective equipment. Contact EHS for Bloodborne Pathogen Risk Assessment.

Supervisory personnel are additionally responsible for:

- Ensuring all staff under their direction meet the appropriate requirements prior to assignment to duties by which occupational exposures could occur:
 - Are properly trained before working with blood or other potentially infectious materials, per training section below and the suggested checklist template in Appendix I.
 - Have declared their vaccination preference, and have initiated vaccination (if vaccination is desired), per vaccination section below
- Maintaining records of all site-specific training and Declaration of Vaccination Preference with employee records, and submitting a copy to EHS.
- Ensuring that guidelines established in this manual are strictly followed by all persons under their jurisdiction.
- Maintenance of all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels and clean up materials as required.
- Ensuring that adequate supplies of the aforementioned equipment are available in appropriate sizes.

Individual Personnel

Individuals who are determined to have occupational exposure to human blood or other potentially infectious material must comply with the procedures and requirements presented in this manual and in personnel training. Individual personnel must accept shared responsibility for acting in a safe manner. Individuals:

- Should consult with their supervisors regarding the safe handling and proper disposal of human blood or other potentially infectious materials (OPIMs) used in their specific work areas
- Are responsible for following CSU safety guidelines, including Universal Precautions and standard microbiological practices (See CSU Biosafety Manual: <http://www.ehs.colostate.edu/WBiosafety/Home.aspx>)
- Must complete required training and annual re-training and request information and training when unsure
- Report job-related BBP exposure to OHP
- Wear all necessary PPE

DEFINITIONS

Occupational Exposure

Occupational exposure is defined as reasonably anticipated skin, eye, mucous membrane, or parenteral contact with human blood or potentially infectious material (OPIM) that may result from the performance of an employee's duties.

An exposure incident would involve contact with blood or other potentially infectious body fluid through:

- Percutaneous (needlestick, puncture or cut through the skin)
- Mucous membrane (contact with eyes, mouth, nasal passage)
- Non-intact skin (contact through cuts, abrasions in the skin)
- Inhalation (inhaling aerosols)

Bloodborne Pathogens

Bloodborne pathogens are microorganisms found in human blood that can infect and cause disease when persons are exposed to blood that contain the microorganisms. While there are many bloodborne pathogens, the 3 specifically covered in this ECP are:

- Human Immunodeficiency Virus (HIV) – causes Acquired Immunodeficiency Syndrome (AIDS)
- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV)

Other Potentially Infectious Material (OPIM)

Materials that can contain bloodborne pathogens. OPMs include:

- Human blood and blood products
- Semen or vaginal secretions
- Internal human body fluids, including cerebrospinal fluid, and fluids from joints, chest cavity, heart sac or abdomen
- Breast milk (only if ingested)
- Unfixed human tissues or organs (both living and dead)
- Human cell lines not documented to be free of bloodborne pathogens
- Blood, tissues, or cell lines from animals experimentally infected with bloodborne pathogens
- Cultures or any liquid containing bloodborne pathogens (this includes culture media)
- Equipment contaminated with human blood or OPIMs
- Any body fluid visibly contaminated with human blood
- Any body fluid that is difficult to differentiate from other fluids

The following are not considered to be OPIMs unless they are visibly contaminated with blood, or it is difficult or impossible to distinguish:

- Tears
- Sweat
- Saliva (except during dental procedures)
- Vomit
- Feces
- Urine
- Nose fluids
- Intact human skin (from living or dead source)

EMPLOYEE EXPOSURE DETERMINATION

CSU personnel who have duties that include exposure or reasonably anticipated risk of exposure to blood or other potentially infectious material are included in the Exposure Control Plan. Each job classification in this category includes:

- Emergency Responders, police officers, and personnel administering first aid
- Personnel whose regular job duties include clean-up of blood spills or other potentially infectious material (e.g. designated housekeeping, select custodial, campus recreation, and maintenance personnel, etc.)
- Personnel working with or conducting research on human blood, other potentially infectious materials, unfixed human tissues and organs, and/or cultures derived from human cells or tissues
- Personnel conducting research on HIV and/or Hepatitis viruses

Each department should determine which tasks pose a risk to employees and are encouraged to develop specific exposure control methods to work in conjunction with the CSU Exposure Control Plan. Contact EHS for assistance.

METHODS OF IMPLEMENTATION AND CONTROL

Exposure Control Plan

Employees covered by the bloodborne pathogen standard receive an explanation of this ECP during their initial training session. This plan is also reviewed in the annual refresher training. All employees can review this plan at any time during their work shift by going online

(http://www.ehs.colostate.edu/WBiosafety/PDF/Exposure_Control_Plan.pdf) or by contacting EHS at 970-491-3102. If requested, the employee will be provided with a copy of the ECP free of charge and within 15 days of the request.

EHS is responsible for coordinating reviews and updating the ECP annually, or more frequently if necessary, to reflect any new or modified tasks and procedures that affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

The bloodborne pathogen exposure control at Colorado State University employs 4 major strategies:

- Engineering controls
- Universal precautions and safe work practices
- Personal protective equipment
- Administrative controls - training

Engineering Controls

Engineering controls are used to prevent or minimize exposure to bloodborne pathogens. Engineering controls are devices that reduce exposure risk by removing or isolating the worker from the hazards. Specific engineering controls include:

- Eyewashes
- Biosafety cabinets
- Ventilation
- Sharps engineered for safer use
- Sharps containers

The University identifies the need for changes in engineering controls through review of OSHA recommendations, employee interviews and committee discussions. New products are evaluated regularly through literature and supplier information. Departments are responsible for ensuring that recommended engineering controls are implemented.

Universal Precautions and Safe Work Practices

Universal Precautions

All employees will utilize universal precautions, which are an approach to prevent the occupational exposure to human blood or OPIM. According to the concept of universal precautions, *all* human blood, tissue, and certain human body fluids are treated as if known to be infectious for HIV, HBV, HCV and other bloodborne pathogens.

Safe Work Practices

Safe work practices are designed to reduce the likelihood of occupational exposure, and include the following:

When working in an area where human blood or OPIM are present, personnel must adhere to the following safe work practices:

- No eating, drinking, or chewing tobacco or gum
- No applying cosmetics or handling contact lenses
- No storage of food in refrigerators, freezers, cabinets, or any other area that may be contaminated with human blood or OPIM
- Gloves (and other PPE, as needed) must be worn when there is a potential to come in contact with human blood or OPIM.
 - Gloves must be changed after becoming torn or contaminated
 - Hands must be washed after glove removal

Additionally, when working with human blood, OPIM, or when conducting research on HIV, HBV, HCV, and/or other human bloodborne pathogens, personnel MUST:

- Use a certified biosafety cabinet where feasible
- Conduct all procedures involving blood or OPIM in such a manner to minimize splashing, spraying, splattering and generating droplets.
- Use leak-proof and non-breakable containers to hold blood or OPIM
- Affix biohazard labels as appropriate to containers of blood or OPIM that have not been sterilized
- Keep waste containers near the work area
- Never overfill waste containers
- Examine equipment which may become contaminated with blood or OPIM prior to servicing or shipping, and decontaminate as necessary
- Use extreme caution when working with sharp objects such as needles, razor blades, scalpels, or broken glass and properly dispose of sharps in an appropriate sharps container.

Personal Protective Equipment

Required PPE should be provided to CSU employees at no cost to employees. Training in the use of the appropriate PPE for specific tasks or procedures is to be provided by the supervisors. Supervisors can contact Environmental Health Services for assistance.

Types of PPE available to employees are as follows:

- Safety glasses or face mask with eye shield
- Gloves (Latex or nitrile)
- Eye protection
- Masks
- Protective clothing- if there is a risk of splattering onto exposed skin or clothing. Examples include lab coat, gown, apron, or sleeve protectors.

PPE should also be located in the Bloodborne pathogen spill kits and may be obtained through supervisors or principle investigators.

All employees using PPE must:

- Wear appropriate gloves when it is reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces.
 - Replace gloves if torn, punctured, or contaminated, or if the ability to function as a barrier is compromised.
 - Never wash or decontaminate disposable gloves for reuse.
 - Utility gloves may be decontaminated for reuse if their integrity is not compromised; discard utility gloves if they show signs of cracking, peeling, tearing, puncturing or deterioration.
 - Wash hands immediately or as soon as feasible after removing gloves or other PPE.
- Always wear appropriate face and eye protection when splashes, sprays, splatters or droplets of blood or OPIM pose a hazard to the eyes, nose or mouth.
- Always wear full body protection (including lab coat/gown, gloves, eye protection) during procedures and activities likely to generate splashes, sprays, splatters or droplets of blood or OPIM.
- Remove PPE after it becomes contaminated and before leaving the work area.
- Remove, immediately or as soon as feasible, any garment contaminated with foreign blood or OPIM, in such a way as to avoid contact with the outer surface.

Sharps Policy

Sharps must be handled and disposed of in accordance with the CSU Sharps Policy

(<http://www.ehs.colostate.edu/WBiosafety/Home.aspx>).

- Extreme caution must be used when working with sharp objects such as needles, scalpels, razor blades, or broken glass and properly dispose of the sharps in appropriate sharps containers.
- Needles shall be disposed of in labeled sharps containers according to the CSU Sharps Policy. Sharps containers are inspected and maintained or replaced by designated individuals as needed or whenever necessary to prevent overfilling.
- Needles should not be re-sheathed. Some applications may require re-sheathing. In those cases, the use of re-sheathing needles or mechanical re-capping devices are strongly recommended. If these alternatives are not feasible, then the one-handed scoop method for re-sheathing should be employed:



Place the cap on the counter top and "scoop" it up with the needle, keeping your free hand out of the way.

Needles and other sharps should be handled as little as possible. Handling sharps for transport, cleanup or disposal must be done using a mechanical device or tool (forceps, pliers, broom and dust pan)

- Breaking or shearing needles is prohibited.
- Controls should be used to prevent needlestick injuries, and include specially engineered sharps injury protection (e.g. leur-lock syringes, permanent needle and syringe combination, self-sheathing needles, needle-less systems, etc.).
- University employees who encounter improperly disposed needles shall notify Environmental Health Services/ BSO of the location of the needle(s). The appropriate authorities (e.g., lab manager, principle investigator) must also be notified.
- Department/building proctors or custodial staff should be contacted to dispose of properly decontaminated sharps or glassware.

Labels

The following labeling methods are used at CSU:

- Biohazard label for all equipment used with or to store infectious material (sharps container, biohazardous trash):



- Biohazard bag for spill clean-up materials that have not been disinfected. The bag must be bright orange or red, and must have the biohazard symbol.

Supervisors and PIs are responsible for ensuring that the biohazard label and symbol is affixed on orange or red bags as required if regulated waste or contaminated equipment is brought into or taken out of the facility. Employees are to notify EHS if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc., without proper labels.

Housekeeping

Facilities Maintenance and other CSU custodial or maintenance staff must work together with each Department to ensure that the following conditions are met:

- Decontamination must be performed with disinfectants registered for destruction of HBV, HCV, and HIV.
- Equipment and surfaces must be clean and decontaminated after contact with blood or OPIM.
- Bins/pails (e.g. wash basins) need to be cleaned and decontaminated as soon as feasible after visible contamination.
- Spills of blood or OPIM should be cleaned up as soon as possible by personnel specifically trained for bloodborne pathogen spill response.
- Regulated waste needs to be placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color coded and closed prior to removal to prevent spillage or protrusion of contents during handling.
- Broken glassware must be picked up using mechanical means (e.g. tongs, dustpan and brush) and disposed of in an appropriate sharps container.
- Contaminated sharps are discarded as soon as possible into containers that are closable, puncture-resistant, leak proof on sides and bottoms, and appropriately labeled or color coded. Sharps disposal containers are available through supervisors and must be located where sharps are being used.
- When disposing of biohazardous waste:
 - Supervisors must instruct employees in the proper disposal and procedures when using biohazard bags.
 - Biohazard bags **MUST** be autoclaved before they can be disposed of in the regular trash.
 - Waste containers must be in an upright position and replaced routinely.
 - Containers with blood or OPIM must be closed after use, for disposal or for transfer to an autoclave.

Laundry

It is each department's responsibility to provide laundering services for the following contaminated articles:

- Bar and kitchen towels.
- Sports towels.
- Lab coats and scrubs provided by departments. If the use of personal scrubs and/or lab coats is permitted, then protocols or means of laundering must be provided by the department.
- Personal clothing known or believed to be contaminated with bloodborne pathogens. Such clothing should not leave campus without decontamination.
- Towels provided in showering facilities.

Laundering provided by departments needs to be performed by a designated laundry service on a regular basis.

Prior to laundering, the following laundering requirements must be met:

- Inspect laundry to verify that it is free of sharps.
- Handle contaminated laundry as little as possible, with minimal agitation.
- Place wet contaminated laundry in leak-proof, labeled or color coded containers before transport. Garbage bags or bags provided by the laundering service should be used for this purpose.
- Use the following PPE when handling and/or sorting contaminated laundry:
 - Gloves
 - Eye/face protection

Additional Considerations for Researchers Handling Human Blood, OPIM, Bloodborne Pathogens, or Human Derived Tissue Cultures:

PIs and departments must provide additional appropriate administrative controls, protective equipment, information and training as appropriate for all employees engaged in:

- Culture, concentration or research of HIV, HBV, or HCV and/or other bloodborne pathogens.
- Work with human or animal cell lines potentially infected with bloodborne pathogens. Note: Certain cell lines may be exempt from this requirement. PIs must consult with EHS/BSO to determine specific exemptions.
- Manipulation of human blood or OPIM.
- Manipulation of animal blood or tissue cultures experimentally infected with HIV, HBV, or HCV.

Additional requirements that MAY exceed those for research laboratories not involved in the above activities include:

- Security:
 - Closed, locked when not attended, laboratory doors and limited lab access.
 - Appropriately labeled laboratory access doors.
 - Work Practices and Administration
 - Site-specific training must document that personnel have:
 - Taken the online BSL1/BSL2 training (<https://wsnet.colostate.edu/cwis86/WTrainReg/OnlineClass/BSLUnit1-2/Train.aspx>).
 - Read the CSU Biosafety Manual (<http://www.ehs.colostate.edu/WBiosafety/Home.aspx>)
 - Been informed of the risks associated with their job.
 - All spills must be contained or cleaned up immediately by trained personnel.
 - All spills and accidents must be reported immediately to the supervisor and OHP/BSO.
 - All waste from the work area and animal rooms must be decontaminated appropriately.
 - Transportation of contaminated materials for decontamination must be performed in closed, leak-proof, labeled containers.
- Engineering Controls:
 - Certified biosafety cabinets
 - Centrifuge containment devices to prevent aerosols
 - Autoclave or other effective decontaminating method for decontamination of waste
 - HEPA filters for vacuum lines
 - Use of leak-proof and appropriately labeled containers for transporting contaminated materials
 - Handwashing sink
 - Eyewash station
- Sharps:
 - Safety needles/syringes will be used whenever possible

- Extreme caution is to be used whenever performing procedures with sharps
- Needles/syringes should not be recapped, bent, or removed from syringe after use
- Sharps will be placed in sharps container immediately after use and autoclaved prior to disposal or reusing
- Personal Protective Equipment
 - Lab coats/gowns or other appropriate clothing must be worn at all times in the laboratory and animal handling facility
 - Gloves must be worn when manipulating potentially infected materials or animals
 - Protective clothing must not be worn outside of the work area

HEPATITIS B VACCINATION

The Hepatitis B vaccination series is available at no cost to all employees identified in the exposure determination section of this plan. Vaccination is encouraged unless: 1) documentation exists that the employee has previously received the series; 2) antibody testing reveals that the employee is immune; or 3) medical evaluation shows the vaccination is contraindicated. Information will be provided to employees during training about hepatitis B vaccinations, addressing safety, benefits, efficacy, methods of administration and availability.

Each employee must indicate whether they wish to be vaccinated or not by signing a Declaration of Vaccination Preference form. Employees who decline vaccination may request and obtain the vaccination at a later date at no cost.

The Declaration of Vaccination Preference must be filed with EHS and requested vaccinations should begin at least 10 days prior to initiation of duties by which occupational exposure could occur.

The Declaration of Vaccination Preference can be obtained:

- From the Occupational Health Program Coordinator (OHPC) (970-420-8172; jeni.triantis@colostate.edu)
- Online at http://www.ehs.colostate.edu/WHOHP/PDF/Declaration_of_Vaccination_Preference_POSTED.pdf.

Vaccination for the ECP must be provided by the designated CSU Occupational Health Provider.

POST-EXPOSURE EVALUATION AND FOLLOW-UP

Every individual handling material with potential BBP has the responsibility to report any exposure to their supervisor and to CSU EHS. Medical information will be held confidential and will not be released without permission of the employee.

Immediate Actions to be Taken After an Exposure

- Stop all activity.
- Rinse membranes with water (or eyewash solution) for a minimum of 3-5 minutes as soon as possible following an exposure incident.
- Cleanse all exposed skin with soap and water as soon as possible following an exposure incident.
 - Avoid introducing abrasions in skin – do not scrub or use abrasives.
 - Rinse for a minimum of 3-5 minutes.

- Record the name and phone number of the source individual (if known), and the location and time of the incident.
- Notify your supervisor and EHS (491-0270). All exposures must be reported to the supervisor and OHP/ BSO, even if no treatment is required.
 - The supervisor will work with EHS for reporting and follow up.
- Seek medical evaluation immediately:
 - **During business hours (between 8 AM and 5 PM, Monday through Friday):**
 - Attention must be sought at a CSU Authorized Treating Physician. See <http://www.ehs.colostate.edu/WorkComp/Home.aspx> for a list of Authorized Treating Physicians.
 - **After business hours (between 5 PM and 8 AM, and on weekends):**
 - Urgent Care or Emergency Room Facilities should be utilized.
- Follow up must be performed with EHS at 970-420-8172.
- If you want your medical charges to be considered for Worker's Compensation, then you will need to file a report of injury, which must be filled out within 4 days at: <https://wsnet.colostate.edu/cwis86/WorkComp/compData/Add/AddClaimtest.aspx>.

Medical Evaluation and Follow up

The immediately available confidential medical evaluation and follow-up will be conducted by the treating physician and will include:

- Documentation of the routes of exposure, when, and how the exposure occurred.
- Obtaining consent and making arrangements to have the source individual tested as soon as possible to determine HIV, HCV and HBV infectivity, if possible; documenting that the source individual's test results were conveyed to the employee's health care provider.
 - Note: If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
- Assuring that the exposed employee is provided with the source individual's test results and providing information about applicable disclosure laws and regulations concerning the identity and infectious state of the source individual (e.g. laws protecting confidentiality).
- After obtaining consent, collecting exposed employee's blood as soon as feasible after an exposure incident, and testing blood for baseline HBV, HCV and HIV serological status.
 - Note: If the employee does not give consent for HIV, HBV, or HCV serological testing during collection of blood for baseline testing, the baseline blood sample will be preserved for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, testing will be performed as soon as feasible.

EHS ensures that the health care professional evaluating an employee after an exposure incident receives the following:

- A description of the employee's job duties relevant to the exposure incident.
- Circumstances of exposure.
- Route(s) of exposure.
- Upon employee consent, relevant employee records, including vaccination status.

Procedures for Evaluating the Circumstances Surrounding an Exposure Incident

EHS will review the circumstances of all exposure incidents to determine:

- Engineering controls in use at the time

- Work practices followed
- A description of the device being used (including type and brand), if applicable
- Protective equipment or clothing that was used at the time of exposure incident
- Location of incident
- Procedure being performed when the incident occurred
- Employee training

All percutaneous injuries from contaminated sharps will be recorded in an incident log by the BSO.

If revisions to this ECP are necessary, EHS will ensure that appropriate changes are made. (Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

EMPLOYEE TRAINING

Initial Training and Annual Retraining

All employees required to participate in the ECP must have initial training and annual retraining. Initial training must be completed before performing duties by which occupational exposure could occur.

Several training techniques may be used, as approved by EHS, including:

- Instructor led (by EHS or ECTs designated by EHS)
- Videotape programs
- Computer aided interactive training
- Training manuals/employee handouts
- Employee review sessions

Training must cover, at a minimum, the following elements:

- A copy and explanation of the OSHA bloodborne pathogen standard
- An explanation of the CSU ECP and how to obtain a copy
- Epidemiology, symptoms, and transmission of bloodborne pathogen diseases
- An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident
- An explanation of the use and limitations of engineering controls, work practices and PPE
- An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE
- An explanation of the basis for PPE selection
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine is free of charge
- Information on the appropriate actions to take, and persons to contact, in an emergency involving blood or OPIM
- Spill cleanup procedures
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up available
- Information on the post exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- An explanation of the signs and label and/or color coding required by the standard and uses at the University
- An opportunity for interactive questions and answers with the person conducting the training session

Training materials for the University are available at Environmental Health Services, 141 General Services Building.

Each participant must also be trained for spill clean-up, and site-specific training with their supervisor or a designated trainer for their area prior to assignment to tasks where occupational exposure may occur. Appendix I presents suggested content and template. Supervisors are responsible for retention of site-specific training records. It is strongly recommended that copies of these records be submitted to EHS.

Additionally, Principal Investigators or supervisors must provide lab specific training for researchers handling any cultures or other materials potentially containing human blood/bloodborne pathogens, OPIM or Human Derived Tissue Cultures. Training must include safety training specific for the duties, equipment, and protocols relative to each employee. Training must ensure that employees have sufficient proficiency in working with human pathogens or tissue cultures prior to being allowed to work with any materials potentially containing human bloodborne pathogens. The employee must not participate in work involving infectious agents until proficiency is demonstrated.

SUMMARY: REQUIREMENTS PRIOR TO ASSIGNMENT TO DUTIES WITH OCCUPATIONAL EXPOSURE

It is the supervisor's responsibility to ensure that:

- Prior to assignment to duties with occupational exposure:
 - Initial training is completed, to include spill clean-up
 - Site-specific training is completed
 - The Declaration of Vaccination Preference is filed with EHS
 - Vaccination, if requested, has been initiated
- Employees are re-trained annually
- Site-specific training is documented and maintained with the employee files. Copies should be submitted to EHS

RECORDKEEPING

Training Records

Records of training conducted by EHS are maintained by EHS for at least 3 years. Supervisors are responsible for maintaining records of training done on-site for at least 3 years.

The training records include:

- The dates of the training sessions
- The contents or a summary of the training sessions
- The names and qualifications of the persons conducting the training
- The names and job duties of all persons attending the training sessions

Employee training records will be provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to the employee's supervisor.

Medical Records

Medical records are maintained for each employee with occupational exposure in accordance with 29 *CFR* 1910.1020, "Access to Employee Exposure and Medical Records". All information is confidential. Information will not be disclosed without the employee's written consent, except as required or permitted by law.

Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent directly to the medical provider.

Sharps Injury Log

All percutaneous injuries from contaminated sharps are also recorded in an Incident Report Log. All Incidents must include at least:

- Date of the injury
- Type and brand of the device involved (syringe, suture needle)
- Department or work area where the incident occurred
- Explanation of how the incident occurred

This log is reviewed as part of the annual program evaluation and maintained for at least 5 years following the end of the calendar year covered. If a copy is requested by anyone, it must have any personal identifiers removed from the report.

APPENDIX I - BLOODBORNE PATHOGENS SITE-SPECIFIC TRAINING CHECKLIST

In order to complete the training requirements please review the site-specific training items listed below with the employee. Check each item as it is reviewed or write N/A if it is not applicable to your work area.

Administrative-These Items MUST be completed

- _____ Ensure that online components have been completed (Risk Assessment, Initial BBP training and quiz)
- _____ Declaration of Vaccination Preference must be signed and submitted

Spill Kits and Personal Protective Equipment (PPE) (gloves, eye protection, ventilation devices, etc.)

- _____ Location and availability of spill kits and review of kit contents
- _____ Location of PPE, and maintenance of reusable PPE, if applicable (cleaning, storage and inspection)

Engineering Controls

- _____ Location, operation, and use of eyewash facilities
- _____ Explanation of engineering controls that are specific to the work environment (examples: eyewash stations, sharps containers biological safety cabinets, mechanical pipettors, safer sharps devices, etc.).

Biohazardous Waste Handling

- _____ Discussion and clarification of which wastes generated in the work area are considered biohazardous and how those items are to be segregated, stored, transported, treated and disposed of
- _____ Review of hazardous waste pick-up procedures if applicable to the work area

Disinfection & Spill Response/Exposure Incident Response/Exposure Control Plan

- _____ Review of the CSU procedure for handling spills of potentially infectious materials
- _____ Reminder that non-disposable items that were touched with dirty gloves must be decontaminated before being put back into the spill cleanup kit
- _____ Who to contact for spill cleanup supplies, and for reporting

Other Site Specific Check Points (List as needed)

Additional Requirements for HIV, HBV, and HCV Research Laboratories:

- _____ BSL1/BSL2 online training: <https://wsnet.colostate.edu/cwis86/WTrainReg/OnlineClass/BSLUnit1-2/Train.aspx>
- _____ Read the CSU Biosafety Manual: <http://www.ehs.colostate.edu/WBiosafety/Home.aspx>
- _____ Informed of the job associated risks, and given an opportunity to ask questions
- _____ Review departmental security access procedures
- _____ Lab specific procedures associated with BBP and OPIM

Department:		
Date of Training:	Trainer (Printed Name):	Trainer Signature:
LIST TASKS OR PROCEDURES THAT MAY POSE RISK OF EXPOSURE TO HUMAN BLOODBORNE PATHOGENS:		
Employee Printed Name	Employee CSU ID Number	Employee Signature

Continue on back if needed

Please sign and date the completed checklist.

