

## COMMONWEALTH of VIRGINIA

RANDOLPH L. GORDON, M.D., M.P.H. COMMISSIONER

Department of Health P O BOX 2448 RICHMOND, VA 23218

June 27, 1997

TDD 1-800-828-1120

#### **MEMORANDUM**

TO:

District Directors

FROM:

Grayson B. Miller, Jr., M.D.

njeuth Director, Office of Epidemiology

**SUBJECT:** 

HB 2764: Bloodborne Pathogen Training for School Personnel And Management

of Exposure-Prone Incidents in Schools

The 1997 General Assembly amended Sections 22.1-271.3 of the Code of Virginia to 1) require school boards to ensure that school personnel who have direct contact with students receive bloodborne pathogen training and 2) require local health directors to provide medical advice to division superintendents regarding possible exposures of school personnel to blood or body fluids of students. Attachment I is a copy of that amendment.

While school boards are responsible for the provision of bloodborne pathogen training to school personnel, school systems are likely to request your assistance. It may be helpful for you to be involved at least in the planning stages for this training. Involvement of local health departments may ensure that school employees receive the correct messages about potential risks and legitimate modes of disease transmission, thereby decreasing the number of calls regarding incidents which do not pose exposure risks to personnel.

All school districts and health districts were previously provided with the manual Guidelines for Specialized Health Care Procedures. Attachment II is a section from those guidelines entitled "Guidelines Regarding Bloodborne Pathogens." This information should be helpful for school personnel involved in training.



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The law also requires that a school superintendent consult the local health director for situations involving incidents which may have exposed employees to the blood or body fluids of students. You should meet with the division superintendent(s) to work out notification procedures for your district.

The district director is responsible for investigating each exposure incident as soon as practicable to determine the appropriate recommendation for the employee. There is no prescribed method or format for the investigation. It need be no longer or more detailed than is necessary to ascertain the degree of risk to the employee. The investigation may be conducted as a telephone interview with a public health or school nurse, as well as the school superintendent, who has determined the essential facts of the exposure incident. This telephone interview may be sufficient to develop recommendations for the superintendent. The medical advice may be conveyed to the school by the district director or another health department physician. The medical advice should be provided to the school superintendent, not the employee. It is the responsibility of the school superintendent to convey the information to the employee.

There is no responsibility on the part of the health department to provide diagnostic services or treatment. The goal of the recommendation is 1) to apprise the employee of the degree of risk that he or she has been infected by a bloodborne pathogen, and 2) to suggest a course of action, if any, the employee should consider. The course of action may address diagnostic, prophylactic, preventive, or treatment actions. These services may be provided by the health department, the employee's health care provider, or a combination. For assistance in determining recommendations, you may want to review Dr. John Rullan's memorandum of September 25, 1996, regarding post-exposure prophylaxis guidelines for occupational HIV exposure. As long as you have made a good faith effort to provide consultation and specific recommendations, you have discharged your responsibility under this law.

Based on past experience reported from selected health districts, we do not expect to have a large number of requests from school districts for assistance in exposure-prone incidents. In order to assess the demand and to provide you with help, I am asking that you track these requests, including how many requests were received, the average amount of district time spent on each request and how many of them were substantiated exposures. We will survey you at the end of the first year to gather these data. Please advise me if the requests become excessive.

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Please remember that existing laws regarding release of confidential medical information are applicable, as are penalties for improper release of information. The Office of Epidemiology is available to assist you with the implementation of this law as needed. If you have any questions, please call me at (804) 786-6029, Dr. John Rullan at (804) 786-6261 or Casey W. Riley at (804) 786-6267.

### Attachments

c: Jeff Lake
John Rullan, M.D.
Casey W. Riley
Doug Cox

### VIRGINIA ACTS OF ASSEMBLY -- 1997 SESSION

#### **CHAPTER 685**

An Act to amend and reenact § 22.1-271.3 of the Code of Virginia, relating to public school attendance and school personnel training and certain viral infections; notification of school personnel.

[H 2764]

### Approved March 21, 1997

Be it enacted by the General Assembly of Virginia:

1. That § 22.1-271.3 of the Code of Virginia is amended and reenacted as follows:

§ 22.1-271.3. Guidelines for school attendance for children infected with human immunodeficiency

virus; school personnel training required; notification of school personnel in certain cases.

A. The Board of Education, in cooperation with the Board of Health, shall develop, and revise as necessary, model guidelines for school attendance for children infected with human immunodeficiency virus. The first such guidelines shall be completed by December 1, 1989. The Board shall distribute copies of these guidelines to each division superintendent and every school board member in the Commonwealth immediately following completion.

B. Each school board shall, by July 1, 1990, adopt guidelines for school attendance for children with human immunodeficiency virus. Such guidelines shall be consistent with the model guidelines

for such school attendance developed by the Board of Education.

C. Every school board shall ensure that all school personnel having direct contact with students receive appropriate training in the etiology, prevention, transmission modes, and effects of blood-borne pathogens, specifically, hepatitis B and human immunodeficiency viruses or any other infections that are the subject of regulations promulgated by the Safety and Health Codes Board of the Virginia Occupational Safety and Health Program within the Department of Labor and Industry.

D. Upon request from a school employee who believes he has been involved in a possible exposure-prone incident which may have exposed the employee to the blood or body fluids of a student, the division superintendent shall contact the local health director who, upon immediate investigation of the incident, shall determine if a potentially harmful exposure has occurred and make recommendations, based upon all information available to him, regarding how the employee can reduce any risks from such exposure. The division superintendent shall share these recommendations with the school employee. The division superintendent and the school employee shall not divulge any information provided by the local health director regarding such student. The information provided by the local health director shall be subject to any applicable confidentiality requirements set forth in Chapter 2 (§ 32.1-35 et. seq.) of Title 32.1. .

# GUIDELINES REGARDING BLOODBORNE PATHOGENS

## Universal Precautions for Handling Blood/Body Fluids in School

### **Legal Basis**

Please refer to the Occupational Safety and Health Administration (OSHA) Final Bloodborne Pathogens Standard for the most recent requirements.

### **Introduction**

The following guidelines are designed to protect persons who may be exposed to blood or body fluids of students or employees in a school.

Anticipating potential contact with infectious materials in routine and emergency situations is the most important step in preventing exposure to and transmission of infections. Use universal precautions and infection control techniques in all situations that may present the hazard of infection. Diligent and proper handwashing, the use of barriers (e.g., latex gloves), appropriate disposal of waste products and needles, and proper care of spills are essential techniques of infection control.

### **Universal Precautions**

When applying the concept of universal precautions to infection control, all blood and body fluids are treated as if they contain bloodborne pathogens, such as the human immunodeficiency virus (HIV) and hepatitis B virus (HBV). HIV and HBV can be found in:

- blood
- cerebrospinal fluid
- synovial fluid
- vaginal secretions
- semen

- pericardial fluid
- breast milk
- peritoneal fluid
- amniotic fluid
- pleural fluid

HBV (not HIV) is also found in saliva and other body fluids such as urine, vomitus, nasal secretions, sputuin, and feces. It is not possible to know whether

these body fluids contain bloodborne pathogens therefore, all body fluids should be considered potentially infectious. Thus universal precautions should be observed by all students and staff when handling or coming into contact with any blood or body fluids.

### **Handwashing**

Diligent and proper handwashing form the backbone of infection control. Hands should be washed:

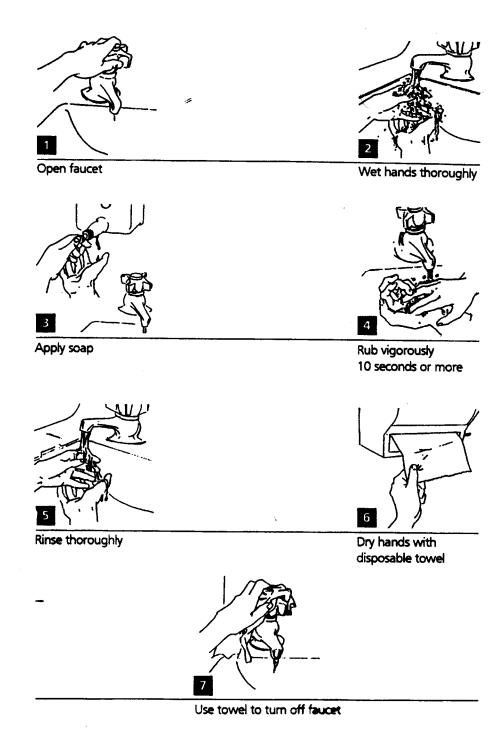
- immediately before and after physical contact with a student (e.g., diaper changes, assisting with toileting, assisting with feeding)
- immediately after contact with blood or body fluids or garments or objects soiled with body fluids or blood
- after contact with used equipment (e.g., stethoscope, emesis basin, gloves)
- after removing protective equipment such as gloves or clothing

### **Procedure:**

- 1. Remove jewelry and store in a safe place prior to initial handwashing (replace jewelry after final handwashing).
- 2. Wash hands vigorously with soap under a stream of running water for approximately 10 seconds.
- 3. Rinse hands well with running water, and thoroughly dry with paper towels.
- 4. If soap and water are unavailable, bacteriostatic/bacteriocidal wet towelettes, "handi-wipes", or instant hand cleaner may be used.

Please see detailed instructions in Figure 1, Eight Steps To Proper Handwashing for detailed handwashing instructions.

Figure 1. Eight Steps to Proper Handwashing



From Resource Manual for the Prevention of HIB/HBV Viruses by Maryland State Department of Education, 1991.

## Ways to Avoid Contact with Body Fluids

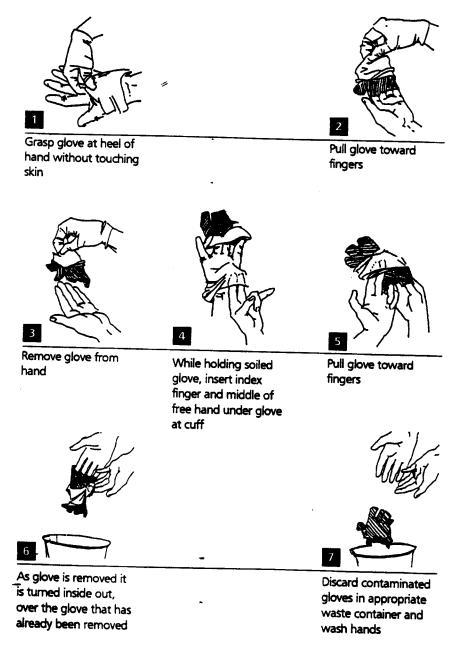
### **Gloves**

When possible, avoid direct skin contact with body fluids. Disposable single use, waterproof, latex, or vinyl gloves should be available in the school clinics. Vinyl gloves should be used with students who have a latex allergy or a high potential for developing a latex allergy, such as students with spina bifida. The use of gloves is intended to reduce the risk of contact with blood and body fluids for the caregiver as well as to control the spread of infectious agents from student to employee, employee to student, or employee to employee.

Gloves should be worn when direct care may involve contact with any type of body fluids. Incidents when gloves should be worn include (but are not limited to): caring for nose bleeds, changing a bandage or sanitary napkins, cleaning up spills or garments soiled with body fluids, disposing of supplies soiled with blood, or any procedure where blood is visible. Gloves should also be worn when changing a diaper, catheterizing a student, or providing mouth, nose or tracheal care.

Do not reuse gloves. After each use, gloves should be removed without touching the outside of the glove and disposed of in a lined waste container. After removing the gloves, the hands should be washed according to the handwashing procedure. (See Figure 2. Proper Removal of Gloves.)

Figure 2. Proper Removal of Gloves



From Resource Manual for the Prevention of HIB/HBV Viruses by Maryland State Department of Education, 1991.

### **Protective Clothing**

If spattering of body fluids is anticipated, the clothing of the caregiver should be protected with an apron or gown and the face protected with a face mask and eye goggles or face shield. The apron or gown should be laundered or disposed of after it is used and should not be used again until it is clean. The goggles and mask should be disposed of properly.

### **CPR Shield**

If cardiopulmonary resuscitation is needed, a disposable CPR shield should be used.

### **Disposal of Infectious Waste**

All used or contaminated supplies (e.g., gloves and other barriers, sanitary napkins, bandaids), except syringes, needles, and other sharp implements, should be placed into a plastic bag and sealed. This bag can be thrown into the garbage, out of reach of children or animals.

Make arrangements to dispose of used needles, syringes, and other sharp objects at a local medical facility or local health department. Needles, syringes, and other sharp objects should be placed **immediately after use** in a metal or other puncture-proof container that is leak proof on the bottom and sides. To reduce the risk of a cut or accidental puncture by a needle, <u>NEEDLES SHOULD NOT BE RECAPPED</u>, <u>BENT</u>, <u>OR REMOVED FROM THE SYRINGE BEFORE DISPOSAL</u>. Once it is full, the container should be sealed, bagged, and kept out of the reach of children until it can be disposed of properly.

Body waste such as urine, vomitus, and feces should be disposed of in the toilet. If such body fluids as urine and vomitus are spilled, the body fluids should be covered with an absorbent sanitary material, gently swept up, and discarded in plastic bags.

### Clean-Up

Spills of blood and body fluids should be cleaned up immediately with an approved disinfectant cleaner.

#### Procedure:

- Wear gloves. (See "Ways to Avoid Contact with Body Fluids".)
- Mop up spill with absorbent material.
- Wash the area well, using the disinfectant cleaner supplied in the clinics or a 1:10 bleach solution (mix 1 part household bleach, sodium hypochlorite, in ten parts of water). Replace solution daily.
- Dispose of gloves, soiled towels, and other waste in sealed plastic bags and place in garbage, as already indicated.
- WASH HANDS.

Routine environmental clean-up facilities (e.g., clinic and the bathrooms) do not require modification unless contaminated with blood or body fluids. If so, the area should be decontaminated using the procedure outlined. Regular cleaning of non-contaminated surfaces, such as toilet seats and table tops, can be done with the standard cleaning solutions or the 1:10 bleach solution mentioned above. Regular cleaning of obvious soil is more effective than extraordinary attempts to disinfect or sterilize surfaces.

Rooms and dustpans must be rinsed in disinfectant. Mops must be soaked in disinfectant, washed, and thoroughly rinsed. The disinfectant solution should be disposed of promptly down the drain.

### **Laundry**

Whenever possible, disposable barriers (e.g., disposable gloves and gowns) should be used if contamination with blood or body fluids is possible. If sheets, towels, or clothing become soiled, they should not be handled more than necessary. Wash contaminated items with hot water and detergent for at least 25 minutes. Presoaking may be required for heavily soiled clothing. The most important factor in laundering clothing contaminated in the school setting is elimination of potentially infectious agents by soap and hot water.

Soiled student clothing should be rinsed using gloves, placed in a plastic bag, and sent home with appropriate washing instructions for the parents.

### **Accidental Exposure**

Accidental exposure to blood, body products, or body fluids places the exposed individual at risk of infection. The risk varies depending on the type of body fluid (blood vs. respiratory vs. feces), the type of infection (Salmonellae vs.

Haemophilus Influenzae Virus vs. HIV), and the integrity of the skin that is contaminated.

### **Procedure:**

- Always wash the contaminated area immediately with soap and water.
- If the mucous membranes (eye or mouth) are contaminated by a splash of potentially infectious material or contamination of broken skin occurs, irrigate or wash area thoroughly.
- If a cut or needle injury occurs, wash the skin thoroughly with soap and water.

In instances where broken skin, mucous membranes, or a needle puncture occur, the caregiver should document the incident. The student's parent or guardian should also be notified. The person who was exposed to the infection should contact his/her physician for further care as outlined in the recommendations by the Centers for Disease Control and Prevention (CDC).

### **Pregnant Women**

Pregnant women are at no higher risk for infection than other caregivers, as long as appropriate precautions are observed. There is, however, the possibility of in utero transmission of viral infections such as cytomegalovirus (CMV), HIV, or HBV to unborn children.

#### Sources

Adapted from Virginia Department of Health and Virginia Department of Education. (1992). Universal Precautions for Handling Blood Body Fluids in School. In <u>Virginia School Health Guidelines</u> (pp. 195-202).

Bradley, B. (1994). Occupational Exposure to Bloodborne Pathogens, Implementing OSHA Standards in the School Setting. Scarborough, Maine: National Association of School Nurses, Inc.

### **Guidelines for Exposure Policy Development**

The following sample exposure plan from the Virginia Department of Labor and Industry's Occupational Exposure to Bloodborne Pathogens; Final Rule (1992) is provided as a sample guideline for local school divisions when they develop exposure policies for their schools. Please refer to the most recent guidelines for up-to-date guidelines.

### SAMPLE EXPOSURE CONTROL PLAN

Note: This sample exposure control plan is being offered as a guide to assist employers in complying with the VOSH/OSHA Bloodborne Pathogens Standard 1910.1030. It is not intended to supersede the requirements detailed in the standard. Employers should review the standard for particular requirement that are applicable to their specific situation, and adapt this plan accordingly. As a part of this plan, an employer will need a schedule for maintenance and/or replacement of engineering controls and a housekeeping schedule and procedure for decontamination of contaminated surfaces and equipment. Please note that this plan does not include provisions for HIV/HBV laboratories and research facilities, which are addressed in section (e) of the standard. Employers in these settings will need to add information relevant to their particular facility. The italicized content includes suggested approaches, and is not to indicate a single method of accomplishing exposure control.

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## EXAMPLE OF A BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

### I. INTRODUCTION

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control

The OSHA/VOSH 1910.1030 Bloodborne Pathogens Standard was issued to reduce the occupational transmission of infections caused by microorganisms sometimes found in human blood and certain other potentially infectious materials. Although a variety of harmful microorganisms <u>may</u> be transmitted through contact with infected human blood, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV) have been responsible for infecting workers who were exposed to human blood and certain other body fluids containing these viruses. Infection routes include needlestick injuries and direct contact of mucous membranes and non-intact skin with contaminated blood/materials. Occupational transmission of HBV occurs much more often than transmission of HIV. Although HIV is rarely transmitted following occupational exposure, the lethal nature of HIV requires that all possible measures be used to prevent exposure of workers.

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Exposure Determination
Methods of Compliance
Hépatitis B Vaccination Policy
Procedures for Evaluation and Follow-up
of Exposure Incidents

Employee Training
Recordkeeping Procedures

### II. EXPOSURE DETERMINATION

All job categories in which it is reasonable to anticipate that an employee will have skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials (listed below) will be included in this exposure control plan. (See Addendum G, for more information.) Exposure determination is made without regard to the use of personal protective equipment (i.e., employees are considered to be exposed even if they wear personal protective equipment.)

### Other Potentially Infectious Materials (OPIM)

### **Body Fluids**

- semen
- vaginal secretions
- cerebrospinal fluid
- pleural fluid
- pericardial fluid
- peritoneal fluid
- amniotic fluid
- any body fluid visibly contaminated with blood
- saliva in dental procedures

### **Other Materials**

- any unfixed tissue or organ other than intact skin from a human (living or dead)
- HIV/HBV containing cell or tissue cultures, organ cultures, and culture medium
- blood, organs, or other tissues from experimental animals infected with HIV or HBV

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### **SECTION 4: BLOODBORNE PATHOGENS**

### . LIST A

### ALL EMPLOYEES ARE EXPOSED

All employees in job categories listed here are included in the plan.						
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### LIST B

### SOME EMPLOYEES ARE EXPOSED

Job classifications in which some employees may have occupational exposure are included on this list. Because not all the employees in these categories are expected to incur exposure to blood or other potentially infectious materials, the tasks or procedures that would cause these employees to have occupational exposure are also listed. The job classifications and associated tasks for these categories are as follows:

Job Classification	Tasks/Procedures

#### III. METHODS-OF COMPLIANCE

#### **Universal Precautions**

All blood or other potentially infectious materials (as described in II, Exposure Determination) shall be handled as if contaminated by a bloodborne pathogen. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

**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. The following engineering controls will be utilized:

(List controls such as sharps containers, biologic safety cabinets, seneedles, etc.)	f-sheathing
The above controls will be maintained or replaced on a regular schedule for reviewing the effectiveness of the controls is as follows: (Specify who is responsible and the frequency of the schedule, etc.)	edule. The
Handwashing and other General Hygiene Measures  Handwashing is a primary infection control measure that protect	s both the
employee and the patient. Appropriate handwashing must be practiced. Employees shall wash hands thoroughly using soap whenever hands become contaminated and as soon as possible after gloves or other personal protective equipment. When other skin mucous membranes come in contact with blood or other potentially materials, the skin shall be washed with soap and water and the membranes shall be flushed with water as soon as possible.	e diligently and water or removing or areas or or infectious
(Describe available handwashing facilities, or in circumstand handwashing facilities are not feasible, describe alternative hand protocol; i.e. antiseptic hand cleanser used in conjunction with clean towels or antiseptic towelettes. When these alternatives are used, I	cleansing

Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials.

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

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

Employees shall use practices to minimize splashing, spraying, spattering, and generation of droplets during procedures involving blood or other potentially infectious materials.

IV-14	SECTION 4: BLOODBORNE PATHOGENS
(List and discuss any plate technicians will ren	prescribed practices for the particular setting; for example, nove vacutainer tops behind plexi-glass barriers.)
Sharps Management	,
prohibited. (Note: in very special handed technique may qualifies for this exemp	s and other contaminated sharps shall not be bent, d. Shearing or breaking of contaminated needles is instances, recapping using a mechanical device or a one-y be permitted. Specify who, if anyone, within the facility oftion. List the procedures and the mechanical device to be ded technique will be used.)
and leakproof on side Containers are to be feasible to the immediation disposable sharps sharps contained sharps contained sharps are contaminated sharps are	st be closable, puncture resistant, labeled or color-coded, is and bottom, and maintained upright throughout use. easily accessible to personnel and located as close as ate area where sharps are used or found. Contaminated all be discarded, as soon as possible after use, in the tainers. Contaminated broken glass is also to be placed in ontainers. As soon as possible after use, reusable are to be placed in the reusable sharps container until Give locations of sharps containers.)
openings. Nearly full of decontaminated in the	containers creates a hazard when needles protrude from containers must be promptly disposed of (or emptied and case of reusable sharps) and replaced.  It is provided the containers of the cont

### **Precautions in Handling Specimens**

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

transport, or shipping. The container must be closed before being stored, transported, or shipped.  (Describe containers used for this purpose and explain where they are located and accessed.)
Containers must be labeled/color-coded if they go out of the facility (labeling must also be used in house if all specimens are not handled using universal precautions). (Explain labeling/color coding procedure in use or alternately that the labeling exemption is in effect.)
If outside contamination of the primary container occurs, or if the specimen could puncture the primary container, the primary container shall be placed within a secondary container that prevents leakage, and/or, resists puncture during handling, processing, storage, or transport.  (Describe containers used for this purpose and explain where they are located and accessed.)
Management of Contaminated Equipment
Assess equipment for contamination, and decontaminate if possible, before servicing or shipping. Equipment that has not been fully decontaminated must have label attached with information about which parts remain contaminated. (Describe who is responsible for assessing and decontaminating equipment and what decontamination procedure is to be used.)

### **Personal Protective Equipment**

#### **General Guidelines**

All personal protective equipment will be provided, repaired, cleaned, and disposed of by the employer at no cost to employees. Employees shall wear personal protective equipment when doing procedures in which exposure to the skin, eyes, mouth, or other mucous membranes is anticipated. The articles to be worn will depend on the expected exposure. Gloves, gowns, laboratory coats, face shields, masks, eye protection, mouthpieces, resuscitation bags, pocket

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### **SECTION 4: BLOODBORNE PATHOGENS**

masks are available. A variety of sizes are in stock. Employees who have allergies to regular gloves may obtain hypoallergenic gloves.  (List procedures requiring personal protective equipment and the type of protection to be used. Explain how clothing will be provided, where it can be obtained, and who is responsible for distribution. See Addendum A.)
If a garment is penetrated by blood or other potentially infectious material, the garment shall be removed as soon as possible and placed in a designated container for laundering or disposal. All personal protective equipment shall be removed before leaving the work area; it shall be placed in assigned containers for storage, washing, decontamination, or disposal.  (List where employees are expected to put contaminated garments and other personal protective equipment upon leaving the work area.)
Protection for Hands  Gloves shall be worn in the following situations:  • when it can be reasonably anticipated that hands will contact blood or other potentially infectious materials, mucous membranes, and non-intact skin;
<ul> <li>when performing vascular access procedures (only exception is for phlebotomists in volunteer blood donation centers);</li> <li>when handling or touching contaminated items or surfaces.</li> <li>(List procedures in which gloves are required or refer to Addendum A.)</li> </ul>
Disposable Gloves

- Replace as soon as feasible when gloves are contaminated, torn, punctured, or when their ability to function as a barrier is compromised.
- Do not wash or decontaminate single use gloves for re-use.

### **Utility Gloves**

- Decontaminate for re-use if the gloves are in good condition.
- Discard when gloves are cracked, peeling, torn, punctured or show other signs of deterioration (whenever their ability to act as a barrier is compromised).

## Protection for Eyes/Nose/Mouth

Employees shall wear masks in combination with eye protection devices (goggles or glasses with solid side shields) or chin-length face shields 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. Situations that require such protection are as follows: (or see Addendum A)
Protection for the Body
A variety of garments, including gowns, aprons, lab coats, and clinic jackets, are to be worn in occupational exposure situations. Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when <u>cross</u> contamination can reasonably be anticipated (e.g., autopsies, orthopedic surgery). The following situations require the use of protective clothing: (or see Addendum A)
Housekeeping
General Policy
The workplace will be maintained in a clean and sanitary condition. A written housekeeping procedure guide, which gives the appropriate methods and frequency 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, must be followed. (Expiain where guide is located. List in the guide the germicides which will be used, such as bleach solution or EPA registered germicides. Guide may be added as an appendix.)

### **Equipment and Environmental and Working Surfaces**

Clean contaminated work surfaces with appropriate disinfectant:

- after completing procedures;
- immediately or as soon as feasible when overtly contaminated or after any spill of blood or other potentially infectious material (OPIM);
- at the end of the work shift if the surface may have become contaminated since the last cleaning.

Remove and replace protective coverings (e.g., plastic wrap, aluminum foil) over equipment and environmental surfaces as soon as feasible when overtly contaminated or at the end of the work shift if they may have become contaminated.

Regularly inspect/decontaminate all reusable bins, pails, cans, and similar receptacles that may become contaminated with blood or OPIM. If these articles become visibly contaminated, they should be decontaminated immediately or as soon as feasible.

(List frequency of inspection/decontamination and who is responsible.)

### **Special Sharps Precautions**

Clean up broken glass that may be contaminated using mechanical means such as a brush and dustpan, tongs, or forceps. **DO NOT** pick up directly with the hands.

Reusable containers are not to be opened, emptied, or cleaned manually or in any other manner that will expose employees to the risk of percutaneous injury. DO NOT reach by hand into a container that stores reusable contaminated sharps.

### Regulated Waste

#### Includes:

- 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 sharp;

pathological and microbiological wastes containing blood or other potentially infectious materials.

Waste Containers
Any of the substances listed above must be placed in containers that are: closable; constructed to contain all contents and prevent leakage of fluids during handling, storage, or transport.
In this facility, containers will be
Containers must be closed prior to moving/removal to prevent spillage or protrusion of contents during handling, storage, or transport. If the outside of the container becomes contaminated, it is to be placed in a second container, which must have the same characteristics as the initial container as discussed above.
Waste containers are to be disposed of: (Describe disposal methods. Methods must be in accordance with the Virginia Department of Waste Management's Infectious Waste Management Regulations).
Laundry
Employees who handle contaminated laundry are to wear protective gloves and other appropriate personal protective equipment.

Contaminated laundry shall be handled as little as possible with a minimum of agitation. Do not sort/rinse laundry in location of use. Place in container/bag where it was used. Wet contaminated laundry, which may soak through or cause leakage from bag or container, will be placed and transported in bags or

containers that prevent soak-through and/or leakage of fluids to the exterior.

Bags/containers will (Specify if a biohazard label or the color red will be used. If the facility utilizes universal precautions in the handling of all soiled laundry, alternative labeling or colorcoding is acceptable if it permits all employees to recognize the containers as requiring compliance with universal precautions.)

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### **SECTION 4: BLOODBORNE PATHOGENS**

### Communication of Hazards to Employees

Employees will be informed of hazards through a system of (specify whether labeling or color-coding will be used), as well as a training program, which is discussed in Section VI of this plan.

Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material, and other containers used to store or transport blood or other potentially infectious materials. Contaminated equipment shall also be labeled in this manner: information about the portions of the equipment that remain contaminated shall be added to the label.

Labels shall be fluorescent orange or orange-red with lettering or symbols in a contrasting color. The label is to be either an integral part of the container or affixed as close as feasible to the container by a method that prevents loss or unintentional removal of the label. The label shall have: the **biohazard symbol** and the text **BIOHAZARD**.

Red bags or red containers may be substituted for the warning label.

The labels/color-coding described here <u>are not</u> required in the following instances:

- when containers of blood, blood components, or blood products are labeled as to their contents and have been released for transfusion or other clinical use;
- when individual containers of blood or other potentially infectious materials are placed in labeled containers during storage, transport, shipment or disposal;
- when regulated waste has been decontaminated.

### IV. HEPATITIS B VACCINATION POLICY

### **General Statement of Policy**

All employees who have been identified as having exposure to bloodborne pathogens (see II. Exposure Determination) will be offered the hepatitis B

vaccination series at no cost to them. In addition, these employees will be offered post-exposure evaluation and follow-up at no cost should they experience an exposure incident on the job.

All medical evaluations and procedures including the hepatitis B vaccination series, whether prophylactic or post-exposure, will be made available to the employee at a reasonable time and place. This medical care will be performed by or under the supervision of a licensed physician, physician's assistant, or nurse practitioner. Medical care and vaccination series will be according to the most current recommendations of the U. S. Public Health Service. A copy of the bloodborne pathogens standard will be provided to the healthcare professional responsible for the employee's hepatitis B vaccination. (Give name of responsible licensed healthcare professional.)

All laboratory tests will be conducted by an accredited laboratory at no cost to the employee. (Give name and location of the laboratory.)

### **Hepatitis B Vaccination**

The vaccination is a series of three injections. The second injection is given one month from the initial injection. The final dose is given six months from the initial dose. At this time, a routine booster dose is not recommended, but if the U.S. Public Health Service, at some future date, recommends a booster it will also be made available to exposed employees at no cost.

The vaccination will be made available to employees after they have attended training on bloodborne pathogens and within 10 work days of initial assignment to a job category with exposure. The vaccination series will not be made available to employees who have previously received the complete hepatitis B vaccination series, to any employee who has immunity as demonstrated through antibody testing, or to any employee for whom the vaccine is medically contraindicated.

Any exposed employee who chooses not to take the Hepatitis B vaccination will be required to sign a declination statement. (See Addendum B) (Add any specific instructions to employees related to scheduling and receiving hepatitis B vaccination.)

## V. PROCEDURES FOR EVALUATION AND FOLLOW-UP OP EXPOSURE INCIDENTS

An exposure incident is 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.

Employees who experience an exposure incident must immediately report their exposure to <u>Position Name</u>. When an employee reports an exposure incident, he/she will be immediately offered a confidential medical evaluation and follow-up including the following elements:

- documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;
- identification and documentation of the source individual unless identification is infeasible.

If the infectivity status of the source individual is unknown, the individual's blood will be tested as soon as feasible after consent is obtained. If the source individual's blood is available, and the individual's consent is not required by law, the blood shall be tested and the results documented. The exposed employee will be informed of the results of the source individual's testing.

The exposed employee's blood shall be collected as soon as feasible after consent is obtained, and tested for HBV and HIV serological status. 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.

The exposed employee will be offered post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service. (See Addendum C.) The exposed employee will be offered counseling and medical evaluation of any reported illnesses.

The following information will be provided to the healthcare professional evaluating an employee after an exposure:

- a copy of 1910.1030 bloodborne pathogens standard;
- a description of the exposed employee's duties as they relate to the exposure incident:
- the documentation of the route(s) of exposure and circumstances under which exposure occurred;
- results of the source individual's blood testing, if available;

• all medical records relevant to the appropriate treatment of the employee including vaccination status.

and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The written opinion will be limited to the following information:

- the employee has been informed of the results of the evaluation;
- the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials that require further evaluation or treatment.

NOTE: All other findings shall remain confidential and shall not be included in the written report.

### VI. EMPLOYEE TRAINING

Employees will be trained regarding bloodborne pathogens at the time of initial assignment to tasks where exposure may occur and annually, during work hours. Additional training will be provided whenever there are changes in tasks or procedures that affect employees' occupational exposure; this training will be limited to the new exposure situation.

The training approach will be tailored to the educational level, literacy, and language of the employees. The training plan will include an opportunity for employees to have their questions answered by the trainer.

(Name of person/position) is responsible for arranging and/or conducting training. (A variety of methods may be used; e.g., lecture, demonstration, videotapes, and written materials.)

The following content will be included:

- 1. explanation of the bloodborne pathogen standard;
- 2. general explanation of the epidemiology, modes of transmission, and symptoms of bloodborne diseases;
- 3. explanation of this exposure control plan and how it will be implemented;
- 4. procedure that may expose employee to blood or other potentially infectious materials;
- 5. control methods that will be used at this facility to prevent/reduce the risk of exposure to blood or other potentially infectious materials;
- 6. explanation of the basis for selection of personal protective equipment;
- 7. information on the hepatitis B vaccination program including the benefits and safety of vaccination;

- 8. information on procedures to use in an emergency involving blood or other potentially infectious materials;
- 9. which procedure to follow if an exposure incident occurs;
- 10. explanation of post-exposure evaluation and follow-up procedures;
- 11.an explanation of warning labels and/or color coding.

### VII. RECORDKEEPING PROCEDURES

### Medical Recordkeeping

A medical record will be established and maintained for each employee with exposure. The record shall be maintained for the duration of employment plus 30 years in accordance with 29 CFR 1910.20. (Give name/position responsible for maintaining medical records.)

### The record shall include the following:

- name and social security number of the employee;
- a copy of the employee's hepatitis B vaccination status with dates of hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination;
- a copy of examination results, medical testing, and any follow-up procedures;
- a copy of the healthcare professional's written opinion;
- a copy of the information provided to the healthcare professional who
  evaluates the employee for suitability to receive hepatitis B vaccination
  prophylactically and/or after an exposure incident.

### **Confidentiality of Medical Records**

The record will be kept confidential. The contents will not be disclosed or reported to any person within or outside the workplace without the employee's express written consent, except as required by law or regulation. Employee medical records required under 1910.1030 shall be provided upon request for examination and copying to the subject employee and to the commissioner of the Virginia Department of Labor and Industry in accordance with 29 CFR 1910.20.

### **Training Records**

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

The following information shall be included:

- dates of training sessions;
- contents or a summary of the training sessions;
- names and qualifications of trainer(s); and
- names and job titles of all persons attending.

(See Addendum F for a sample form which may be used to collect information about training.)

Training records shall be provided upon request for examination and copying to employees, to employee representatives, and to the commissioner of the Virginia Department of Labor and Industry in accordance with 29 CPR 1910.20.

This Exposure (	Control Plan was		
Prepared by:			
Date Prepared:			
Review Date:			

### ADDENDUM A

See the following reference for more information.

Centers for Disease Control and Prevention. (1990). Public Health Service statement on management of occupational exposure to human immunodeficiency virus, including considerations regarding zidovudine postexposure use. Morbidity and Mortality Weekly Reput (29, Suppl. RR-1)1-14.

### **ADDENDUM B**

See the following reference for more information.

Centers for Disease Control and Prevention. (1990). Protection against viral hepatitis: Recommendations of the Immunization Practices Advisory Committee(ACIP). Morbidity and Mortality Weekly Report (39,Suppl. S-2)1-26.

### ADDENDUM D

Examples of Recommended Personal Protective Equipment for Worker Protection
Against HIV and HBV Transmission<sup>1</sup> in Prehospital<sup>2</sup> Settings

Guidelines for Prevention of Transmission of HIV and HBV to Health Care and Public Safety Workers Reprinted from DHHS (NIOSH) Centers for Disease Control, 19S7, HHS Publications No. 39-107, Table 4, Page 23.

Task of Activity	Disposable Gloves	Gown <sup>3</sup>	<u>Mask</u>	Protective Eyeware
Bleeding control with spurting blood	Yes	Yes	Yes	Yes
Bleeding control with minimal bleeding	Yes	No	No	No
Emergency childbirth	Yes	Yes	Yes, if splashing is likely	Yes, if splashing is likely
Blood drawing	At certain times <sup>4</sup>	No	No	No
Starting an intravenous (IV) line	Yes	No	No	No
Endotracheal intubation, esophageal obturator use	Yes	No	No, unless splashing is likely	No, unless splashing is likely
Oral/nasal suctioning, manually' cleaning airway	Yes <sup>5</sup>	No	No, unless splashing is likely	No, unless splashing is likely
Handling and cleaning instruments with microbial contamination  -	Yes	No, unless soiling is likely	No	No
Measuring blood pressure	No	No	No	No
Measuring temperature	No	No	No	No
Giving an injection	No	No	No	No

<sup>&</sup>lt;sup>1</sup> The examples provided in this table are based on application of universal precautions. Universal precautions are intended to supplement rather than replace recommendations for routine infection control, such as handwashing and using gloves to prevent gross microbial contamination of hands (e.g., contact with urine or feces).

Defined as setting where delivery of emergency health care takes place away from a hospital or other health care facility.

Refers to protective masks to prevent exposure of mucous membranes to blood or other potentially contaminated body fluids. The use of resuscitation devices, some of which are also referred to as "masks", is discussed on page 16.

For clarification see Addendum A and B.

While not clearly necessary to prevent HIV or HBV transmission unless blood is present, gloves are recommended to prevent transmission of other agents (e.g., Herpes simplex).

IV	/_	3	0

## **SECTION 4: BLOODBORNE PATHOGENS**

### ADDENDUM E

### Mandatory Hepatitis B Vaccination Declination Form

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.

Name	 	314. ·		
Position	V.8		<del>-</del>	
Date				

Training Topic:

### ADDENDUM F

(Name of Employer) (Address)

Date of Training:		
Name of Trainer(s):		
Qualifications of Trainer(s):		
Summary of Content:		
		** **
•	TRAINING ROSTER	
Name of Participant	Soc. Sec. No.	Job Title
Name of Participant		Job Title
Name of Participant		Job Title
Name of Participant  -		Job Title
Name of Participant		Job Title
Name of Participant		Job Title
Name of Participant		Job Title
Name of Participant		Job Title
Name of Participant		Job Title

#### ADDENDUM G

# JOB CLASSIFICATIONS WITH A LIKELIHOOD OF OCCUPATIONAL EXPOSURE TO BLOODBORNE PATHOGENS.

Although a list is included below of a number of job classifications that may be associated with tasks that have occupational exposure to blood and other potentially infectious materials, the scope of this standard is in no way limited to employees in these jobs. The hazard of exposure to infectious materials affects employees in many types of employment and is not restricted to the health care industry. At the same time, employees in the following jobs are not automatically covered unless they have occupational exposure:

- Physicians, physician's assistants, nurses, nurse practitioners, and other health care employees in clinic and physicians' offices;
- Employees of clinical and diagnostic laboratories;
- Housekeepers in health care facilities;
- Personnel in hospital laundries or commercial laundries that service health care or public safety institutions;
- Tissue bank personnel;
- Employees in blood banks and plasma centers who collect, transport, and test blood;
- Freestanding clinic employees (e.g., hemodialysis clinics, urgent care clinics, health maintenance organization (HMO) clinics, and family planning clinics);
- Employees in clinics in industrial, educational, and correctional facilities (e.g., those who collect blood and clean and dress wounds);
- Employees assigned to provide emergency first aid;
- Dentists, dental hygienists, dental assistants, and dental laboratory technicians;
- Staff of institutions for the developmentally disabled;
- Hospice employees;

- Home health care workers;
- Staff of nursing homes and long-term care facilities;
- Employees of funeral homes and mortuaries;
- HIV and HBV research laboratory and production facility workers;
- Employees handling regulated waste;
- Medical equipment service and repair personnel;
- Emergency medical technicians, paramedics, and other emergency medical service providers; and
- Firefighters, law enforcement personnel, correctional officers, and employees in the private sector, the federal government, or a state or local government in a state that has an OSHA-approved state plan.