

# **CLACKAMAS ESD**

## **WORK EXPOSURE CONTROL PLAN**

**2007**

ADOPTED H&S COMMITTEE 2007

**TITLE: BLOODBORNE PATHOGENS – Work Exposure Control Plan**

**GENERAL DESCRIPTION:** BLOODBORNE pathogens in human blood can be transmitted and cause disease in other humans. Since medical history and examination cannot reliably identify all patients harboring bloodborne pathogens, precautions in contact with blood and body fluid should be consistently used for all staff and student care. Universal Precautions, described by the Centers for Disease Control from the early 1980's, stated the need to consider **ALL** blood and bloody body substances as potentially infectious, regardless of the patient's diagnosis. It is the policy of Clackamas Education Service District to practice Universal Precautions.

In 1988, OR-OSHA (Oregon – Occupational Safety and Health Act) adopted regulations regarding protection from occupational exposure to Hepatitis B and Human Immunodeficiency Virus. In 1991, Federal OSHA regulations require statement on the management and control of occupational exposure to bloodborne pathogens. This Exposure Control Plan Document is to implement all requirements of the 1991 OSHA and the 1992 OR-OSHA Regulations for Occupational Exposure to Bloodborne Pathogens.

Definitions:

- A. Bloodborne Pathogens: Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to: Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).
- B. Contaminated: The presence or the reasonable anticipated presence of blood or other potentially infectious materials on an item or surface.
- C. Engineering Controls: Controls that isolate or remove the bloodborne pathogens hazard from the workplace, i.e. sharps disposal containers. (Sharps: any object that can penetrate the skins).
- D. Exposure Incident: A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.
- E. Occupational Exposure: Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from performance of an employee's duties.
- F. Other potentially Infectious Materials: The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva, any unfixated tissue or organ, 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.
- G. Parenteral: Piercing mucous membranes or skin barrier through such events as needle sticks, human bites, cuts, and abrasions.
- H. Universal Precautions: An approach to infection control, according to the concept that all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

- I. Work Practice Controls: Controls that reduce the likelihood of exposure by altering the manner in which a task is performed, i.e. prohibiting breaking of lancelets (used for finger prick, to draw blood for glucose measurement).
- J. Source Person: Person, adult or child, who is the origin of any blood or potentially infectious materials. This person need not actually be infected.
- K. Exposed Person: An ESD employee, who in the performance of their duties, comes in contact with blood or potentially infectious material as defined by: “Exposure Incident.”

**PRIMARY RESPONSIBILITY:** The Health and Safety Officer  
Appropriate Department Directors

- A. Identify and document all personnel portions that may have occupational exposures to bloodborne pathogens.
- B. Identify and document all tasks and procedures where occupational exposures to bloodborne pathogens may take place.
- C. Provide all necessary personal protective equipment to employees whose positions, tasks, or procedures may lead to an occupational bloodborne pathogens exposure.
- D. Provide necessary and required training to safely handle and dispose of potentially infectious waste materials, i.e. soiled laundry or clothing.
- E. Fulfill other responsibilities as delineated in the Exposure Control Plan.

Employees: (identified in ESD work exposure plan)

- A. Report to their immediate supervisor any needle sticks, direct blood, or body fluid exposures to eyes, mouth, nose, open wound, or abrasion.
- B. Properly wear all personal protection equipment prescribed in this plan, and as prescribed by department procedures.
- C. Category A employees will receive the Hepatitis B vaccination series or will sign a statement of declination.
- D. Category B employees will be offered the Hepatitis B vaccination series or will sign a statement of declination.
- E. Receive proper training on bloodborne pathogens and prevention of the transmission of these diseases in the workplace.
- F. Report to the supervisor any situation or procedure that has the potential for causing injury or exposure to bloodborne pathogens.
- G. Follow work exposure plan and department procedures.

**REFERENCE OR AUTHORITY:** Oregon Occupational Safety and Health Division of  
OR-OSHA, OAR 437-02-360(23).



## Methods of Compliance

### A. Universal Precautions:

1. According to the concept of Universal Precautions, all human blood and certain body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.
2. Body Substance Isolation incorporates the concept of Universal Precautions and is observed because differentiation between body fluid types is difficult or impossible. Therefore, employees are trained to treat all body fluids as potentially infectious materials.

### B. Engineering and Work Practice Controls:

1. Hand washing facilities are provided for all employees at convenient locations within their departments.
  - a. Hand washing is required immediately or as soon as feasible after hands are soiled or gloves are removed.
  - b. Should hand washing facilities not be available, antiseptic hand cleanser and clean towels or towelettes are available for staff.
2. Contaminated sharps will be placed in leak proof, puncture resistant, red sharps containers labeled with the universal biohazard label for disposal.
  - a. Contaminated needles and sharps are not to be bent, broken, or recapped unless deemed absolutely necessary due to the procedure being performed.
3. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in areas where there is a reasonable likelihood of occupational exposure.

### C. Personal Protective Equipment: The following personal protective equipment is available in classrooms, buses, and other areas where exposure could occur.

1. Disposable gloves, in appropriate sizes and accessible locations, are available for all workers at risk of exposure to blood or body fluids, for use at their discretion. In addition, hypoallergenic gloves, glove liners, powderless gloves or other alternatives will be made available for the employee who has sensitivities. Examples of when gloves are used include handling or touching contaminated surfaces or items.
  - a. Disposable gloves will be replaced as soon as practical when contaminated, torn, punctured, or damaged in any way.
  - b. Disposable gloves will **never** be reused.
  - c. Gloves are located in an area where an exposure could occur.

### D. Housekeeping and waste management: Clackamas ESD will maintain classrooms in a clean and sanitary condition.

1. Employees are responsible for ensuring that equipment or surfaces are cleaned and disinfected immediately after a spill or leakage occurs.
2. Spills of blood or potentially infectious materials will be decontaminated prior to clean up with a disinfectant effective against bloodborne pathogens.
3. Sharps containers are closable and puncture and leak proof. These containers are handled in a way to prevent contamination. The containers are red, and labeled with the universal biohazard label.
4. Soiled laundry shall be placed in leak proof plastic bags and sent home.

### Hepatitis B Vaccine Program

- A. Even with adherence to Universal Precautions, engineering controls, work practices, use of personal protective equipment, and compliance to housekeeping, cleaning and disinfection, exposure incidents can still occur.
- B. Clackamas ESD recognizes that Hepatitis B infection is vaccine preventable and shall make available the Hepatitis B vaccine, and vaccination series to all employees in Categories A and B, and shall make available post exposure evaluation and follow-up to all employees who have had an exposure.
  1. All employees who have occupational exposure means any employee with a reasonable likelihood of occupational exposure without regard to the frequency of such exposure.

**(See list of job classification – Categories A & B of employees eligible for Hepatitis B vaccination.)**
  2. Exposure incident means a specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.
- C. The Hepatitis B vaccine shall be made available at no cost to Category A and B employees; shall be made available to the employee at a reasonable time and place; shall be performed by or under the supervision of a licensed physician, or by or under the supervision of another licensed healthcare professional; and the healthcare professional responsible for the employee's Hepatitis B vaccination shall be provided a copy of the OSHA Occupational Exposure to Bloodborne Pathogens Standard.
  1. The Willamette Falls Occupational Health Center is responsible for setting up and operating the vaccination program.
  2. The vaccination program consists of a series of three inoculations over a six month period and shall be given after the employee has received training on the 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.
  3. Hepatitis B vaccination is to be made available within 10 workdays of initial assignment, by notification at time of hire, to all employees who have occupational exposure. Exceptions to

receiving the vaccine include 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.

4. Participation in a pre-screening program is not a prerequisite for receiving Hepatitis B vaccination.
5. Category A employees declining Hepatitis B vaccination will be required to sign a Statement of Declination. (See Appendix C)
6. If an employee initially declines Hepatitis B vaccination but at a later date decides to accept the vaccination, that employee need only contact the ESD Human Resources or Health and Safety officer to arrange for Hepatitis B vaccination.
7. If a routine booster dose of Hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, it will be made available at no cost to the employee.

#### Post-Exposure Evaluation and Follow-up

- A. Following an exposure incident, the exposed employee will notify their immediate supervisor of the incident. The employee will also follow all steps identified in procedure FS-008 for “Occupational Injury or Illness.”
  1. The employee will contact Willamette Falls Occupational Health Center or their personal physician for appropriate post exposure evaluation and follow-up.
  2. The immediate supervisor will gather the following information:
    - a. Type and method of exposure (splash, needlestick, etc.)
    - b. Source person
    - c. Date and time of incident
  3. The immediate supervisor will contact the source person or their guardian if a minor, and request their cooperation in being evaluated for any bloodborne pathogens. If the source person is willing to assist, their name, address and telephone number will be provided to Willamette Falls Occupational Health Center. If the source person will not cooperate, such information will be put in writing and provided to Willamette Falls Occupational Health Center. This information will include date and time of contact, with a notation that the source person was not willing at that time to be cooperative. **The name of the source person will not be listed.**
  4. Willamette Falls Occupational Health Center provides post exposure evaluation and follow-up using medically trained staff. The center will follow procedures identified in Appendix B for evaluating the exposed employee and notifying the ESD that such evaluation has occurred.
- B. Following a student to student exposure, the classroom staff should follow the procedure below:

1. Classroom staff (including both personnel trained and authorized to respond to incidents and those that are not) should immediately do the following if a child to child exposure is suspected:
  - Wash exposed skin surfaces with large amounts of soap and warm water. Exposed mucus membranes should be rinsed with large quantities of warm water.
2. The teacher contacts the Coordinator and conveys the type and method of exposure, the children involved in the exposure and the date and time of the incident.
3. The Coordinator is responsible to contact the parents of the children involved.
4. The Coordinator will request the cooperation from the parent of the child who was the source of potential exposure to voluntarily share known medical information pertinent to the situation or to have the child evaluation by the child's primary care physician for any bloodborne pathogens. The Coordinator will request parental consent to disclose their child's name, parental contact information, and doctor's name to the parent of the child who was exposed.
  - If the parent is willing to share medical information of have the child evaluated but does not have access to a medical provider the ESD will consider providing the evaluation through Willamette Falls Occupational Health Center. It should be emphasized to the parent that the ESD's provision of services through Willamette Falls is a good will gesture and in no way represents admission of liability.
5. The parent of the child who was exposed should be told the details of the incident (excluding the name of the child unless consent has been obtained) and encouraged to contact their primary care physician for appropriate post exposure evaluation and follow-up.
  - If the parent is willing to develop a post exposure plan but does not have access to medical provider, the ESD will consider providing such services through Willamette Falls Occupational Health Center. It should be emphasized to the parent that the ESD's provision of services through Willamette Falls is a good will gesture and in no way represents admission of liability.
6. Appropriate medical release for information exchange between primary care physicians for post exposure planning will be the responsibility of the parent and their medical provider(s).

#### Employee Training:

- A. Clackamas ESD will ensure that all employees with occupational exposure (including part time, and temporary employees) participate in a training program which will be provided at no cost to the employee, and include an opportunity for interactive questions and answers with the person conducting the training.
  1. Training shall be provided at the time of initial assignment to tasks where occupational exposure may take place.
  2. Training shall take place at least annually thereafter.

3. For employees who have received training or 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 to be provided.
4. Annual training for all employees shall be provided within one year of their previous training.
5. Departments will 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.
6. Training records will be maintained for three years. Training material content: Material used in training shall be appropriate in content and vocabulary to education level, literacy, and language of employees.

B. Training material content: Material used in training shall be appropriate in content and vocabulary to education level, literacy and language of employees.

1. An accessible copy of the OR-OSHA Bloodborne Pathogens Regulation 1910-1030 and an explanation of its contents shall be available to employees.
2. An explanation of the epidemiology and symptoms of bloodborne diseases.
3. An explanation of this exposure control plan, how to obtain a copy, and the location of the Exposure Control Plan.
4. An explanation of the modes of transmission of bloodborne pathogens.
5. An explanation of the appropriate methods for recognizing activities that may involve exposure to blood and other potentially infectious materials.
6. An explanation of the use and limitation of methods that will prevent or reduce exposure including:
  - a. Appropriate engineering controls
  - b. Work practices
  - c. Personal protective equipment
7. Information on personal protective equipment:
  - a. The types
  - b. Proper use
  - c. Location
  - d. Removal

- e. Handling
  - f. Decontamination
  - g. Disposal
8. An explanation of the basis for selection of personal protective equipment.
  9. Information on the Hepatitis B vaccine including its:
    - a. Efficacy
    - b. Safety
    - c. Method of administration
    - d. Benefits of vaccination
  10. Information on the appropriate actions to take, and persons to contact in an emergency involving blood or other potentially infectious materials.
  11. 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.
- C. The person conducting the training will be knowledgeable in the subject matter contained in the training program.

**APPENDIX A**

**BLOODBORNE PATHOGEN  
Staff Training**

**Category A  
(HBV vaccine will be made available)**

<b>Department</b>	<b>Position</b>	<b>Job Description</b>
Special Education	License Practical Nurse	Nursing

**Category B  
(HBV vaccine will be made available)**

<b>Department</b>	<b>Position</b>	<b>Tasks</b>
Administrative Services	Operations/Maintenance	<ol style="list-style-type: none"> <li>1. Provide assistance to students with bleeding or other body spillage.</li> <li>1. Provide assistance to employees, students, and visitors with bleeding or other injuries.</li> </ol>
Special Education	Classroom Teacher Behavioral Consultant Consulting Teacher Related Services Staff Early Childhood Specialist Educational Assistants COTA LPTA Adaptive PE Teacher School Psychologist Diagnostic Teacher Speech/Language Paraprofessional Subs	<ol style="list-style-type: none"> <li>1. Changing menstrual pads</li> <li>2. Emesis cleanup</li> <li>3. Tooth brushing</li> <li>4. Changing ostomy bag</li> <li>5. Biting incidents by students</li> <li>6. Diapering &amp; toileting</li> <li>7. Cleaning nose &amp; mouth secretions</li> <li>8. Feeding (oral or gastrostomy)</li> <li>9. Suctioning</li> <li>10. Catheterization</li> <li>11. Blood glucose monitoring</li> <li>12. Provide assistance to students with bleeding or injuries</li> </ol>

## **APPENDIX B**

### **POST-EXPOSURE MANAGEMENT Willamette Falls Occupational Health Center**

The body of knowledge regarding treatment for an exposed person is continuing to expand and be refined. As a result, protocols that we follow today may be different in six months based on ongoing research findings. From a medical point of view it is exciting because we have an increasing ability to provide effective treatment. Although this may make it difficult for you to estimate costs, exposed workers are covered under Workers Compensation and rate limits are set by law.

The key to effective post-exposure management lies in the assessment of the severity of the exposure and the medical history of both the source and the exposed person. The doctor will then make a determination about what testing to do for both parties.

The source person has the choice of going to his/her family doctor or refusing the test. I'd rather assume cooperation and that either the source person is evaluated here and tested if necessary or tested by the family physician and results are made available to Willamette Falls Occupational Health Center. When the source person is a minor, it is necessary to have a parent or legal guardian accompany the person. Part of doing HIV testing includes counseling about the test, the weaknesses of the test and the medical and non-medical implications if the result is positive. It is also necessary to have the legal guardian or parent sign a consent to draw blood for testing.

The protocol for the most serious exposure, LEVEL III, follow. It included prices for lab testing and doses of vaccine. Fees for office visits are estimated in this proposal because they are dependent on the situation and other treatments that may be done if the worker is injured or needs additional first aid, tests or care. Again, these all fall under your workers compensation coverage.

Included as part of this packet is the report from Willamette Falls Occupational Health Center sends after seeing an exposed person.

**WILLAMETTE FALLS IMMEDIATE CARE  
OCCUPATIONAL HEALTH PROTOCOL  
FOR TREATMENT OF SIGNIFICANT EXPOSURES**

**Purpose:** The purpose of this protocol is to establish evaluation and treatment guidelines for pre-hospital emergency care for an employee who has sustained a significant exposure to blood. Only Level III exposures (exposures of open skin or mucous membranes to blood or body fluids) will be covered.  
\*It assumes the source person is not available for testing  
\*If the source person is available and tests negative, the process stops after the first visit for the exposed person.

There are three primary purposes for the evaluation of Level III exposures:

- A. To prevent transmission of Hepatitis B and HIV to the exposed worker.
- B. To document the absence of any previously acquired Hepatitis (B or C) or HIV prior to the current exposure for the purposes of any future claims.
- C. To establish medical documentation and any physical evidence of exposure.

**Procedure:** The following guidelines are recommended for individuals with no intervening symptoms following exposure. Recommendations for workers who develop symptoms will be individualized depending upon the symptoms.

## **VISIT 1**

### **History:**

- A. Circumstance of the exposure
  - 1. Protection worn
  - 2. Type of exposure (splash, needlestick, etc.)
  - 3. Source of patient information
  - 4. First aid rendered (wash exposed portion, etc.)
  - 5. Time of exposure
- B. Past history of Hepatitis/HIV
- C. Prior history of Hepatitis B immunization
  - 1. Completed series?
  - 2. Date, time, name of agency providing immunization
  - 3. If known, the level of antibody (none – no antibody detected, insufficient – between 0 – 10 SRU, or adequate – over 10 SRU).

### **Physical Examination:**

HEENT	Oral thrush, pharyngeal exudates, cervical adenopathy
CHEST	Presence of rales, rhonchi or wheezes
CARDIAC	Rhythm, gallop
ABDOMEN	Hepatomegaly, splenomegaly, tenderness
EXTREM	Presence of puncture wound, laceration, open wounds, edema
SKIN	RASH

**Laboratory:**

- A. No previous Hepatitis B vaccination  
 Infections serology required:  
     Hepatitis B surface antigen\*  
     Hepatitis C antibody  
     HIV antibody  
*(If patient refuses, keep blood for 90 days, patient can, by law, elect to have HIV testing within 90 days.)*  
 \*Note: This scheme is designated to pick up a previously unknown carrier state (which is usually HbsAG positive). It will not detect a person who has previously been exposed to Hepatitis B and is Hbcore antibody positive.
- B. Previous Hepatitis B vaccination:  
 Infections serology required:  
     Hepatitis B surface antibody (quantitative)  
     Hepatitis C antibody  
     HIV antibody  
*(If patient refuses, keep blood for 90 days. Patient can by law elect to have HIV testing within 90 days.)*

**Treatment:**

Hepatitis B

- A. No previous Hepatitis B vaccination  
 Hepatitis B immune Globulin (HBIG – 0.06 ml/kg)  
 Hepatitis B vaccine (1<sup>st</sup> dose – 1 cc Recombivax)
- B. Partially vaccinated employee (one or more Hepatitis B immunizations)  
 Hepatitis B immune Globulin (HBIG)
- C. Completely vaccinated employee  
 If hepatitis B titer is known and is greater than 10 SRU, then no treatment required  
 If Hepatitis B titer is not known, HBIG is administered and a Hepatitis B surface antibody quantitative titer is obtained.

Hepatitis C

No specific prophylaxis is proven to be of benefit with the prevention of acquisition of Hepatitis C. However, a number of investigators are treating potential Hepatitis C exposures with ISG (gamma globulin – 0106 ml/kg).

HIV

If the source patient is known to be HIV seropositive and the exposure is a definite parenteral exposure, HIV prophylaxis should be offered to the worker. If the HIV antibody status of the source patient is unknown and the exposure is classified as a definite exposure, AZT may be started until the serology of the source patient is available. **Note: This applies only in the situation where the source patient can be tested for the presence of the HIV Antibody.**

### **VISIT 2 (6 WEEKS)**

The presence of a “viral illness” compatible with primary seroconversion from HIV exposure should be sought. Fever, pharyngitis, myalgia, malaise, rash, and adenopathy are common symptoms.

#### **Laboratory and Treatment:**

- A. No previous Hepatitis B vaccination  
HBIG – second dose  
Hepatitis B vaccine = second dose  
HIV antibody
- B. Previous Hepatitis B vaccination  
HIV antibody

### **VISIT 3 (3 MONTHS)**

The majority of individuals who will be seroconverted will have done so by this time. No differences between vaccinated individuals and non-vaccinated individuals exist at this visit. The same symptoms for 6-week visit should be sought after.

#### **Laboratory and Treatment:**

HIV antibody

### **VISIT 4 (6 MONTHS)**

This is currently the final visit recommended for follow up of any occupational exposure. As of 1991 no healthcare worker who has reported an exposure has seroconverted after six months. The physician should question the patient for any symptoms new since the last clinic visit.

#### **Laboratory and Treatment:**

- A. No previous vaccination for Hepatitis B  
HIV antibody  
Hepatitis C antibody  
Hepatitis B vaccine (final dose)  
Quantitative titer to be measured in 408 weeks
- B. Vaccinated worker  
HIV antibody  
Hepatitis C antibody

**Willamette Falls  
Immediate Care**

**POST EXPOSURE EVALUATION REPORT**

**BLOODBORNE PATHOGENS**

Name: \_\_\_\_\_ Date of Exam: \_\_\_\_\_

Employer: \_\_\_\_\_

The above individual has been evaluated for a bloodborne pathogen exposure:

1. Hepatitis B vaccine was:
  - Not indicated
  - Indicated
  
2. This individual:
  - Did receive a Hepatitis B vaccination
  - Did not receive a Hepatitis B vaccination
  
3. This individual has been informed of the results of the evaluation and has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

\_\_\_\_\_  
Examining Physician

M.D./D.O.

\_\_\_\_\_  
Date

Employee Name: \_\_\_\_\_ Date: \_\_\_\_\_

Department/Job Title: \_\_\_\_\_

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 want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date