Section 2

Exposure Control Plan for Occupational Exposure to Bloodborne Pathogens

For Compliance with California Code of Regulations,
Title 8 General Industry Safety Orders,
Section 5193 & 3204

California State University Long Beach Research Foundation

Revised: February, 2002

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Training Report Sheet

Exposure Control Plan		**Date**	

Training Conducted by	
Location (Bldg./Room)	
Group or Department	

Printed Name	**Signature**	**Printed Name**	**Signature**

OCCUPATIONAL EXPOSURE TO BLOOD BORN PATHOGENS

The CSULB Research Foundation Exposure Control Plan for Occupational Exposure to Bloodborne Pathogens is designed to protect employees from infectious disease resulting from exposure to blood or other potentially infectious materials (OPIM)

DEFINITIONS

- Blood - Human blood, human blood components, and products made from human blood
- Bloodborne Pathogens - Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).
- Other Potentially Infectious Materials –
    - The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, and other body fluid that is visibly contaminated with blood such as saliva or vomitus, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids such as emergency response;
    - Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
    - 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.
- 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.

EXPOSURE DETERMINATION

CSULB Research Foundation employees in the following job classifications may have occupational exposure to blood or other potential infectious materials.

- Biomedical Research Assistant
- Community Worker (all levels)
- Nurse, Public Health (PHN)
- Research Assistant
- Research Associate (all levels)
- Research Fellow (all levels)
- Research Laboratory Assistant
- Research Technician (all levels)

WORK PRACTICE CONTROL

Universal precautions will be observed at this campus in order to prevent contact with blood or other potentially infectious materials. All blood will be considered infectious regardless of the perceived status of the source individual.

- The following work practice controls shall be used to minimize employee exposure:

    Employees shall wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.

Employees shall wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed. Shearing or breaking of contaminated needles is prohibited. Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in appropriate containers until properly processed. These containers shall be:

- Puncture resistant;
- Leakproof on the sides and bottom;
- Appropriately labeled

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

Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

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

Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

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

If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

If the specimen could puncture the primary container, the primary container shall be placed within a secondary container which is puncture-resistant in addition to the above characteristics.

Equipment which may become contaminated with blood or potentially infectious materials shall be decontaminated as necessary, unless decontamination of such equipment or portions of such equipment is not feasible. If decontamination is not feasible:

- A readily observable label shall be attached to the equipment stating which portions remain contaminated.
- The appropriate administrator shall inform all affected employees, the servicing representative, and/or the manufacturer, in writing, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment shall be provided free of charge.

Employees shall be provided, at no cost, personal protective equipment necessary to prohibit blood or other potentially infectious materials from passing through or reaching the employees' work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

Employees shall use appropriate personal protective equipment unless the employee temporarily and briefly declines to use personal protective equipment, under rate and extraordinary circumstances, when the employee believes that in a specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of the employee or other employees.

Cleaning, laundering, disposal, repair, and replacement of personal protective equipment shall be the responsibility of the University.

All personal protective equipment shall be removed prior to leaving the work area. If a garment is penetrated by blood, or other potentially infectious materials, the garment shall be removed immediately, or as soon as feasible.

When personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

- Gloves

  Gloves shall be worn when it can be reasonable anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin.

  Disposable (single use) gloves shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured or when their ability to function as a barrier is compromised.

  Disposable (single use) gloves shall not be washed or decontaminated for re-use.

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

  Latex gloves used in a wet procedure shall be replaced after one hour of use.

- Masks, Eye Protection, and Face Shields

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

- Gowns, Aprons, and Other Protective Body Clothing

  Appropriate protective clothing shall be worn in occupational exposure situations.

- Laundry

  Contaminated laundry shall be handled as little as possible with a minimum of agitation. Contaminated laundry shall be bagged and shall not be sorted or rinsed by university personnel.

  Contaminated laundry shall be placed in red bags. If contaminated laundry is sent to a facility which does not utilize Universal Precautions in the handling of all laundry, the university shall ensure that the red bags are labeled with the universal biohazard symbol and the legend BIOHAZARD.

  Employees having contact with contaminated laundry shall wear protective gloves and other appropriate personal protective equipment

HOUSE KEEPING

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

- Contaminated work surfaces shall be decontaminated with a with a hypochlorite (10% v/v) or amphyl (10% v/v) solution immediately upon completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.
- Protective coverings, such as plastic wrap, aluminum foil, or imperviously backed absorbent paper used to cover equipment and environmental surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated or at the end of the work shift if they may have become contaminated during the shift.
- All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and contaminated with a 500-ppm hypochlorite solution for a minimum of contamination.
- Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.
- Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

MEDICAL WASTE - SHARPS

Sharps Waste" means any device having acute ridged corners, edges, or perturbances capable of cutting or piercing.

- Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

  Closable;

  Puncture resistant;

  Leakproof on sides and bottom; and

  Labeled with the words "sharps waste" or with the international biohazard symbol and the word "BIOHAZARD".

- REUSABLE CONTAINERS SHALL NOT BE USED

  During use, containers for contaminated sharps shall be:

  - Easily accessible to employees and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found;
  - Maintained upright throughout use; and
  - Replaced when filled to capacity.

  When moving containers of contaminated sharps from the area of use, the containers shall be:

  - Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;
  - Placed in containers located in the designated medical waste accumulation area.

MEDICAL WASTE - OTHER REGULATED WASTED CONTAINMENT

Sharps Waste" means any device having acute ridged corners, edges, or perturbances capable of cutting or piercing.

- Medical waste shall be placed in containers which are:

  Closable;

  Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

  Labeled;

  Closed prior to removal from the area of use to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;

  Placed in containers located in the designated medical waste accumulation area.

- If outside contamination of the medical waste container occurs, it shall be placed in a second container. The second container shall be:

  Closable;

  Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

  Labeled;

  Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

MEDICAL WASTE - HANDLING, STORAGE, TREATMENT AND DISPOSAL

- Medical waste generated by CSULB Research Foundation/Research Foundation Projects shall be treated by off-site disposal.

  Medical waste shall not be stored above 0^ centigrade (32^ Fahrenheit) for more than seven calendar days.

  Containers used for the containment and/or transport of medical waste must be leak resistant, have tight fitting covers, and kept clean and in good repair. The appropriate container shall be labeled with the words "Biohazard Waste", or with the international biohazard symbol and the word "BIOHAZARD" on the lid and sides so as to be visible from any lateral direction. Containers labeled with the words "Infectious Waste" or with the international biohazard symbol and the word "Biohazard" on the lid and sides may also be used until the replacement of containers is necessary or existing stock has been depleted.

- CSULB Research Foundation DOES NOT TREAT ANY MEDICAL WASTE ONSITE.

HEPATITIS B VACCINATION

- Hepatitis B Vaccination

  Hepatitis B vaccinations shall be offered free of charge to employees who have occupational exposure to bloodborne pathogens. Vaccinations shall be administered in amounts and at times prescribed by standard medical practice. Each identified employee shall receive information on the hepatitis B vaccine,

including information on its efficacy, safety, method of administration, and the benefits of being vaccinated and be offered the Hepatitis B vaccination within 10 working days of appointment or assignment.

An employee declining a Hepatitis B Vaccination should sign a Hepatitis B declination form.

An employee, who initially declines hepatitis B vaccination but at a later date decides to accept the vaccination, shall receive that hepatitis B vaccination at that time.

If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S.

Public Health Service at a future date, such booster dose(s) shall be made available to identified employees.

- Post-exposure Evaluation and Follow-up

  An employee who experiences an "exposure incident" must report it immediately to his/her Supervisor and/or the Research Foundation Human Resources Office. The completion of an "Employees Claim for Workers' Compensation Benefits" must be filed. The "claim" must document the route(s) of exposure, and the circumstances under which the exposure incident occurred. If known, the identification of the source individual shall be made.

  The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.

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

  Upon receipt of the source testing or if consent for blood testing has not been given, the employee should be given the opportunity to:

  - Receive the Hepatitis B vaccine
  - Receive the Hepatitis B Immune Globulin
  - Consent to a baseline blood collection and Hepatitis B Vaccine
    - Serological
    - Testing
  - Consent to a baseline blood collection and HIV serological testing
  - Consent to baseline blood collection, but not consent to blood testing at that time. In these cases, the blood sample will be preserved for 90 days. If within the 90 days of the exposure incident, the employee elects to have the baseline sample tested for HBV or HIV; such testing shall be done as soon a feasible.

COLLECTION AND TESTING OF BLOOD FOR HBV AND HIV SEROLOGICAL STATUS

Information Provided to the Healthcare Professional.

- A copy of Section 5193 of the General Industry Safety Orders (GISO) - Bloodborne Pathogens - shall be provided to the healthcare professional responsible for the employee's hepatitis B vaccination.
- The healthcare professional evaluating an employee after an exposure incident shall be provided with the following:

    - A description of the exposed employee's duties as they relate to the exposure incident;
    - Documentation of the route(s) of exposure and circumstances under which exposure occurred;
    - Results of the source individual's blood testing, if available; and
    - All medical records relevant to the appropriate treatment of the employee, including vaccination status.
    - Healthcare Professional's Written Opinion
- The Research Foundation Human Resources Office shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation.

The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.

- The healthcare professional's written opinion for HBV vaccination and post exposure follow-up shall be limited to the following information:
    - Whether vaccination is indicated for employee and if employee has received such vaccination.
    - A statement that the employee has been informed of the results of the evaluation; and
    - A statement that the employee has been told about any medical conditions resulting from exposure to blood or other potential infectious materials which require further evaluation or treatment.

LABELS AND SIGNS

Labels shall be affixed to containers of regulated waste.

- Labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious materials, and other containers used to store, transport or ship blood or other potentially infectious materials.
- The label shall include the universal biohazard symbol and the legend **BIOHAZARD**. In case of regulated waste, the word **BIOHAZARD WASTE** may be substituted for the **BIOHAZARD** legend. The label shall be fluorescent orange or orange-red.
- Blood products that have been released for transfusion or other clinical use are exempted from these labeling requirements.

INFORMATION AND TRAINING

Appropriate administrators shall ensure that training is provided.

Appropriate administrators (Research Foundation Human Resources Office and/or Research Foundation Project Director) shall ensure that training is provided to employees at the time of initial assignment to tasks where occupational exposure may occur, and ensure that training be repeated within twelve months of the previous training.

- Training will be interactive and cover the following elements:
    - An accessible copy of the standard and an explanation of its contents;
    - A discussion of the epidemiology and symptoms of bloodborne diseases;
    - An explanation of the modes of transmission of bloodborne pathogens;
    - An explanation of the CSULB Bloodborne Pathogen Exposure Control Plan, and a method for obtaining a copy;
    - The recognition of tasks that may involve exposure;
    - An explanation of the use and limitations of methods to reduce exposure, for example engineering controls, work practices and personal protective equipment (PPE);
    - Information on the types, use, location, removal, handling, decontamination, and disposal of PPEs;
    - An explanation of the basis of selection of PPEs;

- Information on the Hepatitis B vaccination, including efficacy, safety, method of administration, benefits, and that it will be offered free of charge;
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
- An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting and medical follow-up;
- Information on the evaluation and follow-up required after an employee exposure incident;
- An explanation of the signs, labels, and color-coding systems.

- Additional training shall be provided to employees when there are any changes of tasks or procedures affecting the employee's occupational exposure.

RECORD KEEPING

The Research Foundation Human Resources Office is responsible for maintaining medical records related to occupational exposure.

- Medical Records

  The Research Foundation Human Resources Office ensures that medical records are maintained in accordance with Title 8, California Code of Regulations, Section 3204. These records shall be kept confidential, and not disclosed without the employee's written consent and must be maintained for a least the duration of employment plus 30 years.

  The records shall include the following:

  - The name and social security number of the employee;
  - A copy of the employee's HBV vaccination status, including the dates of vaccination and ability to receive vaccination;
  - A copy of all results of examination, medical testing, and follow-up procedures;
  - A copy of the information provided to the healthcare professional, including a description of the employee's duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure;
  - A confidential copy of the healthcare professional opinion.

- Training Records

  Training records shall be maintained for three years from the date of training.

  The following information shall be documented;

  The dates of the training sessions;

  An outline describing the material presented;

  The names and qualifications of persons conducting the training;

  The names and job titles of all persons attending the training sessions.

- Availability

  The employee's records shall be made available to the employee or to his designated representative for examination and copying upon request in accordance with Title 8, California Code of Regulations, General Industry Safety Orders Section 3204.

All employee records shall be made available to the Chief of the Division of:

Occupational Safety and Health (DOSH) and the National Institute for Occupational Safety and Health (NIOSH).

EVALUATION AND REVIEW

The Director, Research Foundation Human Resources is responsible for annually reviewing this program, and its effectiveness, and for updating this program as needed.

- Date of Original Adoption: August, 1999
    - Date of Revision: February, 2002