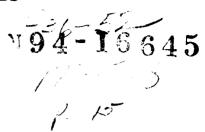
# OSHA BLOODBORNE PATHOGENS STANDARDS EXPOSURE CONTROL PLAN

Prepared by: Caro Elise Luhrs, M.D.
Rita Teitelbaum, R.N.
Hummer Associates
(April, 1992 - Revised June 1992)



The Hummer Associates Exposure Control Plan is designed to reduce significant occupational exposure to bloodborne pathogens and infectious materials for Hummer Associates health care personnel. Under universal precautions, all patients and all body fluids are considered potentially infectious for bloodborne pathogens. Medical personnel need not be at increased risk if universal precautions are correctly understood and followed. This program covers all employees who could reasonably anticipate contact with blood or other potentially infectious materials (OPIM\*) during the performance of their job responsibilities. Although HIV and Hepatitis B (HBV) are mentioned most often, this program applies to all bloodborne diseases. The two main components needed to implement this program are universal precautions and engineering/work practice controls.

This program covers all employees who may have occupational exposure to blood or OPIM, including part-time, temporary, and per diem employees. It also covers any employee trained in first aid who is responsible for rendering medical assistance as part of his/her job duties; i.e., fitness personnel and secretaries who cover the Fitness Centers.

The OSHA Bloodborne Pathogen Standards seek to minimize the health risk from occupational exposure to blood and other potentially infectious materials utilizing a variety of steps which include:

- o An exposure control plan.
- o Engineering/work practice controls.
- o Personal protective equipment (PPE).
- o Housekeeping guidelines.

- o Hepatitis B vaccination.
- o Post-exposure evaluation and follow-up.
- o Employee information and training.
- o Comprehensive recordkeeping.

<sup>\*</sup>Other Potentially Infectious Materials (OPIM): Human body fluids including semen; vaginal secretions; cerebrospinal, synovial, and pleural fluids; saliva; any body fluid that is visibly contaminated with blood.

The Hummer Associates Exposure Control Plan incorporates all requirements of the OSHA Standards in a comprehensive package to be implemented in each of the Centers. The exposure control plan identifies tasks and procedures where occupational exposure to blood and OPIM may occur. The plan identifies the individuals who are at risk and need to be educated in other elements of the program. Exhibit 1 is a compliance calendar.

Exhibit 1. Compliance Calendar: The Following OSHA Standards
Must be Implemented by the Noted Dates

Bloodborne Pathogens Standards	 	March 6, 1992
Exposure Control Plan	 	May 5, 1992
Employee Information Plan	 	June 4, 1992
Recordkeeping	 	June 4, 1992
Engineering/Work Practice Controls	 	July 6, 1992
Personal Protective Equipment	 	July 6, 1992
Housekeeping	 	July 6, 1992
Hepatitis B Vaccination	 	July 6, 1992
Post-Exposure Evaluation and Follow-Up .	 	July 6, 1992
Labels and Signs	 	July 6, 1992

### Job Classifications Covered Under Exposure Program

The following job classifications are those in which all employees will have contact with blood or OPIM:

- o Physicians
- o Nurses
- o Nurse Practitioners
- o Medical Technicians/Phlebotomists.

The following job classifications are those in which employees may on occasion have risk exposure:

- o Fitness Center personnel
- o Secretaries covering Fitness Centers
- o Laundry personnel.

## **Engineering/Work Practice Controls**

### **Handwashing Facilities**

Hummer Associates shall see that all Centers have appropriate handwashing facilities. Proper handwashing technique shall be encouraged by the following:

- o Soap must be available with at least tepid running water.
- o If soap and water are not feasible, use antiseptic hand cleanser or towlette. Wash hands as soon as possible thereafter.
- o Handwashing facilities must be readily accessible to employees.
- o Hands and any other skin must be washed as soon as feasible following contact with blood or OPIM.
- o Hands must be washed immediately after removal of gloves or other personal protective equipment (PPE).

### Sharps/Containers for Used Sharps

## Handling of Used Sharps

Hummer Associates, through each agency, will provide the necessary supplies for safe handling of contaminated sharps. The employer shall see that all employees are trained in proper disposal of contaminated sharps:

- o Shearing or breaking of contaminated needles is prohibited.
- o Bending, recapping, or removing contaminated needles by hand is prohibited unless:
  - Recapping is properly performed by scoop method.
  - Needle removal is done by one-handed technique or mechanical device.
- o Disposable scissors, needles, syringes, razors, knife blades, tweezers, applicators, and used test tubes shall be considered sharps and disposed of accordingly.

### Containers for Used Sharps

- o The containers for used sharps must be:
  - Puncture resistant.
  - Labeled or color coded in accordance with standards.
  - Leak proof on the sides and bottom

- Stored in a way that will not require employees to reach by hand into container where sharps are placed.
- Sealable.
- o The sharps container must remain upright during use.
- o Never overfill container.
- o Duct tape may be used to secure container lid, but may not serve as lid.
- o Self sheathing needle products must be disposed of in sharps container.
- o Some sharps containers may contain residual liquid. If the container cannot be sealed to prevent leakage, it must be placed in a secondary container.
- o Sharps containers must be located as close as possible to locations where sharps are used, and must be easily accessible.

#### Other Potentially Infectious Waste

Any disposable item contaminated with blood or OPIM must be considered as infectious. We have previously discussed the disposal procedure for sharps, or "hard materials." Soft infectious waste -- cotton balls, gauze, gloves, band-aids, hemoccult slides, and dextrostix also require special disposal procedures. They are as follows:

- o Shall be placed in a red, plastic hazardous waste bag.
- o When full (and it must not be overfilled), it is closed and secured with a twist tie, then placed in labeled hazardous waste container/box.

#### Containers for Laboratory Specimens

- o Specimens of blood and OPIM must be placed in a container which prevents leakage during collection, handling, processing, storage, and transport.
- o If contamination of outside or primary container occurs, or if specimen could puncture primary container, the primary container must be placed within a secondary container.

#### Second Containers

Second containers are required when outside contamination of first waste containers occurs. The second container must:

- o Be closable.
- o Adequately contain all contents, and prevent leakage during handling, storage, and transport.

Double bagging is only required when waste container is splashed with blood or OPIM, or is handled by an employee with contaminated gloves. Routine double bagging is not required.

#### Disposal of Hazardous Waste

Hummer Associates, through (each agency), has contracted with BFI Hazardous Waste Disposal Co., to remove infectious waste from the work site. BFI provides boxes and box liners for transport and disposal. Each Health Center must obtain the proper sharps containers and red hazardous waste bags. Each Center must arrange for proper labels and labeling of bags and containers. To prepare hazardous waste for transport and disposal:

- o Properly close and seal sharps containers.
- o Seal destruclip containers with duct tape.
- o Secure red bags with "soft" waste.
- o Place sealed sharps containers, sealed destructip containers, and secured bags in appropriately labeled boxes which have been provided by BFI.
- o This box will contain a red, thick plastic liner. The box will be sealed, as indicated on box.
- o The labeled boxes will be removed for disposal by BFI.
- o A designated employee will sign for the removal of box/boxes.
- o At a later date, the Health Center will receive a copy of a form with the disposal location. This will be retained in the Health Center.

#### Hygiene, Food and Beverage

Special care must be taken around areas where food is stored, eaten, or prepared. Employees must always be aware that:

- o Eating, drinking, smoking, applying makeup, and handling contact lenses are prohibited in work areas where there is a risk of occupational exposure.
- o Food and drink must not be stored in places where infectious materials are located.
- o Employees who are provided a designated lunch room or break area must wash up and change any contaminated clothing prior to entry.
- o Mouth pipetting/suctioning of blood and other OPIM is prohibited.

### Laundry

Handling of contaminated linens should be kept to a minimum. They should only be handled when bagging for removal and transport. Bagging should be red, so laundry is aware of biohazard. When handling linens, the employee must:

- o Consider all laundry as contaminated and use universal precautions -- wear gloves and any other necessary PPE when in contact with dirty linens.
- o If linens are soiled or wet and might leak, they must be placed in a red infectious waste leakproof bag.

## Labeling/Sign Requirements

Signs, labels or appropriate colored bags must be used to identify hazardous or potentially hazardous materials. These must be universal and easily recognizable to persons who may not be familiar with universal precautions. The following are OSHA recommended guidelines:

- o Labels and signs must be used to identify items that can pose a hazard.
- o Labels must be affixed as close as feasible to the container with string, wire, or adhesive to prevent loss or removal.
- o Employees will be trained in basic label/sign requirements:
  - Labels/signs will be fluorescent orange or orange-red or predominately so, with letters or symbols in contrasting colors.
  - Red bags or red containers are permissible substitutes.

The following sources of hazardous waste must be labeled as noted:

- o Waste material container -- biohazard label or red container.
- o Contaminated sharps -- Biohazard label or red container.
- o Refrigerator/freezer holding blood or OPIM -- biohazard label.
- o Containers used for storage, transport, or shipping of blood or OPIM -- biohazard label or red container.
- o Individual specimens of blood or OPIM remaining in facility -- no label if universal precautions in use.
- o Individual containers of blood or OPIM placed in labeled container during storage, transport, shipment, or disposal -- no additional label required.
- o Contaminated equipment needing servicing or shipping -- <u>biohazard label</u> placed on location of contamination.

The following are exempted from labeling requirements:

- o Individual containers of blood placed in labeled containers during storage, transport, or shipping.
- o Hazardous waste which has been decontaminated.

# Personal Protective Equipment (PPE)

Personal protective equipment (PPE) will be worn when engineering and work controls do not limit exposure to blood or OPIM. PPE includes, but is not limited to, gloves, gowns, lab coats, masks or eye protection. These items will be supplied free of charge by Hummer Associates. These items shall be:

- o Made of materials that do not permit blood or OPIM to pass through or reach employees' clothes, skin, eyes, mouth, or other mucous membranes.
- o In various sizes and at readily accessible locations.
- o Cleaned, laundered, disposed of and replaced by Hummer Associates.
- o Removed prior to leaving work area.
- o Used in accordance with the written policies of Hummer Associates.

#### **Items of Personal Protective Equipment**

### Gloves

Gloves are not necessary for routine contact (blood pressures, counseling). They must be worn when it can be reasonably anticipated that the employee will have hand contact with blood, OPIM, or touching or handling contaminated items on surfaces. These gloves shall be:

- o Latex, disposable (NOT TO BE REUSED), changed between patients.
- o Replaced as soon as practical when contaminated.
- o Disposed of as infectious waste.

Hypoallergenic, powderless gloves or glove liners will be provided to employees who are allergic to normal gloves.

# Eve Protection/Masks

These items shall be worn whenever splashes, spray, splatter, or droplets of blood or OPIM may be generated.

## Scrubs/Gowns/Lab Coats

These items shall be worn when contamination of clothing may be anticipated.

# **CPR Shield**

In the event that CPR must be given, a CPR shield shall be used when administering mouth-to-mouth resuscitation.

Personal protective equipment will be worn by all staff in direct contact with blood, body fluids, and OPIM, as listed in Exhibit 2:

Exhibit 2

Procedure	Gloves	Gown/Lab Coat	Mask/Goggles	None
Venipuncture	X			
Finger Sticks	X			
Oral Exams	X			
Vaginal/Rectal Exams	X			
Wound Care	X			
Handling Closed Specimens	X			
Vital Signs				X
EKG				X
CPR	X		*	
Sigmoidoscopy	X	X		
Cleaning of Contaminated				
Areas and Instruments	X**	X		
Cleaning of Blood/OPIM				
Spills	X**	X		
Cleaning of sigmoidoscope	X	X	X	
* Use CPR Shield	J **	Jse heavy-duty late:	x-type utility gloves	s.

Procedures will be performed to minimize splashing, splattering, and generation of droplets.

## Housekeeping

Decontamination of work surfaces and instruments is an ongoing process. Routine cleaning must be scheduled and procedures must be in place for accidental contamination.

#### Decontamination of Work/Exam Areas

#### Accidental Contamination

- o Work surfaces, walls, table tops, floors, trash cans, and beds shall be cleaned as soon as possible after contamination.
- o Surfaces shall be cleaned with a Chlorox solution of a dilution 1:10 (1 part Chlorox to 10 parts water).
- o The solution need only stay in contact with the surface for a few seconds -- wipe on and wipe off.
- o Broken glass should not be picked up by the hands or vacuum cleaner. Tools used to pick up glass must be decontaminated or disposed of properly. The glass must be disposed of in a sharps container.
- o The employee shall wear gloves and gown when decontaminating the work areas.

# Routine Cleaning of Work Areas

- o Blood drawing areas and exam tables shall be disinfected on a daily basis.
- o These areas shall be cleaned with a 1:10 dilution of Chlorox.
- o The employee shall wear gloves and gown when disinfecting work areas.

#### **Decontamination of Instruments**

As previously mentioned, contaminated disposable instruments shall be disposed of in a sharps container. Reusable instruments shall be cleaned in the following manner:

- o Employee cleaning the instruments shall wear gloves and gown.
- o Any visible contaminants shall be rinsed off under tap water.
- o Instruments shall be placed in a 1:10 dilution of Chlorox for 30 minutes, then rinsed with tap water.
- o Those instruments that are to be sterilized shall be wrapped, dated, labeled accordingly, and sterilized.

## **Decontamination of Laboratory Equipment**

When it is not feasible to decontaminate equipment prior to servicing or shipping, partial decontamination is required (e.g., flushing lines, wiping exterior). If equipment is heavily soiled, employee must prewash prior to servicing or shipping. Label must be affixed stating which portions of the equipment remain contaminated.

## **Hepatitis B Vaccination**

Hummer Associates will provide appropriate HBV to all employees (including parttime and per diem) with occupational exposure to blood and OPIM. These vaccinations will be made available to new employees within 10 working days of their initial assignment, during work hours, and at the work site. These vaccinations will be free of charge to the employee. The injections will be administered in compliance with current CDC guidelines. Currently, no booster is recommended. There is exemption if:

- o Employee has already received a complete vaccination series, with documentation.
- o Employee has been shown to be immune to HBV, with documentation.
- o Vaccine is contraindicated for medical reasons.

Exemption shall be noted in the employee's medical record. If an employee refuses to receive the HBV, the employee must sign a copy of OSHA's Hepatitis B Vaccination Declination. Exhibit 3 shows the wording of this Declination. This form may not be edited or altered in any way. If employee later decides to be vaccinated, employer will do so at no charge.

#### **Exhibit 3. Hepatitis B Vaccine Declination**

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Signature Date

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

Occupation exposure is exposure that occurs during the performance of an employee's job and places him/her at risk of developing HIV infection or Hepatitis B. Methods of exposure include:

- o Percutaneous inoculation or cut with a contaminated sharp object.
- o Contact of mucous membranes or non-intact skin (chapped, abraded, or inflamed) with blood and body fluids.

When such incident occurs, the <u>Post Exposure Protocol</u> must be initiated. The <u>Post Exposure Protocol</u> is as follows:

- o Thoroughly wash affected area at once.
- o Contact immediate supervisor who will then notify Medical Director.
- o Complete Employee Exposure Report (see Exhibit 4).
- o Obtain, with consent, blood samples from individual who was source of exposure incident.
- o If consent is not obtained, employer must document in writing that legally required consent cannot be obtained.
- o If documentation is infeasible (needle stick from unknown source), employer must state this in writing.
- o If source individual is known to be HIV and HBV positive, testing is not necessary.
  - Results of tests on source must be made available to employee, but disclosure to the employer is not required.
- o Medical Director and employee determine necessity for outside referral.
- o If Medical Director is not available within a reasonable amount of time, the Chief Nurse will determine the necessity for outside referral.
  - Outside referral is mandatory if:
    - Employee insists, for whatever reason.
    - There has been percutaneous or mucous membrane exposure to blood or any body fluid visually contaminated with blood.
  - Employer must provide the following information to outside physician:
    - Copy of Bloodborne Pathogen Standard.
    - Copy of Employee Exposure Report.
    - Job description of employee.
    - Source individual's HIV/HBV status, if known.
    - Employee's HBV vaccine status and other relevant information.
  - Outside physician medical evaluation will be sent to employer. This report must include:
    - Indication of vaccination and whether such vaccination was completed.

- Documentation that post-exposure evaluation was performed.
- Documentation that exposed employee was informed of results of evaluation and any medical condition resulting from exposure requiring further evaluation and treatment.
- Employer must provide employee with copy of this written report from outside specialist within 15 working days of receiving outside specialist evaluation.
- A release of information may be signed if the employee wishes the complete findings sent to the HCMD.
- o Referral and treatment by outside physician will be at no cost to employee.

# Exhibit 4. Employee Exposure Report

Employee's name	Position	Position		
Occurrence date	Reported date	ported date		
Occurrence time	Reported time			
Description of exposure				
Employee's HBV vaccination status	(give dates)			
CONTACT SOURCE:				
if known Name	Tele.#			
Private MD	Tele. #	·		
unknown				
CONTACT SOURCE LAB RESULTS:				
HBSAG				
HIV				
OTHER				
Unable to obtain and reason				
RESOLUTION				
Outside physician referral m	uado.			
		Dato		
Physician's name				
No need for outside referral				
Employee's Signature	Attending	RN / MD		

#### Exhibit 5. OSHA Requirements for Outside Physician Medical Evaluation

The new OSHA Bloodborne Pathogen Standards require that the following elements must be covered in your medical evaluation:

- o Employee's name and physician.
- o Occurrence date and time.
- o Evaluate date.
- o Indication of vaccination and whether such vaccination was completed.
- o Documentation that post-exposure evaluation was performed.
- o Documentation that exposed employee was informed of results and any medical condition resulting from exposure requiring further evaluation and treatment.

## PLEASE MAIL CONFIDENTIAL COPY TO REFERRING PHYSICIAN

## **Employee Information and Training**

An important component of the Hummer Associates Exposure Control Plan is the education and training of the staff. The more educated the employee and the better understanding of the recommendations, the better the compliance.

- o Initial training must be accomplished within 90 days of Standard's effective date (June 4, 1992)
- o New employees (to include per diem and part-time) must be trained within 15 days of starting job and prior to being placed in positions where occupational exposure may occur.
- o Training will be annually thereafter, or at any time when there are modifications of new tasks or procedures.
- o Training will take place during work hours at the work location.

The Medical Director/Chief Nurse shall designate an Exposure Control Plan educator. The educator shall have an expertise in bloodborne pathogens and be knowledgeable in the Standards and how they relate to your particular workplace. The educator will conduct a training program that will include:

- o Copies of Bloodborne Standards for all staff.
- o General discussion of transmission and symptoms of bloodborne diseases, to include HIV, HBV, and others.

- o Explanation of the Exposure Control Plan -- its use and purpose.
- o Explanation of how to recognize activities that may involve exposure to blood or OPIM.
- o Explanation of the use and limitations of appropriate engineering/work practice controls and personal protective equipment (PPE).
- o Explanation of proper type, use, location, removal, handling, and disposal of PPE.
- o Explanation of proper labeling/sign requirements for potential hazards.
- o Discussion of all aspects of the Post Exposure Protocol.
- o Discussion and explanation of Employee Exposure Report.

The educator will encourage an interactive question and answer period.

#### Recordkeeping: Medical Records and Training Records

#### **Medical Records**

Hummer Associates, at each Health Unit site, must initiate a Medical Record for any employee involved in an exposure incident. This record must include:

- o Name and Social Security Number.
- o Copy of Hepatitis B vaccination status (including dates of all vaccinations).
- o Copy of Employee Exposure Report.
- o Copy of results of medical testing, examinations, and follow-up.
- o Employer's copy of outside physician's medical evaluation.
- o Copy of information provided to outside physician for post-exposure evaluation.

Employer must ensure confidentiality of these records. Employee's express written consent is required for disclosure of medical records. Employer must maintain records at least for the duration of employment, plus 30 years.

#### **Training Records**

Hummer Associates is required to maintain accurate records of employee training (see Exhibit 6). These records shall include:

- o Dates of the training sessions.
- o Contents and summary of the training sessions.
- o Names and qualifications of trainers.
- o Names and titles of all attendees.

Training records must be retained for 3 years from the date of the training session. Records will be maintained on site. Medical/training records must be provided upon request for examination and copying to the subject employee and anyone with written consent of the employee or to OSHA. If the facility closes, Hummer Associates must inform the Director of NIOSH or designated representative at least 3 months before disposing of the medical/training records.

# Exhibit 6. Training Record

FOR EACH TR	AINING SESSION:				
1.	Date of training session				
2.	Content & summary of training session				
-					
-					
-					
3.	Name and qualifications of trainer				
4.	Names and titles of attendees at session				
Completed	lbyDate				

TRAINING RECORDS WILL BE RETAINED FOR 3 YEARS FROM DATE OF SESSION