CITY OF KIMBALL
MUNICIPAL POLICY NUMBER 02-2017
BLOODBORNE DISEASE EXPOSURE CONTROL PLAN POLICY

DATE COUNCIL APPROVED: May 2, 2017
Updated: October 17, 2017

I. Purpose and Applicability of the Bloodborne Disease Exposure Control Program

The purpose of this exposure control program is to minimize or eliminate potential employee exposure to human blood and certain other body fluids or tissues by defining special precautions. An additional purpose for this program is to define the administrative responsibilities for the program. It is suggested that the final OSHA Regulations (Appendix VIII) and Instruction CPL 2-2.44 C also be used as a reference. Other sources of regulatory assistance may include individual state OSHA and public health agencies.

While contact with the above materials is not a frequent on-the-job occurrence with City personnel, potential exposure may occur in first-aid situations where there are open wounds or where breathing resuscitation efforts are required. This program primarily addresses those parts of the regulation that would apply to this minimum exposure.

This model blood borne disease exposure control program has been modified in accordance with instructions provided by the Minnesota Municipal Utilities Association and applicable state and federal regulations and has been approved as the City's own blood borne disease exposure control program by the appropriate administrative or governing authority shown below.

Department(s) to which applicable	Approving Authority	Date Approved
Public Works Dept.	City Council	May 2, 2017
Fire Department	City Council	May 2, 2017

Where administrative responsibility for the program is divided among two or more City departments, separate programs will be adopted.

II. Definitions

Potentially infectious material is defined as human blood and blood products, contaminated sharps and syringes, human tissues and organs and certain body fluids. These body fluids include semen, vaginal secretions, saliva in dental procedures, cerebral-spinal fluid, fluids from joints, chest cavity, heart sac, abdomen or birth sac and any fluid that is visibly contaminated with blood or if the conditions are such that it is difficult or impossible to tell if blood or other body fluids are present.

Not included are tears, sweat, vomit, feces, urine, and nose fluids (unless visibly contaminated with blood or other body fluids). Contact with unbroken skin is not considered to be hazardous.

A blood borne pathogen is defined as any organism present in human blood that can cause disease in humans. These pathogens include, but are not limited to, HBV and HIV.

A potentially exposed employee is any employee who may reasonably be expected to be exposed to specific eye, mouth or other mucous membrane or non-intact skin contact with the potentially infectious materials mentioned above while performing assigned duties.

III. Exposure Determination and Participation List

The first step in implementing the program will be to prepare an Exposure Determination and Participation List (see Appendix I). Rules require that each job position with potential exposure to blood borne pathogens will be placed into either a category in which all employees have potential exposure or into a category in which only some employees have potential exposure.

Exposure determination will be made without regard to the use of personal protective equipment (PPE).

The exposure control program will be reviewed and updated to reflect significant changes in jobs or procedures.

IV. Universal Precautions

Universal precautions are methods of exposure control in which potentially infectious materials are always treated as if they were known to be infected with blood borne pathogens. The following policies will be followed to protect all employees:

A. Employee Responsibilities

1. Gloves will be worn whenever there is the potential for the hands to come in skin contact with blood, infectious materials, mucous membranes, non-intact skin, or surfaces and materials soiled with blood or other potentially infectious materials.

2. Disposable gloves will be replaced as soon as possible when they are visibly soiled, torn, punctured, or may no longer provide a barrier to contamination.

3. Employees will wash their hands immediately after removing protective gloves or other PPE and after hand contact with blood or other potentially infectious materials. If working away from a facility with a water supply, disinfecting towelettes may be used and hands will be washed with soap and water as soon as possible.

4. All PPE will be removed immediately after completion of the task being performed and placed in a designated appropriate area or container for storage, washing, decontamination or disposal.

5. Masks, eye protection or chin-length face shields will be worn if there is a potential for splashes, spray, or spatters of blood or other potentially infectious materials into the air where it may contact the eyes, nose, or mouth.

6. Depending upon the task and degree of exposure expected, protective clothing will be worn that provides effective protection.

   Gowns, coats, aprons or similar items will be worn if there is a potential of contaminating work clothing and a protective cap will be worn if there is the potential for the splashing or spraying of potentially infectious material on the head.

   Fluid resistant clothing will be worn if there is a potential for the splashing or spraying of blood or other potentially infectious materials.

   Fluid proof clothing and shoe covers will be worn if there is a potential for clothing or shoes to become soaked with blood or other potentially infectious materials.

7. If hypodermic needles or other sharps are used, they will not be sheared, bent, broken, or recapped by hand.

8. It is prohibited to eat, drink, smoke, apply cosmetics or lip balm, handle contact lenses, or store food and beverages in areas of possible contamination or occupational exposure.

9. All procedures involving blood or other potentially infectious materials will be performed in such a way to minimize splashing, spraying, or the production of aerosols.

10. Direct mouth to mouth contact is prohibited and resuscitation procedures will be performed with mouthpieces, resuscitation bags, pocket masks, or other ventilation devices.

11. Potentially infectious broken glassware and other sharp items will not be picked up directly by hand but will be manipulated using mechanical devices such as a brush, dust pan, tongs, and forceps or cotton swabs.

12. Any container used to hold potentially infectious materials will be closable, leak proof, and display the universal biohazard symbol shown. If the outside of the container is likely to be contaminated also, a second leak proof container will be placed over the first, labeled as above, and closed to prevent leakage during

handling, storage, and transport. If puncture of the first container is likely, both containers will be puncture resistant.

BIOHAZARD

If the above container holds infectious waste for disposal, the disposal method will comply with federal, state and local regulations.

13. If sharps are used, they will be placed immediately in closable, puncture resistant and disposable containers which are leak proof on the bottom and sides and display the universal biohazard symbol.

    These containers will be easily accessible to personnel in the immediate area of use and will be replaced routinely and not allowed to become overfilled.

14. If reusable items are contaminated, they will be decontaminated before washing and/or reuse or processing.

15. All laundry used in a potentially infectious situation, will be treated as if it were contaminated and will be handled as little as possible with a minimum of agitation.

    The laundry will be bagged at the location where it was used, the bag will display the universal biohazard symbol and the laundry will be sorted only in a well-ventilated area by trained employees wearing protective gloves and other appropriate PPE to prevent exposure during handling and sorting.

B. Employer Responsibilities

1. Any engineering or work practice controls which would help isolate or remove the hazards will be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

2. The City will provide appropriate PPE and ensure that affected employees use the appropriate protective equipment and follow the above universal precautions.

   The supplied equipment may include items such as disposable or reusable gloves, fluid-proof aprons, coats, head and foot coverings, face shields, masks, eye protection, mouthpieces, resuscitation bags, pocket masks, or any other device

which would protect the worker from work exposure.

3. PPE will be provided in the appropriate sizes for affected employees and will be readily accessible at the worksite or issued to the employee. If an employee is allergic to the gloves normally provided, hypoallergenic gloves will be provided for that employee.

4. Provisions will be made for the cleaning, laundering or disposal of PPE and all such equipment will be repaired or replaced as needed to maintain its effectiveness.

5. Wherever contamination may occur, the worksite will be maintained in a clean and sanitary condition. An appropriate written schedule for cleaning and the method of disinfection (a solution of 1:10 of household bleach and water is acceptable as is any disinfectant that is tuberculocidal) will be provided and will be based on the work location, the type of contamination, the type of surface to be cleaned and the type of procedures used.

   All equipment and work surfaces will be cleaned and disinfected immediately after contact with blood or other potentially infectious materials. If protective coverings are used, they will be removed and replaced at the end of the work shift or whenever they become obviously contaminated.

   Equipment (including containers and receptacles) intended for reuse which may become contaminated will be checked routinely and before servicing or shipping and will be decontaminated as needed.

6. Communication of Hazards to Employees

   Warning labels will be fixed (to prevent their loss or accidental removal) to containers or equipment (such as refrigerators) containing contaminated material.

   These labels will be orange-red with lettering of a contrasting color and will display the universal biohazard symbol.

   Signs will be posted at the entrance to any work area where potentially infectious material is located. The sign will include:

   The word "Biohazard" and the universal biohazard symbol with the sign being orange red with letters of a contrasting color.

   The name of the infectious agent.

   Any special instructions for entering the area, and the name and telephone number of the supervisor of the area.

V. Training

The City will ensure that all affected employees participate in a training program which will include the following:

A. The training program will contain at least the following for each affected employee:

1. The location of a copy of this policy and the OSHA standard 1910.1030 that is available to all employees at all work hours and an explanation of their contents (See Appendix VIII).

2. A general explanation of the epidemiology and symptoms of blood borne diseases.

3. An explanation of the modes of transmission of blood borne pathogens.

4. An explanation of the City's exposure control program.

5. The appropriate methods for recognizing tasks and activities that may involve exposure to blood and other potentially infectious materials.

6. The use and limitations of the universal precautions that will prevent or reduce exposure (engineering controls, work practices, and PPE).

7. Information on types, proper use, location, removal, handling, decontamination and/or disposal of PPE.

8. An explanation of the basis for PPE selection.

9. Information on the hepatitis B vaccine, including its efficacy, safety, and the benefits of being vaccinated.

10. Appropriate actions to take and persons to contact in an emergency.

11. Procedures to follow if an exposure incident occurs, including:
    - The method of reporting the incident and the medical follow-up that will be available.
    - Information on provided medical counseling for exposed individuals.

12. An explanation of hazard labels or color coding for contaminated waste materials.

B. Once all current employees have been trained, new employees will be trained at the time of initial employment. The training will be appropriate in content and vocabulary to the

educational level, literacy and language background of the employees being trained and will be given annually thereafter. See CFR 1910.1030(g)(2).

VI. Medical Requirements

The City will make HBV vaccination available to all employees with potential occupational exposure and post-exposure medical follow-up for any employee with an occupational exposure incident.

A. All evaluations and the above items will be performed by or under the supervision of a licensed physician and all laboratory tests will be conducted by an accredited laboratory.

B. All pertinent medical items will be provided at no cost to the employee and at a reasonable time and place according to standard recommendations for medical practice.

C. The vaccination will be offered unless the employee has had a previous HBV vaccination or unless antibody testing has revealed that the employee is immune.

D. The employee must sign a consent or decline form. If the employee declines the vaccination initially but elects to take it at a later date (while still covered under this policy), the vaccination will be provided at that time and if booster doses are recommended at a later date, they will be provided upon the advice of a physician.

E. Antibody testing will be provided for those employees who desire testing before deciding whether to receive vaccination. If the employee is found to be immune, an offer of vaccine to that employee is not required.

F. The post exposure evaluation will include at least:

1. Documentation of the exposure route, HBV and HIV antibody status of the source individual (if known) and the circumstances of the exposure.

2. If the source individual is known and permission can be obtained, the source individual's blood will be tested to determine the presence of HIV and/or HBV infection.

   The source person's test results will be made available to the exposed employee and the employee will be informed of applicable laws and regulations concerning disclosure of the identity and infectious nature of the source individual. When the source individual is known to be infected with HIV or HBV, testing of the source person's blood need not be repeated.

3. Blood collection from the exposed employee will be done as soon as possible after the exposure incident. Actual testing of the sample may be done at that time or at a later date if the employee so requests.

4. Follow-up procedures will include antibody or antigen testing, counseling, illness reporting, and safe and effective post-exposure treatment to meet standard medical practices.

G. The City will provide the following to the evaluating physician:

1. A copy of this policy and the OSHA standard and its appendices.

2. A description of the affected employee's occupational duties as they relate to occupational exposure.

H. For each affected employee, the City will obtain from the physician a copy of the physician's written opinion and provide a copy to the employee within 15 working days of the completion of the evaluation. Each written opinion will be limited to the following information:

1. The physician's recommendations upon the ability of the employee to receive HBV vaccination.

2. A statement that the employee has been informed of the results of the medical evaluation and that the employee has been told about any medical conditions resulting from exposure which might require further evaluation or treatment.

3. Those specific findings which are related to the employee's ability to receive HBV vaccination. Any other findings will remain confidential.

VII. Recordkeeping

A. Medical Records

1. An accurate record will be kept for each affected employee regarding his/her hepatitis B status and will include the following:
   - Name and social security number.
   - A copy of the employee's hepatitis B vaccination records relative to the ability to receive vaccination and the circumstances of any exposure incidents.
   - A copy of all results regarding the physician's examination, testing, and post exposure follow-up results.
   - A copy of the physician's written opinions.
   - A copy of the information that is required to be provided to the physician.

2. These records will be kept confidential and the information will not be reported to anyone except:

- Examination and copying by the employee.
- At the written consent of the employee.
- To enforcement authorities authorized by OSHA.

3. These records will be maintained during the duration of employment plus 30 years.

B. Training Records (See Appendix II)

1. Records of training will include the following:
   - A copy of the current training list of at-risk personnel with the current training status of each employee.
   - The dates of the training sessions and the name of the instructor.
   - A written summary of the contents of the sessions (see section 5B, page 10 for a general training outline).
   - The names of all persons attending the sessions.
   - These records will be maintained for three years.

2. The records will be made available only:
   - To the employee for examination and copying.
   - To anyone who has the written consent of the employee.
   - When requested by enforcement authorities authorized by OSHA.

[NOTE: If the City ceases to do business and there is no successor employer to receive the records and maintain them for the required time, the City will notify the Division of Labor at least 3 months prior to their disposal and send copies within that 3-month period if required to do so.]

VIII. Approval of Policy

This policy shall be formally approved and adopted by the City Council.

APPENDIX I

BLOODBORNE DISEASE EXPOSURE CONTROL PROGRAM EXPOSURE DETERMINATION AND PARTICIPATION LIST

JOB TITLES FOR WHICH ALL EMPLOYEES IN THAT POSITION HAVE POTENTIAL EXPOSURE	DUTIES INVOLVING POTENTIAL EXPOSURE	NAMES OF EMPLOYEES PERFORMING THOSE DUTIES
Public Works Dept.	Wastewater Operations	Matt Serbus Brian Mehr
Fire Department	Emergency Response	All Volunteers

JOB TITLES FOR WHICH ONLY SOME EMPLOYEES IN THAT POSITION HAVE POTENTIAL EXPOSURE	DUTIES INVOLVING POTENTIAL EXPOSURE	NAMES OF EMPLOYEES PERFORMING THOSE DUTIES

APPENDIX II

Bloodborne Disease Exposure Control Program Record of Employee Training

This form is recommended to document employee and supervisor training under the OSHA Bloodborne Pathogens Protection Standard. A videotape or tape recording of a presentation is also acceptable, but not required.

The session noted below was held to meet the requirements specified in the Bloodborne Disease Exposure Control Program for the above-named City.

Be sure to attach a summary of the information presented at this training.
(A workshop brochure, agenda, course outline, or video tape jacket notes may be used as a summary.)
(See Section 5B, page 10 for training requirement outline.)

A. Session Title or Topic: _____

B. Date/Time of Session: _____

C. Presented By: _____

D. Location: _____

E. See Roster for Employees Present:

APPENDIX III

HEPATITIS B IMMUNIZATION
CONSENT OR DECLINE

I have read the information about Hepatitis B and the Hepatitis B vaccine. I have had an opportunity to ask questions of a qualified nurse or physician and understand the benefits and risks of Hepatitis B vaccination. I understand that I must have 3 doses of the vaccine to obtain immunity. However, as with all medical treatment, there is no guarantee that I will become immune or that I will not experience side effects from the vaccine.

CONSENT TO HEPATITIS B VACCINATION

DECLINE OF HEPATITIS B VACCINATION

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.

If you have already received the vaccination please indicate by signing below and including the year in which you received the vaccination.

_____ _____

Signature Date/Year

APPENDIX IV

INFORMATION ABOUT HEPATITIS B AND HEPATITIS B VACCINE[1]

The Disease

Hepatitis B is a viral infection caused by the Hepatitis B virus (HBV) which causes death in 1-2% of infected patients. Most people with Hepatitis B recover completely, but approximately 5-10% become chronic carriers of the virus. Most of these people have no symptoms, but can continue to transmit the disease to others. Some may develop chronic active hepatitis and cirrhosis of the liver. HBV may be a causative factor in the development of liver cancer. Immunization against the Hepatitis B virus can prevent acute hepatitis and its complications.

The Vaccine

Hepatitis B (Recombivax HB) vaccine is produced from yeast cells. It has been extensively tested for safety and effectiveness in large scale clinical trials. Recombivax has been marketed since 1986.

Approximately 90 percent of healthy people who receive two doses of vaccine and a booster achieve high levels of surface antibody (anti-HB_s) and protection against Hepatitis B virus. Hepatitis B vaccine is recommended for workers with potential for contact with blood or body fluids. Full immunization requires 3 doses of vaccine over a six-month period, although some persons may not develop immunity even after 3 doses.

There is no evidence that the vaccine has ever caused Hepatitis B. However, persons who have been infected with HBV prior to receiving the vaccine may go on to develop clinical hepatitis in spite of immunization.

Dosage and Administration

The Recombivax HB vaccine is given in three intramuscular doses in the deltoid muscle. Two initial doses are given one month apart and the third dose is given six months after the first.

Possible Vaccine Side Effects

The incidence of side effects is very low. No serious side effects have been reported with the vaccine. Ten to 20 percent of persons experience tenderness and redness at the site of injection and low grade fever. Rarely rash, nausea, joint pain, and mild fatigue have been reported. The possibility exists that other side effects may be identified with more extensive use.

[1]Memorandum Regarding a New Policy on Hepatitis B, issued jointly by the Iowa Department of Public Health and the Department of Personnel, 1989

APPENDIX V

INFORMATION ABOUT AIDS

"AIDS" is shorthand for the acquired (rather than inherited) immune deficiency (a breakdown of the body's defense system, producing susceptibility to certain diseases) syndrome (a group of many disorders and symptoms). People with the full-blown form of AIDS suffer from unusual, life-threatening infections and/or rare forms of cancer."[1]

"The virus that causes AIDS and AIDS-related conditions is now called Human Immunodeficiency Virus. HIV is a retrovirus that must live and reproduce inside human cells. It is extremely fragile and does not survive long outside the body. It is present in certain body fluids (notably in blood, semen, and vaginal secretions) of people who have been infected, whether or not they have symptoms".[1]

"The virus that causes AIDS also produces milder but often serious illnesses called AIDS Related Complex (ARC). These may include persistent enlargement of lymph nodes, chronic fatigue, fever, weight loss, night sweats, and abnormal blood counts. Many people with ARC improve but others progress to having AIDS itself or remain the same."[1]

The virus is spread through sexual contact and exposure to human blood, blood components and certain other body fluids. Evidence has shown that only blood, semen, vaginal secretions and possibly breast milk are implicated in transmission from person to person.[2]

The rapid increase of HIV cases increases the risk that workers with duties involving potential contact with the above materials may be exposed to the virus if they do not follow the "Universal Precautions". These blood and body fluid precautions are designed to protect the worker and require that all potential contact be treated as if potentially infectious material contained the HIV virus.

Routine social or community contact with an HIV-infected person carries no risk of transmission. Neither Hepatitis B Virus nor HIV is transmitted by casual contact in the work place. The "Universal Precautions" used to protect the worker from HBV and HIV are the same except for the fact that there is currently a vaccine to prevent HBV infection but there is no vaccine for HIV.

[1] Aids, What Everyone Should Know, Pamphlet, American College Health Association, 1987

[2] Recommendations for Prevention of HIV Transmission in Health Care Settings, OSHA Instruction CPL 2-2.44B, 1990

APPENDIX VI

Additional Information on Employee Protection

APPENDIX VII

PROCEDURES TO COMPLETE FOR COMPLIANCE

1. Review this document.

2. Adopt the document as your Bloodborne Disease Exposure Control Plan.

3. Determine which employees are potentially exposed to hazardous materials and document their job title, the duties they would be performing when potential exposure might take place, and their names on an exposure determination list (See Appendix I).

4. Arrange for appropriate PPE, warning tags and labels, and containers (see pages 6-9).

5. Provide a training program (see page 10) for each employee on the participant list.

6. Provide each affected employee with medical consultation and the choice of accepting or refusing immunization for Hepatitis B (see pages 11 and 12, and Appendices III, IV, and V).

7. Keep records on file of all training and medical activities (see pages 13 and 14).

APPENDIX VIII

A copy of Title 29 CFR 1910.1030, Bloodborne Disease Exposure Control, follows.

OSHA STANDARD 1910.1030

1910.1030 Bloodborne pathogens

(a) Scope and application. This section applies to all occupational exposure to blood or other potentially infectious materials as defined by paragraph (b) of this section.

(b) Definitions. For purposes of this section, the following shall apply:

"Assistant Secretary" means the Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.

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

"Bloodborne Pathogens" means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

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

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

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

"Contaminated Sharps" means 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" means the use of physical or chemical means to remove, inactivate, or destroy blood borne 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.

"Director" means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designated representative.

"Engineering Controls" means controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the blood borne pathogens hazard from the workplace.

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

"Hand washing Facilities" means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

"Licensed Healthcare Professional" is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

"HBV" means hepatitis B virus.

"HIV" means human immunodeficiency virus.

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

"Other Potentially Infectious Materials" means

(1) 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;

(2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead) and

(3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs or other tissues from experimental animals infected with

HIV or HBV.

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

"Personal Protective Equipment" is 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.

"Production Facility" means a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

"Regulated Waste" means 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.

"Research Laboratory" means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

"Source Individual" means 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, developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

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

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

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

(c) Exposure control.

(1) Exposure Control Plan. (i) Each employer having an employee(s) with occupational exposure as defined by paragraph (b) of this section shall establish a written Exposure Control Plan designed to eliminate or minimize employee exposure.

(ii) The Exposure Control Plan shall contain at least the following elements:

(A) The exposure determination required by paragraph (c)(2),

(B) The schedule and method of implementation for paragraphs (d) Methods of Compliance, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, (g) Communication of Hazards to Employees, and (h) Recordkeeping, of this standard, and

(C) The procedure for the evaluation of circumstances surrounding exposure incidents as required by paragraph (f)(3)(i) of this standard.

(iii) Each employer shall ensure that a copy of the Exposure Control Plan is accessible to employees in accordance with 29 CFR 1910.20(e).

(iv) The Exposure Control Plan shall be reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

(v) The Exposure Control Plan shall be made available to the Assistant Secretary and the Director upon request for examination and copying.

(2) Exposure determination. (i) Each employer who has an employee(s) with occupational exposure as defined by

paragraph (b) of this section shall prepare an exposure determination. This exposure determination shall contain the following:

(A) A list of all job classifications in which all employees in those job classifications have occupational exposure;

(B) A list of job classifications in which some employees have occupational exposure, and

(C) A list of all tasks and procedures or groups of closely related task and procedures in which occupational exposure occurs and that are performed by employees in job classifications listed in accordance with the provisions of paragraph (c)(2)(i)(B) of this standard.

(ii) This exposure determination shall be made without regard to the use of personal protective equipment.

(d) Methods of Compliance

(1) General. Universal precautions shall be observed to prevent contact with blood and other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

(2) Engineering and work practice controls.

(i) Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used.

(ii) Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

(iii) Employers shall provide hand washing facilities which are readily accessible to employees.

(iv) When provision of hand washing facilities is not feasible, the employer shall provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/ paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible.

(v) Employers shall ensure that employees wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.

(vi) Employers shall ensure that employees 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.

(vii) Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed except as noted in paragraphs (d)(2)(vii)(A) and (d)(2)(vii)(B) below. Shearing or breaking of contaminated needles is prohibited.

(A) Contaminated needles and other contaminated sharps shall not be recapped or removed unless the employer can demonstrate that no alternative is feasible, or that such action is required by a specific medical procedure.

(B) Such recapping or needle removal must be accomplished through the use of a mechanical device or a one-handed technique.

(viii) Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in appropriate containers until properly reprocessed. These containers shall be:

(A) Puncture resistant;

(B) Labeled or color-coded in accordance with this standard;

(C) Leak-proof on the sides and bottom; and

(D) In accordance with the requirements set forth in paragraph (d)(4)(ii)(E) for reusable sharps.

(ix) 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.

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

(xi) 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.

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

(xiii) 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.

(A) The container for storage, transport or shipping shall be labeled or color-coded according to paragraph (g)(1)(i) and closed prior to being stored, transported, or shipped. When a facility utilizes Universal Precautions in the handling of all specimens, the labeling/color-coding of specimens is not necessary provided containers are recognizable as containing specimens. This exemption only applies while such specimens/containers remain within the facility. Labeling or color-coding in accordance with paragraph (g)(1)(i) is required when such specimens/containers leave the facility.

(B) If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during handling, processing, storage, transport, or shipping and is labeled or color-coded according to the requirements of this standard.

(C) 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.

(xiv) Equipment which may become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless the employer can demonstrate that decontamination of such equipment or portions of such equipment is not feasible.

(A) A readily observable label in accordance with paragraph (g)(1)(i)(H) shall be attached to the equipment stating which portions remain contaminated.

(B) The employer shall ensure that this information is conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

(3) Personal protective equipment.

(i) Provision. When there is occupational exposure, the employer shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Personal protective equipment will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through or to reach the employee's 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.

(ii) Use. The employer shall ensure that the employee uses appropriate personal protective equipment unless the employer shows that the employee temporarily and briefly declined to use personal protective equipment when, under rare and extraordinary circumstances, it was the employee’s professional judgment that in the 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 worker or co-worker. When the employee makes this judgment, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

(iii) Accessibility. The employer shall ensure that appropriate personal protective equipment in the appropriate sizes is readily accessible at the worksite or issued to employees. Hypoallergenic gloves, glove liners, powder-less gloves, or other similar

alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

(iv) Cleaning, Laundering and Disposal. The employer shall clean, launder, and dispose of personal protective equipment required by paragraphs (d) and (e) of this standard, at no cost to the employee.

(v) Repair and replacement. The employer shall repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the employee.

(vi) If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) shall be removed immediately or as soon as feasible.

(vii) All personal protective equipment shall be removed prior to leaving the work area.

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

(ix) Gloves. Gloves shall be worn when it can be reasonably anticipated that the employee may have had hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures except as specified in paragraph (d)(3)(ix)(D); and when handling or touching contaminated items or surfaces.

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

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

(C) 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, peeling, torn, punctured, or exhibits other signs of deterioration or when their ability to function as a barrier is compromised.

(D) If an employer in a volunteer blood donation center judges that routine gloving for all phlebotomies is not necessary then the employer shall:

(1) Periodically reevaluate this policy;

(2) Make gloves available to all employees who wish to use them for phlebotomy;

(3) Not discourage the use of gloves for phlebotomy; and

(4) Require that gloves be used for phlebotomy in the following circumstances:

(I) When the employee has cuts, scratches, or other breaks in his or her skin;

(II) When the employee judges that hand contamination with blood may occur, for example, when performing phlebotomy on an uncooperative source individual; and

(III) When the employee is receiving training in phlebotomy.

(x) 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.

(xi) Gowns, Aprons, and Other Protective Body Clothing. Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

(xii) Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated (e.g., autopsies, orthopedic surgery).

(4) Housekeeping. - (i) General. Employers shall ensure that the worksite is maintained in a clean and sanitary condition. The employer shall determine and implement an appropriate written schedule for cleaning and method of decontamination based upon the location within the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area.

(ii) All equipment and environmental and

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

(A) Contaminated work surfaces shall be decontaminated with an appropriate disinfectant after 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.

(B) 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 since during the shift.

(C) 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 decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

(D) 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.

(E) 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.

(iii) Regulated Waste.

(A) Contaminated Sharps Discarding and Containment.

(1) Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

(I) Closable;

(II) Puncture resistant;

(III) Leak-proof on sides and bottom; and

(IV) Labeled or color coded in accordance with paragraph (g)(1)(i) of this standard.

(2) During use, containers for contaminated sharps shall be:

(I) Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);

(II) Maintained upright throughout use; and

(III) Replaced routinely and not be allowed to overfill.

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

(I) Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;

(II) Placed in a secondary container if leakage is possible. The second container shall be:

(A) Closable;

(B) Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and

(C) Labeled or color coded according to paragraph (g)(1)(i) of this standard,

(4) Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

(B) Other Regulated Waste Containment.

(1) Regulated waste shall be placed in containers which are:

(I) Closable;

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

(III) Labeled or color coded in accordance with paragraph (g)(1)(i) of this standard; and

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

(2) If outside contamination of the regulated waste container occurs, it shall be placed in a second container. The second

container shall be:

(I) Closable;

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

(III) Labeled or color coded in accordance with paragraph (g)(1)(i) of this standard; and

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

(C) Disposal of all regulated waste shall be in accordance with applicable regulations of the United States, States and Territories,

and political subdivisions of States and Territories.

(iv) Laundry. (A) Contaminated laundry shall be handled as little as possible with a minimum of agitation.

(1) Contaminated laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use.

(2) Contaminated laundry shall be placed and transported in bags or containers labeled or color coded in accordance with paragraph (g)(1)(i) of this standard. When a facility utilizes Universal Precautions in the handling of all soiled laundry, alternative labeling or color-coding is sufficient if it permits all employees to recognize the containers as requiring compliance with Universal Precaution Precautions.

(3) Whenever contaminated laundry is wet and presents a reasonable likelihood of soak through of or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.

(B) The employer shall ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

(C) When a facility ships contaminated laundry off-site to a second facility which does not utilize Universal Precautions in the handling of all laundry, the facility generating the contaminated laundry must place such laundry in bags or containers which are labeled or color-coded in accordance with paragraph (g)(1)(i).

(e) <u>HIV and HBV Research Laboratories and Production Facilities</u>.

(1) This paragraph applies to research laboratories and production facilities engaged in the culture, production, concentration, experimentation and manipulation of HIV and HBV. It does not apply to clinical or diagnostic laboratories engaged solely in the analysis of blood, tissues, or organs. These requirements apply in addition to the other requirements of the standard.

(2) Research laboratories and production facilities shall meet the following criteria:

(i) Standard microbiological practices. All regulated waste shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy blood borne pathogens.

(ii) Special practices.

(A) Laboratory doors shall be kept closed when work involving HIV or HBV is in progress.

(B) Contaminated materials that are to be decontaminated at a site away from the work area shall be placed in a durable, leak-proof labeled or color-coded container that is closed before being removed from the work area.

(C) Access to the work area shall be limited to authorized persons. Written policies and procedures shall be established whereby only persons who have been advised of the potential biohazard, who meet any specific entry requirements, and who comply with all entry and exit procedures shall be allowed to enter the work areas and animal rooms.

(D) When potentially infectious materials or infected animals are present in the work area or containment module, a hazard warning sign incorporating the universal biohazard symbol shall be posted on all access doors. The hazard warning sign shall comply with the provisions outlined in paragraph (g)(1)(ii) of this standard.

(E) All activities involving other potentially infectious materials shall be conducted in biological safety cabinets or

other physical containment devices within the containment module. No work with these other potentially infectious materials shall be conducted on the open bench.

(F) Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing shall be used in the work area and animal rooms. Protective clothing shall not be worn outside of the work area and shall be decontaminated before being laundered.

(G) Special care shall be taken to avoid skin contact with other potentially infectious materials. Gloves shall be worn when handling infected animals and when making hand contact with potentially infectious materials is unavoidable.

(H) Before disposal all waste from work areas and from animal rooms shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy blood borne pathogens.

(I) Vacuum lines shall be protected with liquid disinfectant traps and high-efficiency particulate air (HEPA) filters or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.

(J) Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe needle units (i.e., the needle is integral to the syringe) shall be used for the injection or aspiration of other potentially infectious materials. Extreme caution shall be used when handling needles and syringes. A needle shall not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe shall be promptly placed in a puncture-resistant container and autoclaved or decontaminated before reuse or disposal.

(K) All spills shall be immediately contained and cleaned up by appropriate professional staff or others properly trained and equipped to work with potentially concentrated infectious materials.

(L) A spill or accident that results in an exposure incident shall be immediately reported to the laboratory director or other responsible person.

(M) A biosafety manual shall be prepared or adopted and periodically reviewed and updated at least annually or more often if necessary. Personnel shall be advised of potential hazards, shall be required to read instructions on practices and procedures, and shall be required to follow them.

(iii) Containment equipment.

(A) Certified biological safety cabinets (Class I, II, or III) or other appropriate combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and containment caging for animals, shall be used for all activities with other potentially infectious materials that pose a threat of exposure to droplets, splashes, spills, or aerosols.

(B) Biological safety cabinets shall be certified when installed, whenever they are moved and at least annually.

(3) HIV and HBV research laboratories shall meet the following criteria:

(i) Each laboratory shall contain a facility for hand washing and an eye wash facility which is readily available within the work area.

(ii) An autoclave for decontamination of regulated waste shall be available.

(4) HIV and HBV production facilities shall meet the following criteria:

(i) The work areas shall be separated from areas that are open to unrestricted traffic flow within the building. Passage through two sets of doors shall be the basic requirement for entry into the work area from access corridors or other contiguous areas. Physical separation of the high-containment work area from access corridors or other areas or activities may also be provided by a double doored clothes-change room (showers may be included), airlock, or other access facility that requires passing through two sets of doors before entering the work area.

(ii) The surfaces of doors, walls, floors and ceilings in the work area shall be water resistant so that they can be easily cleaned.

Penetrations in these surfaces shall be sealed or capable of being sealed to facilitate decontamination.

(iii) Each work area shall contain a sink for washing hands and a readily available eye wash facility. The sink shall be foot, elbow or automatically operated and shall be located near the exit door of the work area.

(iv) Access doors to the work area or containment module shall be self-closing.

(v) An autoclave for decontamination of regulated waste shall be available within or as near as possible to the work area.

(vi) A ducted exhaust air ventilation system shall be provided. This system shall create directional airflow that draws air into the work area through the entry area. The exhaust air shall not be recirculated to any other area of the building, shall be discharged to the outside, and shall be dispersed away from occupied areas and air intakes. The proper direction of the airflow shall be verified (i.e., into the work area).

(5) Training requirements. Additional training requirements for employees in HIV and HBV research laboratories and HIV and HBV production facilities are specified in paragraph (g)(2)(ix).

(f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow up

(1) General (i) The employer shall make available the hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident.

(ii) The employer shall ensure that all medical evaluations and procedures including the hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, including prophylaxis, are:

(A) Made available at no cost to the employee;

(B) Made available to the employee at a reasonable time and place;

(C) Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional; and

(D) Provided according to recommendations of the U.S. Public Health Service current at the time these evaluations and procedures take place, except as specified by this paragraph (f).

(iii) The employer shall ensure that all laboratory tests are conducted by an accredited laboratory at no cost to the employee.

(2) Hepatitis B Vaccination

(i) Hepatitis B vaccination shall be made available after the employee has received the training required in paragraph (g)(2)(vii)(I) and within 10 working days of initial assignment to all employees who have occupational exposure unless the employee has previously received the complete hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

(ii) The employer shall not make participation in a prescreening program a prerequisite for receiving hepatitis B vaccination.

(iii) If the employee initially declines hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the employer shall make available hepatitis B vaccination at that time.

(iv) The employer shall assure that employees who decline to accept hepatitis B vaccination offered by the employer sign the statement in appendix A.

(v) 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 in accordance with section (f)(1)(ii).

(3) Post exposure evaluation and follow up. Following a report of an exposure incident, the employer shall make immediately available to the exposed employee a confidential medical evaluation and follow up, including at least the following elements:

(i) Documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;

(ii) Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law;

(A) 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 consent is not obtained, the employer shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.

(B) When 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.

(C) 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.

(iii) Collection and testing of blood for HBV and HIV serological status;

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

(B) If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.

(iv) Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;

(v) Counseling; and

(vi) Evaluation of reported illnesses.

(4) Information Provided to the Healthcare Professional.

(i) The employer shall ensure that the healthcare professional responsible for the employee's Hepatitis B vaccination is provided a copy of this regulation.

(ii) The employer shall ensure that the healthcare professional evaluating an employee after an exposure incident is provided the following information:

(A) A copy of this regulation;

(B) A description of the exposed employee's duties as they relate to the exposure incident;

(C) Documentation of the route(s) of exposure and circumstances under which exposure occurred;

(D) Results of the source individual's blood testing, if available; and

(E) All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain.

(5) Healthcare Professional's Written Opinion. The employer 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.

(i) The healthcare professional's written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.

(ii) The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:

(A) That the employee has been informed of the results of the evaluation; and

(B) That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

(iii) All other findings or diagnoses shall remain confidential and shall not be included in the written report.

(6) Medical recordkeeping. Medical records required by this standard shall be maintained in accordance with paragraph

(h)(1) of this section.

(g) Communication of Hazards to Employees - (1) Labels and Signs

(i) Labels.

(A) Warning 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, except as provided in paragraph (g)(1)(i)(E), (F) and (G).

(B) Labels required by this section shall include the following legend:

BIOHAZARD

(C) These labels shall be fluorescent orange or orange-red or predominantly so, with lettering or symbols in a contrasting color.

(D) Labels required by affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.

(E) Red bags or red containers may be substituted for labels.

(F) Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirement of paragraph (g).

(G) Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.

(H) Labels required for contaminated equipment shall be in accordance with this paragraph and shall also state which portions of the equipment remain contaminated.

(I) Regulated waste that has been decontaminated need not be labeled or color-coded.

(ii) Signs. The employer shall post signs at the entrance to work areas specified in paragraph (e), HIV and HBV Research Laboratory and Production facilities, which shall bear the following legend:

BIOHAZARD

[Name of the Infectious Agent]

[Special requirements for entering the area]

[Name, telephone number of the laboratory director or other responsible person.]

(B) These signs shall be fluorescent orange-red or predominantly so, with lettering or symbols in a contrasting color.

(2) Information and Training.

(i) Employers shall ensure that all employees with occupational exposure participate in a training program which must be provided at no cost to the employee and during working hours.

(ii) Training shall be provided as follows:

(A) At the time of initial assignment to tasks where occupational exposure may take place;

(B) Within 90 days after the effective date of the standard; and

(C) At least annually thereafter.

(iii) For employees who have received training on bloodborne pathogens in the year preceding the effective date of the standard, only training with respect to the provisions of the standard which were not included need be provided.

(iv) Annual training for all employees shall be provided within one year of their previous training.

(v) Employers shall provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.

(vi) Material appropriate in content and vocabulary to educational level, literacy, and

language of employees shall be used.

(vii) The training program shall contain at a minimum the following elements:

(A) An accessible copy of the regulatory text of this standard and an explanation of its contents;

(B) A general explanation of the epidemiology and symptoms of bloodborne diseases;

(C) An explanation of the modes of transmission of bloodborne pathogens;

(D) An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan;

(E) An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials;

(F) An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;

(G) Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;

(H) An explanation of the basis for selection of personal protective equipment.

(I) Information of the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;

(J) Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;

(K) An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow up that will be made available;

(L) Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident;

(M) An explanation of the signs and labels and/or color coding required by paragraph (g)(1); and

(N) An opportunity for interactive questions and answers with the person conducting the training session.

(viii) The person conducting the training shall be knowledgeable in the subject matter as it relates to the workplace that the training will address.

(ix) Additional Initial Training for Employees in HIV and HBV Laboratories and Production Facilities. Employees in HIV or HBV research laboratories and HIV or HBV production facilities shall receive the following initial training in addition to the above training requirements.

(A) The employer shall assure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.

(B) The employer shall assure that employees have prior experience in the handling of human pathogens or tissue cultures before working with HIV or HBV.

(C) The employer shall provide a training program to employees who have no prior experience in handling human pathogens. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. The employer shall assure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

(h) Recordkeeping - (1) Medical records. (i) The employer shall establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR 1910.20.

(ii) This record shall include:

(A) The name and social security number of the employee;

(B) A copy of the employee's hepatitis B vaccination status and any medical records relative to the employee's ability to receive vaccination as required by paragraph (f)(2);

(C) A copy of all results of examinations, medical testing, and follow up

procedures as required by paragraph (f)(3);

(D) The employer's copy of the healthcare professional's written opinion as required by paragraph (f)(5); and

(E) A copy of the information provided to the healthcare professional as required by paragraphs (f)(4)(ii)(B)(C) and (D).

(iii) Confidentiality. The employer shall ensure that employee medical records required by paragraph (h)(1) are:

(A) Kept confidential; and

(B) Are not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by this section or as may be required by law.

(iv) The employer shall maintain the records required by paragraph (h) for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.20.

(2) Training Records. (i) Training records shall include the following information:

(A) The dates of the training sessions;

(B) The contents or a summary of the training sessions;

(C) The names and qualifications of persons conducting the training; and

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

(ii) Training records shall be maintained for 3 years from the date on which the training occurred.

(3) Availability. (i) The employer shall ensure that all records required to be maintained by this section shall be made available upon request to the Assistant Secretary and the Director for examination and copying.

(ii) Employee training records required by this paragraph shall be provided upon request for examination and copying to employees, to employee representatives, and to the Assistant Secretary in accordance with 29 CFR 1910.20.

(iii) Employee medical records required by this paragraph shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1919.20.

(4) Transfer of records. (i) The employer shall comply with the requirements involving transfer of records set forth in 29 CFR 1910.20(h).

(ii) If the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the Director, at least three months prior to their disposal and transmit them to the Director, if required by the Director to do so, within that three-month period.

(i) Dates

(1) Effective Date. The standard shall become effective on March 6, 1992.

(2) The Exposure Control Plan required by paragraph (c)(2) of this section shall be completed on or before May 5, 1992.

(3) Paragraph (g)(2) Information and Training and (h) Recordkeeping shall take effect on or before June 4, 1992.

(4) Paragraphs (d)(2) Engineering and Work Practice Controls, (d)(3) Personal Protective Equipment, (d)(4) Housekeeping, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post Exposure Evaluation and Follow up, and (g)(1) Labels and Signs, shall take effect July 6, 1992.

Appendix A to Section 1910.1030 Hepatitis B Vaccine Declination (Mandatory)

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.