# Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens



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# Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

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Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogen

## **SECTION 1**

## Introduction

#### INTRODUCTION

The Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens document was designed to meet the requirements of two Washington State laws and administrative codes, which address the protection and prevention of HIV/AIDS and other bloodborne pathogens for school employees.

Revised Code of Washington (RCW) 70.24.290 Public School Employee – Authorizes the Office of Superintendent of Public Instruction (OSPI) to adopt rules requiring appropriate education and training of public school employees about the transmission, prevention, and treatment of HIV/AIDS. OSPI is required to develop course content in consultation with the Department of Health under RCW 70.24.290.

<u>Washington Administrative Code (WAC) 392-198</u> School Personnel – Teacher Assistance Program outlines course content requirements for HIV/AIDS for in-service, continuing, and new employee training.

These guidelines additionally address the Washington Industrial Safety and Health Act (WISHA) standards, <u>WAC Chapter 296-823 Occupational Exposure to Bloodborne</u>

<u>Pathogens</u>, which outlines the requirements and procedures for protection of workers with occupational exposure to blood and other potentially infectious materials (OPIM).

The guidelines provide public school districts with information and tools to provide both mandatory and supplemental course content for:

- HIV/AIDS in-service training.
- Continuing in-service training.
- New employee requirements.

The intent is to meet the requirements of state statutes and rules and support the protection of school employees in the workplace.

	Chapter 392-198 WAC	Chapter 296-823 WAC	
Disease	HIV/AIDS	Bloodborne pathogens, particularly Hepatitis B Hepatitis C, and HIV	
Responsible Party	Public schools	Public and private schools	
For Whom	All employees	All employees who have occupational exposure to bloodborne pathogens	
When	All new employees	New employees who have occupational exposure to blood and OPIM and at least annually thereafter	
(Continued on page 3			

	Chapter 392-198 WAC	Chapter 296-823 WAC
Requirements	<ul> <li>Training and education to include:</li> <li>History, epidemiology, and treatment of HIV/AIDS.</li> <li>Methods of transmission of HIV.</li> <li>Methods of prevention including universal precautions.</li> <li>State and federal laws governing discrimination against persons with HIV/AIDS.</li> <li>State and federal laws governing confidentiality of a person's HIV antibody status.</li> </ul>	<ul> <li>Determine which employees have potential for occupational exposure.</li> <li>Write and annually update an Exposure Control Plan.</li> <li>Provide appropriate personal protective equipment (e.g., gloves).</li> <li>Provide initial and annual training to all staff with occupational exposure that includes the epidemiology and symptoms, modes of transmission and methods of prevention of HIV, HBV, and HCV.</li> <li>Offer Hepatitis B vaccine to employees who have occupational exposure.</li> <li>Provide post-exposure management of employees who have "exposure incidents."</li> <li>Maintain records of training and exposure incidents.</li> <li>Provide appropriate engineering controls, such as safer needle systems.</li> </ul>

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## **SECTION 2**

School Policies Related to Bloodborne Pathogens Including HIV/AIDS

## SCHOOL POLICIES RELATED TO BLOODBORNE PATHOGENS INCLUDING HIV/AIDS

The development and maintenance of school district policies is the central job of school boards.<sup>1</sup> The National School Boards Association (NSBA 2010) states:

School board policies have the force of law equal to statutes or ordinances. Policies establish directions for the district; they set the goals, assign authority, and establish controls that make school governance and management possible. Policies are the means by which educators are accountable to the public.

The Washington State School Directors' Association (WSSDA) states "... comprehensive, up-to-date policies are the foundation for success in any school district." Schools have an obligation to establish and implement infectious disease prevention procedures to protect students and staff at school. Control of infectious disease ensures a healthful, safe learning environment, and requires the cooperation of school administrators, school health services staff, teachers, local health departments, community healthcare providers, parents, and students.

#### **INFECTION CONTROL**

Infection control for schools requires two separate plans/policies. The first is a school or school district policy, which addresses <u>infectious disease prevention</u>. The second is the <u>mandated exposure control plan</u>, which outlines what steps the school will take to eliminate or minimize staff's <u>exposure</u> to blood and OPIM. The guidelines address the mandated exposure control plan (ECP) and related school employee training. For additional information on infectious disease prevention policies, refer to the *Infectious Disease Control Guide for School Staff* posted on the OSPI Health Services Web page at www.k12.wa.us/HealthServices/pubdocs/InfectiousDiseaseControlGuide3-11-04.pdf.

#### **EXPOSURE CONTROL**

The Washington Administrative Code (WAC), <u>WAC 296-823-11010</u>, requires employers to establish a written exposure control plan designed to eliminate or minimize employee exposure in the workplace.

The school's Exposure Control Plan **must** be a written policy and procedure and should:

- Be developed by the chief administrative officer, with the advice of the school nurse/school health services program manager and the school medical advisor.
- Utilize the guidelines from the Centers for Disease Control and Prevention (CDC), Washington State Department of Health (DOH), and local health departments.

<sup>1</sup> National Association of School Boards Association, (2010). *School Board Policies*. www.nsba.org/mainmenu/schoolboardpolicies.aspx. Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

- Be reviewed annually.
- Be specific to the school district's needs and requirements.
- Be detailed to meet state requirements that have been approved by the federal Occupational Safety and Health Administration (OSHA).

An overview of content that should be addressed in an exposure control plan can be found in Section 3.

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## **SECTION 3**

## **Exposure Control Plan**

#### **EXPOSURE CONTROL PLAN (ECP)**

Employees incur risk of infection and subsequent illness each time they are exposed to blood or other potentially infectious materials. An exposure incident means a specific eye, mouth, other mucous membrane (the moist layer of tissue that lines the mouth, eyes, nostrils, vagina, anus, or urethra), non-intact skin, or parenteral (piercing of mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions) contact with blood or other potentially infectious materials resulting from the performance of an employee's duties. The Exposure Control Plan (ECP) is the core element used to reduce worker risk by minimizing or eliminating employee exposure incidents to bloodborne pathogens, such as Hepatitis B Virus (HBV), Hepatitis C (HCV), and HIV. An ECP is the district's written policy for implementation of procedures relating to the control of infectious disease hazards for employees. The policy is to be part of the employee accident prevention program or infectious disease policy. ECP components are:

- 1. Exposure determination.
- 2. Control methods (See Handling Body Fluids in Schools at end of this section).
  - a. Standard precautions (includes universal precautions).
  - b. Hand washing procedures.
  - c. Use of gloves.
  - d. Contaminated sharps.
  - e. Cardiopulmonary Resuscitation (CPR).
  - f. Housekeeping practices.
- 3. Training and education of employees (see Section 5).
- 4. HBV vaccination.
- 5. Post-vaccination testing for immunity.
- Post-exposure evaluation and follow-up.
- 7. Record keeping.

Please note that for each of the components, the school staff position must be identified to determine whose job responsibility it will be to see that the school is in compliance. For example, the school safety officer, risk management officer, or human resources director could be designated to be responsible for the overall implementation of the plan including maintaining records and handling post-exposure incidents. The school nurse might be selected to provide the training.

#### **EXPOSURE DETERMINATION**

Any employee with occupational exposure to blood and other potentially infectious materials is protected by the ECP. Potentially infectious human body fluids are blood, 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.

Occupational exposure is defined by the Occupational Safety and Health Administration (OSHA) and the Washington State Department of Labor and Industries (L&I), Division of Occupational Safety and Health (DOSH), as "reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials, which may result from the performance of an employee's duties." In addition to being "reasonably anticipated," the contact must "result from the performance of an employee's duties."

Examples of occupations considered at risk in schools are listed below. However, individual job duties must be considered when determining those employees at risk.

- 1. School nurses who provide physical care in which blood or blood-tinged body fluids are present (suctioning, first aid, injections, etc.).
- 2. Teachers and aides providing physical care to students with potential exposure to blood, e.g., classrooms for the developmentally disabled where biting might be expected.
- 3. Bus drivers who transport students, described in #2 above, and/or staff who provide first aid to students.
- 4. Classroom contact with a student who behaves aggressively (biting, scratching) or has special medical problems such as open skin lesions, which increase the risk of exposure to his/her blood or serous secretions.
- 5. School Speech Language Pathologists (SLP) or therapists providing therapy to students, described in #2 and #4 above.
- 6. Coaches and assistants providing first aid.
- 7. First aid providers (to limit the number of employees with occupational exposure, it is recommended schools designate a limited number of first aid providers and assign them to high-risk areas such as playgrounds and the health room).
- 8. Custodians who clean and dispose of bloody wastes from classrooms (described in #2), or first aid rooms, or who police areas with contaminated wastes (broken glass, discarded drug paraphernalia, etc.).
- 9. Students in the health occupations.

Schools must provide the HBV vaccine to at-risk employees at no cost to employees. The school employee may decline the vaccine (WAC 296-823-13005).

NOTE: Local health departments may have staff who can assist school administrators in identifying school employees at risk of exposure to blood and OPIM. L&I offers free, confidential safety and health consultations and educational services to employers in

Washington through the Division of Occupational Safety and Health (DOSH) Consultation Program (See Appendix G).

#### **COMPLIANCE METHODS**

Compliance methods include information on:

- 1. Standard precautions (includes universal precautions).
- 2. Hand washing procedures.
- 3. Use of gloves.
- 4. Contaminated sharps.
- 5. Cardiopulmonary Resuscitation (CPR).
- 6. Housekeeping practices.
- 7. Signs and labels.

See Handling Body Fluids in Schools at end of this section for specifics.

#### **HBV VACCINATION**

The HBV vaccination shall be offered, at no cost, to all employees whose jobs involve the risk of directly contacting blood or other potentially infectious materials (<u>WAC 296-823-13005</u>).

Please see the previous section on Exposure Determination to identify employees who should be offered the vaccination. The vaccination is a series of three injections at zero, one, and six months. Field trials of the vaccines have shown 80–90 percent efficiency in preventing infections.

Vaccinations shall be given according to recommendations of the United States Public Health Service and administered by, or under the supervision of, a licensed healthcare professional. The Hepatitis B vaccination shall be made available after the employee has received the required training and within 10 working days of initial assignment to all employees who have occupational exposure risk. Employees may decline vaccination or provide the district with documentation of HBV immunity or a statement of contraindication to vaccination from the employee's licensed healthcare provider.

#### POST-VACCINATION TESTING FOR IMMUNITY

Testing for immunity after vaccination is not recommended routinely but is advised for persons for whom a suboptimal response may be anticipated, such as those who have received vaccine in the buttock, persons over 50 years of age, and persons known to have HIV infection. Post-vaccination testing for persons at occupational risk who may have needlestick exposures necessitating post-exposure prophylaxis. When necessary, post-vaccination testing should be done between one and six months after completion

of the vaccine series to provide definitive information on response to the vaccine. This decision to test for immunity is made by a licensed healthcare professional and is paid for by the employer.

#### POST-EXPOSURE EVALUATION AND FOLLOW-UP

Following a report of an exposure incident, the employer is required to make immediately available to the exposed employee a confidential medical evaluation and follow-up. The follow-up shall be:

- 1. Made available at no cost to the employee.
- 2. Made available at a reasonable time and place.
- 3. Performed by or under the supervision of a licensed healthcare provider.
- 4. Provided according to the United States Public Health Service (USPHS) recommendations, current at the time of evaluation.

If an employee has direct contact with blood or other potentially infectious materials, as from a needlestick, cut, bite, or eye splash, post-exposure treatment may be necessary. This depends on whether the source of the blood or other body fluid is infected with Hepatitis B, HIV, or Hepatitis C, and whether the employee exposed has previously received Hepatitis B vaccine. Referral to an appropriate licensed healthcare professional must occur as soon as possible after exposure for provision of immediate protection from Hepatitis B/HIV infection. Treatment for other exposure will be initiated by the licensed healthcare provider.

#### TRAINING AND EDUCATION OF EMPLOYEES

Section 5 contains recommended course content and curriculum materials for school district employees. The employer shall ensure all employees with exposure to blood or other potentially infectious materials participate in training, provided at no cost, to the employee during working hours. Material must be appropriate in content and vocabulary to educational level, literacy, and language background of employees. The training program is to contain the following elements:

- An accessible copy of the regulatory text of the WISHA standard and an explanation of its contents, <u>WAC 296-823</u>, Bloodborne Pathogens.
- An explanation of the modes of transmission of bloodborne pathogens.
- An explanation of the employer's exposure control plan, and the means by which the employee can obtain a copy of the written plan.
- An explanation of the appropriate methods for recognizing tasks and other activities, which may involve exposure to blood and other potentially infectious materials.
- An explanation of the use and limitations of methods of control, which may
  prevent or reduce exposure, including standard precautions, engineering
  controls, work practices, and personal protective equipment.

- An explanation of the basis for selection of personal protective equipment (primarily gloves).
- Information on the types, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment.
- Information on the HBV vaccine, including its efficacy, safety, and the benefits and risks of being vaccinated.
- An explanation of the procedure to follow if an exposure incident occurs and persons to contact in an emergency involving blood or other potentially infectious materials; method of reporting the incident; and the medical follow-up which will be made available.
- An explanation of the signs, labels, tags, and/or color coding used to denote biohazards, e.g., contaminated sharps containers.

#### **RECORD KEEPING**

There are two types of records that must be kept on school employees. One is a medical record on employees who sustain an occupational exposure. The other is training records.

#### **MEDICAL RECORDS**

For each employee, who has experienced an exposure incident, the employer must ensure that the following information is maintained in a confidential medical record:

- The name and social security number of the employee.
- Information regarding the employee's Hepatitis B vaccination status, dates of immunization, and medical records relative to the employee's ability to receive vaccination.
- Documentation of informed consent or refusal of HBV vaccination. (See sample in Appendix C.)
- Employees should be given copies of their own immunization records each time their records are updated.
- A copy of examination results, medical testing, and follow-up procedures, as required in the post-exposure evaluation.
- Following exposure, the employer's copy of the healthcare professional's written opinion.
- A copy of the information provided to the healthcare professional including the exposed employee's duties as they relate to the exposure incident, documentation of the route(s) of exposure, and circumstances under which exposure occurred.
- Medical records are never to be saved in personnel files. The record should be maintained by the health service provider on behalf of the employer, in accordance with RCW 70.02.

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The employer is responsible to ensure the employee records required by this regulation are kept confidential and are not to be disclosed or reported without the employee's express written consent to any person, within or outside the work place, except as required by regulation or by law. The employer shall maintain required records for at least the duration of employment plus 30 years. (WAC 296-802-20005).

#### TRAINING RECORDS

Training records must include the dates of the training sessions, as well as the contents or a summary of the training. The names and qualifications of persons conducting training must be included with the names and titles of all persons attending the training sessions. Training records must be retained for a period of three years from the date on which the training occurred (WAC 296-823-12015). (See samples in Appendix C.)

#### **SHARPS INJURY LOG**

The bloodborne pathogen rule requires that you establish and maintain a "Sharps Injury Log" to record all contaminated sharps injuries in a facility. (See Appendix C for sample form.)

#### You must:

- Record and maintain contaminated sharps injury information in a way that protects the confidentiality of the injured employee.
- Also record the following additional information for contaminated sharps injuries:
  - The type and brand of device involved in the incident.
  - The department or work area where the exposure incident occurred.
  - An explanation of how the incident occurred.
  - Maintain your contaminated sharps injury records for five years.

NOTE: You may record the additional information in any format you choose, such as on the OSHA 300 or 301 forms. It must be retrievable and identifiable to each specific injury.

#### HANDLING BODY FLUIDS IN SCHOOLS

#### **A. Standard Precautions** (includes universal precautions)

Standard precautions are a newer approach to infection control.<sup>2</sup> Broader than universal precautions, (many state laws refer to this term) they are recommended practice for protection against transmission of bloodborne pathogens and other infectious diseases in the workplace. Standard precautions combine the major features

<sup>&</sup>lt;sup>2</sup> Champion, C. 2005. Occupational Exposure to Bloodborne Pathogens, National Association of School Nurses, Inc., Silver Spring, MD.

of universal precautions (UP), and body substance isolation (BSI), and are based on the principle that all blood, body fluids, secretions (including respiratory secretions), excretions (except sweat), non-intact skin, and mucous membranes may contain transmissible infectious agents. Standard precautions include a group of infection prevention practices that apply to all persons, regardless of suspected or confirmed infection status, in any setting in which healthcare is delivered. These include hand hygiene, use of personal protective equipment depending on the anticipated exposure, and safe injection practices. Also, equipment or items in the environment likely to have been contaminated with infectious body fluids must be handled in a manner to prevent transmission of infectious agents (e.g., wear gloves for direct contact, contain heavily soiled equipment, properly clean and disinfect or sterilize reusable equipment). (Excerpted from CDC, 2007: Guideline for Isolation Precautions in Hospitals.)

NOTE: In its 2007 update, CDC added respiratory hygiene/cough etiquette to their standard precautions. Respiratory hygiene has become a standard practice in school and community influenza control plans.

The key steps to preventing disease spread at school are hand washing, gloving, and hand washing after removing gloves and before working with the next person.

#### **B.** General Precautions

- 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 body fluid exposure.
- 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.

#### C. <u>Hand Washing Procedures</u>

- Proper hand washing requires:
  - Use of a plain (non-antimicrobial) soap for routine hand washing and water and vigorous scrubbing for at least 15 seconds and then rinsing under a stream of temperate (warm) water. Soap suspends soil and microorganisms, allowing them to be washed off. Running water is necessary to carry away dirt and debris.
  - Use an antimicrobial agent or waterless antiseptic agent for specific circumstances, e.g., control of outbreaks or infections when soap and water are not available.
  - Use paper towels to turn off the water faucet.
  - Use paper towels to thoroughly dry hands.
  - Use paper towels to open any exit door.
  - Use paper towels to turn off light.
  - Wash after touching any body fluid or contaminated object.

- Wash after gloves are removed and between patients.
- Avoid chapped or cracked skin on hands.
- Facilities must provide an adequate supply of running potable water at a temperate temperature (85°-110°F), soap, and single-use towels or hot-air drying machines.
- When provision of hand washing facilities is not feasible, the employer must provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towel or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands must be washed with soap and running water as soon as feasible.

#### D. <u>Use of Gloves</u>

- When possible, direct skin contact with body fluids should be avoided.
- Disposable non-latex gloves should be available in the offices of coaches, custodians, nurses, principals, and staff in school settings such as the gymnasium, play fields, and health room where contact with blood or other body fluids is likely to occur. All other personnel should have access to first aid supplies, which includes gloves.
- Gloves should be worn when direct hand contact with body fluids is anticipated (treating bloody noses, handling clothes soiled by incontinence, cleaning small spills by hand).
- Disposable (single use) non-latex gloves must be replaced as soon as possible when contaminated or immediately, if they are torn, punctured, or when their ability to function as a barrier is compromised.
- Gloves, used for this purpose, should be placed in a plastic bag or lined trash can, secured, and disposed of daily.
- Because of the increasing incidence of allergic reactions to latex, only non-latex gloves should be used.
- Utility gloves may be cleaned and disinfected for reuse, if they show no signs of deterioration. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration, or when their ability to function as a barrier is compromised.
- Unbroken skin is an excellent barrier to infectious agents. Staff with sores or cuts on their hands (non-intact skin) having contact with blood or body fluids should always double glove, if lesions are extensive.
- Instruction to staff who are at risk for exposure to body fluids should include:
  - Staff should change gloves between tasks on the same student/staff person after contact with material, which may have a high concentration of microbes.
  - Teach staff, including bus drivers/monitors and trip sponsors, how to properly remove gloves.
  - Gloves need not be worn when feeding students or when wiping saliva from skin unless blood is present or the caregiver has cuts or wounds on their hands.

- Always wash hands with soap and water after removing gloves.
- Unanticipated skin contact with body fluids may occur in situations where gloves may not be immediately available (when wiping a runny nose, applying pressure to a bleeding injury outside of the classroom, helping a student in the bathroom). In these instances, hands and other affected skin areas of all exposed persons should be thoroughly washed with soap and water as soon as possible.
- As much as possible, have the student provide direct care for the wound (applying pressure, washing).
- If contact with contaminated body fluids to non-intact skin or mucous membranes does occur, the staff member should follow the school's policy for post-exposure management and seek medical evaluation of the need for post-exposure prophylaxis.

#### E. Contaminated Sharps

- Students should be advised to report needles but not touch them.
- Take care to prevent injuries when using needles and other sharps.
- Broken glassware, discarded needles, and other sharps must not be picked up directly with the hands. Cleanup must be accomplished using mechanical means such as a brush and dustpan, tongs, or forceps by staff wearing appropriate protective gloves.
- Contaminated, reusable sharps must not be stored or processed in a manner which requires employees to reach by hand into the containers where these sharps have been placed.
- Contaminated needles and other contaminated sharps must not be bent, recapped, or removed.
- Contaminated sharps must be discarded immediately in containers which are closable, puncture resistant, leak proof on sides and bottom, and labeled or color-coded.
- During use, containers for contaminated sharps must be easily accessible to personnel and located as close as possible to the immediate area where sharps are used (health rooms, science classrooms).
- The containers must be maintained upright throughout use, replaced routinely, and not be allowed to overfill.
- When moving containers of contaminated sharps from the area of use, they must be closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping. They must be placed in a secondary container if leakage is possible. The secondary container must be closable, constructed to contain all contents, and prevent leakage during handling, storage, transport, or shipping. The secondary container must also be labeled and color-coded.

- Containers for contaminated reusable sharps must meet all of the qualifications for disposable containers, except they do not need to be closeable, since devices will be removed from these containers.
- Shearing or breaking of contaminated needles is prohibited.
- Puncture resistant sharps containers should be provided if contaminated sharps (needles) are in the workplace.
- Disposal of these containers depends on local waste management programs.
   Check with the environmental health office of your local health jurisdiction for any additional local infectious waste disposal requirements and for information in the absence of a local infectious waste management program. (See Appendix F.)

#### F. Cardiopulmonary Resuscitation (CPR)

• Use resuscitation shields with one-way valve (mouth-to-mouth, mouth-to-nose, mouth-to-nose and mouth).

#### G. <u>Housekeeping Practices</u>

 Most schools have standard procedures already in place for removing body fluids (like blood or vomit). These procedures should be reviewed to determine whether appropriate cleaning and disinfection steps have been included.

#### H. General

- The employer must ensure that the worksite is maintained in a clean and sanitary condition and determine and implement an appropriate cleaning schedule for rooms where body fluids are present.
- Housekeeping workers must wear general-purpose utility gloves during all cleaning of blood or other potentially infectious materials.
- Cleaning schedules must be as frequent as necessary, depending on the area of the school, the type of surface to be cleaned, and the amount and type of soil present.

#### I. <u>Procedures for Cleaning and Disinfection of Hard Surfaces</u>

- Those who are cleaning should wear non-latex or utility gloves or other protective equipment and should avoid exposure of open skin or mucous membranes to the blood or body fluids.
- Disposable towels or tissues should be used whenever possible, and mops should be rinsed in disinfectant.
- Contaminated disposable items (tissues, paper towels, diapers) should be handled with disposable gloves and disposed of properly.
- Cleaning and disinfection of hard surfaces including sporting equipment, such as wrestling and gymnastic mats as well as desk and tabletops used for eating,

- should be done routinely at the conclusion of each day. (Some products clean and disinfect in one application, if the surface is not noticeably dirty.)
- When surfaces are overtly contaminated, clean immediately, or as soon as feasibly possible, with soap and water followed by an appropriate disinfectant after completion of procedures.

#### J. Blood or Body Fluid Spills

- Many schools stock sanitary absorbent agents specifically intended for cleaning body fluid spills. The dry material is applied to the area, left for a few minutes to absorb the fluid, then swept up and then wet-mopped.
- Broken glass should only be picked up, vacuumed, or swept up with a utensil.
- Dispose of broken glass in a container, which keeps others from being cut.
- After cleaning a spill, an appropriate disinfectant is then applied to the area and allowed to remain wet for at least the minimum time specified by the manufacturer. Soiled surfaces should be promptly cleaned with a United States Environmental Protection Agency (EPA) approved hospital disinfectant, which is either tuberculosis (TB) or HIV and HBV effective. A solution of six percent sodium hypochlorite (unscented household bleach) diluted 1:10 with water may also be used if allowed by the school.
- Dispose of non-reusable cleaning equipment.
- Wash hands after removing gloves.

#### K. Athletics

- During athletic contests or practice, an ample supply of towels should be available. Disposable towels and tissues are recommended for clean up, cloth towels for showering or bathing.
- Disposable towels must be used for one individual only and then disposed of in an appropriate receptacle.
- Gloves must be worn when handling blood or objects contaminated with blood.
- During sporting events or practice, competitors who are bleeding, have an open wound, or blood on the uniform shall not participate in an event until proper treatment is administered and surface is cleaned and disinfected. This may mean the player may be kept out of play.
- The bloodied portion of a uniform must be properly disinfected or the uniform changed before the athlete may participate. (See Laundry below.)
- Clean and sanitize mats before and after practice and matches. When mats are rolled up, all sides of mats should be cleaned before they are rolled up.

#### L. Procedures for Cleaning and Disinfection of Carpets/Rugs

- Those who are cleaning should wear non-latex or utility gloves or other protective equipment and should avoid exposure of open skin or mucous membranes to the blood or body fluids.
- Soiled rugs or carpets should be cleaned and disinfected promptly after a blood or body-fluid spill. It is recommended by the Washington State DOH that fecescontaminated carpet be disposed of.
- If necessary, mechanically remove body fluid with a dustpan and broom or vacuum. This should only be done with an appropriate wet vacuum extractor.
- Apply a sanitary absorbent agent on soiled area (follow manufacturer's directions). Let dry and re-vacuum.
- Spray with white vinegar solution (one ounce vinegar to one quart cool water).
- Blot area with paper towels.
- The area should be disinfected with an EPA approved disinfectant followed by an application of bacteriostatic rug shampoo.
- The vacuum bag or sweepings should be disposed of in a plastic bag.
- Rinse dustpan and broom in disinfectant.
- If necessary, wash brush with soap and water.
- Disinfect vacuuming equipment.
- Dispose of non-reusable cleaning equipment.

#### M. Disposal of Blood-Containing Materials

- School custodians should wear utility gloves for disposing of soiled items, plastic bags containing soiled items, and whenever there is a risk of puncture.
- If a towel, cloth, or item of clothing is so saturated with blood it would drip blood if compressed, then it should be disposed of in a biohazard bag or container.
- Place other items, which contain bodily fluids or excretions in a plastic bag, tie it, and place it in a second plastic bag. The second bag should then be tied.
- Double bagging prior to handling, storing, and/or transporting infectious waste is necessary if the outside of a bag is contaminated with blood or other potentially infectious materials.
- Equipment contaminated with blood or other potentially infectious materials must be checked routinely and decontaminated, if possible, prior to servicing or shipping.
- Equipment, which cannot be effectively disinfected, must be labeled with the international biohazard symbol and contaminated parts documented.
- Waste, such as bloody tissues (not saturated with blood), should be disposed of properly in a plastic-lined trash can. It is not considered hazardous material, so it can be thrown away in the school dumpster.

#### N. Procedures for Cleaning and Disinfection of Cleaning Equipment

- Soak mops in disinfectant after use and rinsed thoroughly, or wash in a hot water cycle before rinsing.
- Place disposable cleaning equipment in a plastic bag as appropriate.
- Dispose of water down the sewer system.
- Rinse non-disposable cleaning equipment (buckets) thoroughly in disinfectant.
- All bins, pails, cans, and similar receptacles intended for reuse and have a
  reasonable likelihood of becoming contaminated with blood or other potentially
  infectious materials, must be inspected and decontaminated on a regularly
  scheduled basis and cleaned and decontaminated immediately, or as soon as
  feasible, upon visible contamination.
- Dispose of used disinfectant solution down the sewer system.
- Promptly remove gloves and discard in appropriate receptacles.
- Wash hands.

#### O. <u>Procedures for Cleaning and Disinfection of Contaminated Laundry</u>

- Soiled linens should be handled as little as possible and with minimal agitation.
- The employer must ensure employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment (PPE).
- All soiled linens should be placed in plastic bags at the location where it was used.
- Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container, the laundry must be placed and transported in bags or containers, which prevent soak-through and/or leakage of fluids to the exterior.
- Reusable PPE and other non-disposable items (towels used to wipe up body fluid, etc.) soaked through with body fluids should be placed in plastic bags labeled with the international biohazard symbol or color-code.
- Required labels are to be affixed as close as feasible to the container by string, wire, adhesive, or other method, which prevents their loss or unintentional removal. Red bags or containers may be substituted for labels.
- If laundry is being washed at school (towels, etc.), they should be washed in soap and water at 160° F minimum and dried in a hot dryer. If not possible, you may wash at lower temperatures using an appropriate cleaning product for that temperature.
- Student clothing should be bagged and sent home for washing with appropriate directions to the parent/quardian.

#### P. Signs and Labels

 Warning labels must be affixed to containers of regulated waste. Labels should be fluorescent orange or orange-red with contrasting color writing. Red bags may be substituted for labels.

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## **SECTION 4**

HIV/AIDS and Other Bloodborne Pathogens Overview

#### HIV/AIDS AND OTHER BLOODBORNE PATHOGENS OVERVIEW

This section provides important information about bloodborne pathogens including HIV/AIDS and provides required information about the history, transmission, progression, and impact of diseases and their prevention, and can be used in conjunction with the training of school staff in Washington.

#### **DEFINITION**

What is a bloodborne pathogen? A bloodborne pathogen is a microorganism, such as a virus or bacteria, which is carried in the blood and body fluids and causes disease in humans. Examples of bloodborne pathogens include HIV/AIDS and Hepatitis B and C. (See the chart below for a summary of definitions, symptoms, incidence, and treatment for these three diseases.)

#### HEPATITIS<sup>3</sup>

The word *hepatitis* means "inflammation of the liver." Hepatitis can be caused by many things including drugs, toxins, and viruses. Symptoms may include fatigue, loss of appetite, low-grade fever, nausea, abdominal pain, gastrointestinal upset, and, in some cases, jaundice. There are several types of infections classified as viral hepatitis. Each infection is caused by a different virus. They differ in modes of transmission and clinical course. Laboratory and clinical evidence is necessary to distinguish between the types of hepatitis.

	HEPATITIS B	HEPATITIS C	HIV/AIDS
Definition	Hepatitis B is an inflammatory liver disease caused by the Hepatitis B virus (HBV). Infection results in liver cell damage. <sup>4</sup>	Hepatitis C is an inflammatory liver disease caused by the Hepatitis C virus (HCV), which infects liver cells.  Hepatitis C is the most common chronic bloodborne infection in the U.S., affecting three to five times as many people as HIV/AIDS. <sup>5</sup>	HIV stands for Human Immunodeficiency Virus. This virus causes AIDS. HIV attacks the immune system. The immune system gives bodies the ability to fight infections. HIV finds and destroys a type of white blood cell (T cells or CD4 cells), which the immune system must have to fight disease.
(Continued on page 24)			

<sup>3</sup> State of Washington Office of Superintendent of Public Instruction. *Infectious Disease Control Guide for* School Staff, April 2004, available at www.k12.wa.us/HealthServices/resources.aspx.

<sup>5</sup> Greenview Foundation. University of Michigan. Retrieved August 31, 2009, from

<sup>&</sup>lt;sup>4</sup> Hepatitis Foundation International. *The ABC's of Hepatitis*. Retrieved on August 31, 2009, from www.hepfi.org/living/liv abc.html?gclid=CNgzp4SlzpwCFQEhDQodMSSwJw.

www.hepcfund.org/hepatitis c.htm.

<sup>6</sup> Centers for Disease Control and Prevention, HIV/AIDS Basic Information. Retrieved August 31, 2009, from www.hepcfund.org/hepatitis\_c.htm.

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	HEPATITIS B	HEPATITIS C	HIV/AIDS
			AIDS stands for Acquired Immunodeficiency Syndrome. AIDS is the final stage of HIV infection. It can take years for a person infected with HIV, even without treatment, to reach this stage. Having AIDS means the virus has weakened the immune system to the point at which the body has a difficult time fighting infection. <sup>7</sup>
Transmission	Transmitted through bodily fluids and blood. Infected pregnant women can pass HBV to their baby during delivery. Durable virus, which can survive in dried blood for up to seven days.	Transmitted through blood.  Illegal injection drug use accounts for approximately 60 percent of new cases.  Other risk factors include: multiple sex partners, unsafe tattoos, occupational exposure, and mom-to-baby exposure.  Virus can live outside the body for up to 4 days, though may only survive up to 16 hours at room temperature.	Transmitted by being passed from one person to another when infected blood, semen, or vaginal secretions come in contact with an uninfected person's broken skin or mucous membranes. In addition, infected pregnant women can pass HIV to their baby during pregnancy or delivery, as well as through breastfeeding.  HIV is a fragile virus, which will not survive long outside the body.
Acute Symptoms	Some have mild flu- like symptoms.  About 50 percent have no symptoms.  25 percent have severe symptoms: fatigue, nausea, loss of appetite, abdominal pain, fever, joint pain, jaundice, dark urine, and light stools.	About 75–80 percent of persons have no signs or symptoms.  Related symptoms may include fatigue, nausea, dark urine, abdominal pain, loss of appetite, and jaundice.	Many people who are infected with HIV do not have any symptoms at all for ten years or more.
			(Continued on page 25)

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<sup>&</sup>lt;sup>7</sup> Centers for Disease Control and Prevention, HIV/AIDS Basic Information. Retrieved August 31, 2009, from www.cdc.gov/hiv/topics/basic/index.htm.

from <a href="https://www.cdc.gov/hiv/topics/basic/index.htm">www.cdc.gov/hiv/topics/basic/index.htm</a>.

Retrieved August 31, 2009, from <a href="https://www.cdc.gov/hiv/resources/qa/qa1.htm">www.cdc.gov/hiv/resources/qa/qa1.htm</a>.

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	HEPATITIS B	HEPATITIS C	HIV/AIDS
	Symptoms do resolve but the patient may still be infectious and may become chronically infected.		
Chronic Symptoms	Viral infection of liver is persistent.  May become a carrier and able to infect others.  Develop ongoing liver inflammation, cirrhosis of the liver, or liver cancer.  About 15–25 percent of people with chronic Hepatitis B die of liver disease.  Annual number of chronic liver disease deaths associated with Viral Hepatitis is 3,000.9	70 percent develop liver disease, cirrhosis of the liver, or liver cancer.  Most common cause of chronic liver disease in western countries and currently accounts for 40–60 percent of adult liver transplants in the U.S. 10  1–5 percent die from chronic HCV.  Annual number of chronic liver disease deaths associated with Viral Hepatitis is 12,000. 11	<ul> <li>The following may be warning signs of advanced HIV infection: 12</li> <li>Rapid weight loss.</li> <li>Dry cough.</li> <li>Recurring fever or profuse night sweats.</li> <li>Profound and unexplained fatigue.</li> <li>Swollen lymph glands in the armpits, groin, or neck.</li> <li>Diarrhea, which lasts for more than a week.</li> <li>White spots or unusual blemishes on the tongue, in the mouth, or in the throat.</li> <li>Pneumonia.</li> <li>Red, brown, pink, or purplish blotches on or under the skin, or inside the mouth, nose, or eyelids.</li> <li>Memory loss, depression, and other neurological disorders. 13</li> </ul>
			(Continued on page 26)

ODC Disease Burden from Viral Hepatitis A, B, and C in the United States 2009. www.cdc.gov/hepatitis/statistics.htm.

<sup>&</sup>lt;sup>10</sup> Greenview Foundation, University of Michigan (2009). *Hepatitis C Research*. Retrieved August 31, 2009, from <a href="http://hepcfund.org/hepatitis-c.htm">http://hepcfund.org/hepatitis-c.htm</a>.

<sup>&</sup>lt;sup>11</sup> CDC Disease Burden from Viral Hepatitis A, B, and C in the United States 2009. www.cdc.gov/hepatitis/statistics.htm.

Centers for Disease Control and Prevention (2007). HIV/AIDS Questions and Answers. Retrieved August 31, 2009, from <a href="https://www.cdc.gov/hiv/resources/qa/qa5.htm">www.cdc.gov/hiv/resources/qa/qa5.htm</a>.
 Ibid.

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	HEPATITIS B	HEPATITIS C	HIV/AIDS
			The World Health Organization estimates that almost two million people worldwide (who had antiretroviral treatment) died from AIDs in 2008 and over 2.5 million without antiretroviral treatment died. <sup>14</sup>
Incidence	In the U.S. an estimated 1.25 million chronic HBV carriers.  About 5 percent of adult cases result in chronic condition which can lead to serious liver problems and death (approximately 5,000/year in U.S.). 15	Estimated 4 million Americans have been infected with HCV (about 2 percent of the population).  About 80 percent result in chronic condition which can lead to serious liver problems and death (about 10,000–12,000/year in the U.S.). 16	CDC estimated 1.1 million people living with HIV/AIDS in the U.S. (2006).  Estimated 21 percent of those are undiagnosed and unaware of their infection.  Estimated 56,000 new HIV infections each year in the U.S.
Treatment	Vaccine is available to prevent HBV.  Series of three shots.  Antibodies last for 8–13 years plus.  No recommendations from CDC for a booster.  There are two medications to treat chronic HBV.	Currently, the only treatment is a combination therapy of two drugs. This treatment can lead to virus clearance in roughly 50 percent of patients.  However, the treatment is expensive and associated with many side effects.  At this time, there is no vaccine for Hepatitis C. <sup>17</sup>	No cure or vaccine.  Treatment regimes are expensive and complex and include combination antiretroviral medications.

<sup>&</sup>lt;sup>14</sup> UNAIDS – Epidemiology slides: 2009 AIDS epidemic update,

www.unaids.org/en/KnowledgeCentre/HIVData/Epidemiology/2009 epislides.asp.

15 Greenview Foundation, University of Michigan (2009). *Hepatitis C Research*. Retrieved August 31, 2009, from <a href="https://www.hepcfund.org/hepatitis\_c.htm">www.hepcfund.org/hepatitis\_c.htm</a>.

16 lbid.

<sup>&</sup>lt;sup>17</sup> Greenview Foundation, University of Michigan (2009). *Hepatitis C Research*. Retrieved August 31, 2009, from <a href="www.hepcfund.org/hepatitis\_c.htm">www.hepcfund.org/hepatitis\_c.htm</a>.

#### HISTORY AND EPIDEMIOLOGY OF HIV/AIDS

Of these three bloodborne pathogens, HIV and the AIDS illness have received attention in the U.S. since 1981, when the virus was first suspected in this country. In the more than 25 years since HIV/AIDS was identified in the U.S., much has taken place in the discovery of the virus, its complications, treatment, prevention efforts, and social impact as history reveals. The history of HIV/AIDS has been summarized by the Kaiser Family Foundation in their online document <u>The Global HIV/AIDS Epidemic: A Timeline to Key Milestones</u>. Brief highlights from this comprehensive history resource and others follow:

- **Before 1959:** HIV (the virus that causes AIDS) may have transferred to humans in Africa between 1884 and 1924. CDC identified a type of chimpanzee in West Africa as the source of HIV infection in humans. The virus most likely jumped to humans when humans hunted these chimpanzees for meat and came in contact with their infected blood.
- **1959:** African man dies of a mysterious illness, later determined to be from complications related to an HIV infection.
- **1970s:** African doctors see a rise in infections and wasting—a growing epidemic.
- **1981:** HIV was first identified in the United States after a number of gay men started getting sick with a rare type of cancer.
- 1982: CDC formally establishes the term Acquired Immune Deficiency Syndrome (AIDS).
- **1983:** Canadian flight attendant dies of AIDS; believed to be responsible for introducing the virus into the U.S. general population.
- **1984:** Scientists identify HIV (initially called HTLV-III or LAV) as the cause of AIDS. Ryan White, an Indiana teenager with AIDS, is barred from school; goes on to speak out publicly against AIDS stigma and discrimination.
- **1985:** One HIV/AIDS case has been reported from each region of the world.
- **1986:** Ricky Ray, a nine-year-old hemophiliac with HIV, is barred from Florida school, and his family's home is burned by arsonists.
- **1987:** AZT is the first drug approved for treating AIDS.
- **1988:** U.S. national AIDS education campaign conducted. A young girl with AIDS can only attend school if she is in a glass enclosure.
- **1992:** FDA approves the first drug to be used in combination with AZT.
- **1993:** After a British study, the AZT debate emerges, with one side proclaiming AZT saves lives, and the other denouncing AZT as useless.

(Continued on page 28)

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<sup>&</sup>lt;sup>18</sup> Kaiser Family Foundation (2007). *The Global HIV/AIDS Epidemic: A Timeline to Key Milestones*. Retrieved August 31, 2009, from <a href="www.kff.org/hivaids/timeline/hivtimeline.cfm">www.kff.org/hivaids/timeline/hivtimeline.cfm</a>.

1994: AZT is shown to reduce the risk of mother-to-child transmission of HIV.

**1996:** Combination antiretroviral treatment is shown to be highly effective against HIV progression.

**1997:** AIDS deaths begin to decline in developed countries, due to the new drugs.

**1998:** The first human trial in the United States of an HIV/AIDS vaccine begins. African AIDS activist is beaten to death by neighbors after publicly admitting she was HIV infected.

**2000:** Among men who have sex with men in the U.S., African American and Latino cases exceed those among white men.

**2002:** HIV is leading cause of death worldwide among those aged 15–59. UNAIDS reports women comprise about half of all adults living with AIDS worldwide.

2003: The first AIDS vaccine candidate to undergo a major trial is found to be ineffective.

**2006:** Evidence that male circumcision reduces the risk of heterosexually acquired HIV infection in men by approximately 60 percent.

2007: Another major HIV vaccine trial is halted after preliminary results show no benefit.

**2008:** CDC adjusted its estimate of new HIV infections because of new technology developed by the agency.

**2009:** CDC estimates about 1 million people in the United States are living with HIV or AIDS. About one- quarter of these people do not know they are infected. Not knowing puts them and others at risk.

Sources:

CDC www.cdc.gov/hiv/topics/basic/.

About.com www.aids.about.com/od/newlydiagnosed/a/hivtimeline.htm.

Avert <u>www.avert.org/aids-timeline.htm.</u>

As this timeline reveals, HIV/AIDS has probably been in existence for close to a century. The virus and illness has been addressed in the U.S. since 1981 when the first cases were suspected. In that time, scientists isolated and named the virus, and verified the connection between the HIV virus and AIDS. Medication has been developed to treat HIV/AIDS with some success, but a vaccine to prevent the disease has yet to be discovered. Though the system in which the numbers of cases in the U.S. are reported/recorded have changed recently, the numbers of persons with HIV both in the U.S. and the world stand at epidemic proportions.

#### **GLOBAL IMPACT OF HIV/AIDS**

The CDC estimates approximately 1.1 million persons are living with HIV in the U.S. This number is expected to continue to increase over time as antiretroviral treatments prolong the lives of those who are infected, and more people become infected with HIV than die from the disease each year. As the number of people living with HIV, or HIV

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prevalence grows, so does the opportunity for HIV transmission to others.<sup>19</sup> Youth AIDS<sup>20</sup> (2009) provides the following statistics regarding the incidence of HIV/AIDS.

#### Globally

- 33.2 million people now live with HIV or AIDS.
- In 2007, approximately 2.5 million people were infected with HIV.
- Every day, over 6,800 people become infected with HIV—almost 5 people per minute.
- 5,700 people die from AIDS every day.
- One child dies every minute.
- AIDS has orphaned 15 million children around the world, losing one or both parents to the disease.
- Every 15 seconds, another person age 15–24 becomes infected with HIV/AIDS.

#### **United States**

Roughly, 1 million people in the U.S. are living with HIV/AIDS.

- Since the start of the AIDS epidemic, 1.5 million Americans have been infected with HIV, and more than 524,000 have died of AIDS.
- African Americans account for 48 percent of new HIV infections.
- AIDS is the leading cause of death for African-American women aged 25–34, and HIV rates among Hispanic women are increasing.
- The number of women living with HIV has tripled in the last two decades.
- At least half of all new infections are among people under the age of 25.
- Washington, DC has the highest HIV/AIDS prevalence rates in the U.S., where 1 in 20 people are living with HIV or AIDS.

<sup>19</sup> Centers for Disease Control and Prevention (2008). *HIV Transmission Rates in the United States*. Retrieved September 2, 2009, from

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www.cdc.gov/hiv/topics/surveillance/resources/factsheets/transmission.htm#ref1.

Population International Youth AIDS (2009). Statistics. Retrieved September 2, 2009, from <a href="https://www.projects.psi.org/site/PageServer?pagename=Statistics\_nr&gclid=CN30uILXjJwCFSMeDQodDBPDYA">www.projects.psi.org/site/PageServer?pagename=Statistics\_nr&gclid=CN30uILXjJwCFSMeDQodDBPDYA</a>.

The Global Health Council<sup>21</sup> (2009) reports:

- HIV infections and AIDS deaths are unevenly distributed geographically and the
  nature of the epidemics vary by region. Epidemics are abating in some countries
  and burgeoning in others. More than 90 percent of people with HIV live in the
  developing world.
- There is growing recognition that the virus does not discriminate by age, race, gender, ethnicity, sexual orientation, or socioeconomic status—everyone is susceptible. However, certain groups are at particular risk of HIV, including men who have sex with men (MSM), injecting drug users (IDUs), and commercial sex workers (CSWs).
- The impact of HIV/AIDS on women and girls has been particularly devastating.
   Women and girls now comprise 50 percent of those aged 15 and older living with HIV.
- The impact of HIV/AIDS on <u>children</u> and <u>young people</u> is a severe and growing problem. In addition to the estimated 2.1 million children living with HIV/AIDS, about 15 million children have lost one or both parents due to the disease.

#### **HIV Infections and AIDS in Washington State**

In Washington State:

• There are between 600–800 reports of HIV and AIDS per year.

- On average 550–600 of these reports reflect new diagnoses of HIV disease.
- Approximately 85 percent of the new diagnoses from 2005 through 2007 were among males, and 73 percent were among individuals age 30 and older.
- From 2005 to 2007, approximately 62 percent of all new HIV diagnoses were reported among white, non-Hispanic persons, and about 62 percent of the new diagnoses were attributed to male-to-male sexual contact (either by itself or in conjunction with injection drug use).
- As of December 31, 2007, there were 10,059 persons reported to be living with HIV infection in Washington State, 56 percent of whom had AIDS.
- Annual deaths among individuals with AIDS have declined significantly since the advent of antiretroviral therapy (ART) in the mid-1990s.
- Approximately 125 deaths are reported to be associated with HIV and AIDS each year.<sup>22</sup>

For a current report on Washington State HIV/AIDS statistics, go to www.doh.wa.gov/cfh/hiv/default.htm.

<sup>21</sup> Global Health Council (2009). *Global Impact of HIV/AIDS*. Retrieved September 14, 2009, from <a href="https://www.globalhealth.org/hiv\_aids/">www.globalhealth.org/hiv\_aids/</a>.

Washington State Department of Health (2008). *Notifiable Conditions*. Retrieved September 14, 2009, from <a href="https://www.doh.wa.gov/notify/nc/hiv.htm">www.doh.wa.gov/notify/nc/hiv.htm</a>.

#### IMPACT OF HIV/AIDS ON INFECTED INDIVIDUALS AND THEIR FAMILIES<sup>23</sup>

HIV/AIDS has significant health, financial, social and emotional impacts on its victims. The Global Health Council reports HIV/AIDS has complicated efforts to fight poverty, improve health, and promote development by:

Diminishing a person's ability to support, work, and provide for his or her family. At the same time, treatment and health-care costs related to HIV/AIDS consume household incomes. The combined effect of reduced income and increased costs impoverishes individuals and households.

Deepening socioeconomic and gender disparities. Women are at high risk of infection. Children affected by HIV/AIDS, due to their own infection or parental illness or death, are less likely to receive an education as they leave school to care for ailing parents and younger siblings.

Straining the resources of communities—hospitals, social services, schools and businesses. Health care workers, teachers, and business and government leaders have been lost to HIV/AIDS. The impact of diminished productivity is felt on a national scale.

Stigma. A person may be inclined to hide sickness from their employer, spouse or partner, family and community because of the stigma associated with HIV/AIDS and myths about HIV transmission. This may keep them from seeking testing, counseling, or treatment services out of fear of disclosure repercussions such as discrimination by peers, clients, and co-workers.

Lack of resources and access to HIV/AIDS treatment and care. Many in need of medication lack access to antiretroviral therapy (ARVs). Access may be particularly difficult for people living in rural or remote areas far from a health center with no money for transportation. Women may be unable to leave children or household responsibilities.

Lack of power and control for women. Particularly where men are the sole breadwinners in a household, women may face physical abuse, abandonment, or blame after disclosing their infection to their husband or partner. In leaving such a situation, they may face destitution or rejection by family and community. Laws in many countries leave women without property or inheritance rights.

Lack of other medications. Someone with HIV may also suffer from opportunistic and related infections such as tuberculosis, malaria, Hepatitis C, pneumonia or cancer. Securing medication to address these diseases is often difficult because they are not available at local health centers or because of failure to coordinate efforts properly between disease-specific programs or clinics.

Lack of access to nutrition and clean water. People living with HIV/AIDS have high energy needs, so adequate nutrition is an integral complement to treatment. A proper diet reduces growth and development deficits among children and unwanted weight loss among adults. Clean water is essential for some pediatric formulations of ARVs. Famines, droughts, political events and loss of ability to farm may reduce supplies of food and clean water. Lack of access to these basic necessities is particularly harmful to pregnant women, children, and those on ARV therapy.

Uncertainty of the future. Governments may lack the will and the resources to secure sustainable sources of ARVs and to build capacity for the provision of care and treatment.

<sup>23</sup> Global Health Council (2009). Global *Impact of HIV/AIDS*. Retrieved September 14, 2009, from

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#### **HIV/AIDS TRANSMISSION**

#### How is HIV transmitted?

HIV can be transmitted from a person infected with HIV through:

- Sharing needles and/or syringes (primarily for legal and illegal drug use) or skinpiercing instruments (piercing equipment, tattooing equipment, razors).
- Unprotected anal, vaginal, or oral sex.
- Pregnancy, childbirth, or breastfeeding to an infant.
- Less commonly (and now very rarely in countries where blood is screened for HIV-antibodies), transfusions of infected blood or blood-clotting factors.<sup>24</sup>

### What body fluids transmit HIV?

HIV can be transmitted through the following types of body fluids:

- 1. Blood (and blood-containing tissues).
- 2. Semen and pre-ejaculatory fluid.
- 3. Vaginal and cervical secretions.
- 4. Breast milk.
- 5. Other body fluids containing blood.

### How long can the HIV virus survive?

HIV is a relatively fragile virus and does not remain viable for long periods of time outside of the human host and/or body fluids.

# HIV is not transmitted by casual contact,<sup>25</sup> including:

- Hugging.
- Shaking hands.
- Closed mouth kissing (but there is a very small chance of transmission from open-mouthed or "French" kissing with an infected person because of possible blood contact).
- Coughing.
- Sneezing.
- Eating food prepared by a person living with HIV.
- Being bit or stung by an insect.
- Working with, going to school with, or being around someone who has HIV.
- Using drinking fountains, phones, or toilet seats.
- Donating blood.

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<sup>&</sup>lt;sup>24</sup> Centers for Disease Control and Prevention (2007). *HIV and Its Transmission*. Retrieved September 2, 2009, from <a href="https://www.cdc.gov/hiv/resources/qa/transmission.htm">www.cdc.gov/hiv/resources/qa/transmission.htm</a>

<sup>&</sup>lt;sup>25</sup> Cox, Narra Smith (2003). School HIV/AIDS Policy Tool Kit, Wisconsin Department of Public Instruction.

The CDC developed a fact sheet to correct some of the common misperceptions about HIV. The fact sheet can be accessed at <a href="www.cdc.gov/hiv/resources/factsheets/">www.cdc.gov/hiv/resources/factsheets/</a>. (Highlights of this fact sheet are on the following pages.)

#### Households

Although HIV has been transmitted between family members in a household setting, this type of transmission is very rare. These transmissions are believed to have resulted from contact between skin or mucous membranes and infected blood. To prevent even such rare occurrences, precautions should be taken in all settings, including the home, to prevent exposures to the blood of persons who are HIV-infected, at risk for HIV infection, or whose infection and risk status are unknown.

#### **Businesses and Other Settings**

HIV could be transmitted if instruments contaminated with blood are not sterilized or disinfected between clients.

Instruments intended to penetrate the skin (such as tattooing and acupuncture needles, ear-piercing devices) should be used once and disposed of or thoroughly cleaned and sterilized. Instruments not intended to penetrate the skin but which may become contaminated with blood (for example, razors) should be used for only one client and disposed of or thoroughly cleaned and disinfected after each use.

#### **Kissing**

Casual contact through closed-mouth or "social" kissing is not a risk for transmission of HIV. Because of the potential for contact with blood during "French" or open-mouth kissing, CDC recommends against engaging in this activity with a person known to be infected. However, the risk of acquiring HIV during open-mouth kissing is believed to be very low.

#### **Biting**

Biting is not a common way of transmitting HIV. In fact, there are numerous reports of bites which did *not* result in HIV infection. There have been reports in the medical literature in which HIV appeared to have been transmitted by a bite. Severe trauma with extensive tissue tearing and damage and presence of blood were reported in each of these instances.

#### Saliva, Tears, and Sweat

Contact with saliva, tears, or sweat has never been shown to result in transmission of HIV.

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#### Insects

Studies conducted by CDC researchers, and elsewhere, have shown no evidence of HIV transmission through insects—even in areas where there are many cases of AIDS and large populations of insects such as mosquitoes.

#### **HIV IN THE UNITED STATES**

#### DISEASE PROGRESSION AND CURRENT TREATMENT

Disease progression for AIDS begins with the initial infection of a person with the HIV virus. HIV infection causes a person's immune system to weaken over time, making the person more vulnerable to otherwise harmless infections as well as malignancies. Some individuals who have HIV infection do not have any symptoms for many years. The time between infection with HIV and AIDS diagnosis varies greatly from person-to-person, with an average of 8–11 years.

Many factors affect the progression of the disease including general health status, behaviors, medical treatment, subsequent exposure, time at which antiretroviral treatment is initiated, treatment adherence, and others. Protease inhibitor combination therapies have dramatically improved the health of many people living with HIV, but these medications are not a "cure" and do not eliminate HIV from a person's body. Current treatments for HIV infection have extended life expectancy for people with HIV/AIDS and have reduced the number and severity of infections.<sup>26</sup>

#### **RISK REDUCTION BEHAVIORS**

CDC recommends specific behaviors to reduce one's risk of HIV transmission:<sup>27</sup>

- Do not share needles, syringes, and other equipment used to inject drugs, steroids, vitamins, or for tattooing or body piercing.
- Abstain from sexual intercourse or be in a mutually monogamous relationship with a partner who has been tested and is not infected.
- The correct and consistent use of male latex condoms can reduce the risk of HIV and other sexually transmitted infections (STI) transmission for persons whose sexual behaviors put them at risk for STIs.
- Condoms lubricated with spermicides are no more effective than other lubricated condoms in protecting against the transmission of HIV and other STIs. Avoid use of spermicidal detergent nonoxynol-9 (N9) or petroleum—based lubricants, which can increase transmission.
- Use of a female condom (a thin polyurethane sheath) helps to prevent STIs.

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Cox, Narra Smith (2003). School HIV/AIDS Policy Tool Kit, Wisconsin Department of Public Instruction.
 Centers for Disease Control and Prevention (2007). HIV and AIDS: Are You at Risk? Retrieved

#### Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

- For persons allergic to latex, condoms made of polyurethane (a type of plastic) are available.
- Do not share razors or toothbrushes because of the possibility of contact with blood.
- If pregnant, discuss with licensed healthcare provider about HIV testing and transmission associated with breastfeeding.
- Follow standard precautions (includes universal precautions) when handling blood or other potentially infectious materials.

#### **SUMMARY**

HIV/AIDS is an epidemic. A vaccine to prevent the virus has not yet been discovered. As the National Association of School Boards (NASB) states, "Strong, sustained efforts have helped to limit the epidemic, but the spread of the virus is still far from being stopped. As the nature of the epidemic steadily changes over time, the education system's response needs to adapt accordingly. Since a reliable HIV vaccine is still many years away, the only proven defense against HIV continues to be prevention education."

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<sup>&</sup>lt;sup>28</sup> National Association of School Boards (2007). *Continuing HIV/AIDs Epidemic*. Retrieved September 14, 2009, from

 $<sup>\</sup>underline{www.nsba.org/MainMenu/SchoolHealth/SearchSchoolHealth/TheContinuingEpidemicofHIVAIDSGoodN}\\ \underline{ewsBadNewsandtheRoleofSchools.aspx}.$ 

Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

# **SECTION 5**

Bloodborne
Pathogens and
HIV Prevention
Training For
School Staff

The information contained in this section is designed to be used as a stand alone training module for human resources personnel, school nurses, health educators, and other staff responsible for training school staff on HIV/AIDS and bloodborne pathogens (BBP).

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#### INTRODUCTION

Section 5 of these guidelines provides human resources personnel, school nurses, health educators, and other staff responsible for training, direction in providing mandated school staff training on HIV/AIDS and bloodborne pathogens (BBP). Washington State law requires all school staff with occupational exposure receive training annually on this topic in order to increase their knowledge and to prevent exposure to bloodborne pathogens (WAC 296-823-12005).

In most cases, training can be accomplished through:

- A face-to-face meeting.
- A meeting for the express purpose of the training or as part of a regularly scheduled faculty meeting.
- Online with an opportunity for staff to ask questions.
- As part of beginning of the school orientation.

Special accommodations for bus drivers, food staff, custodial staff, and others may need to be arranged to accommodate their schedules.

Online training might be developed for staff to complete on their own. Accommodations must be made to allow employees an opportunity to ask questions of an instructor or administrator and receive responses at the time of the training.

Documentation of this training must be kept either in the school/school district's offices or in the human resources division.

#### **Adult Learning Principles**

It is important for the BBP trainer to be familiar with adult learning principles before providing training for school staff. All adults learn differently. A clear understanding of adult learning styles and domains will help the instructor develop a training session, which will meet the needs of all of the participants, as well as provide a more effective training. Using a variety of formats helps to keep the training interesting and addresses different adult learning styles. Role play, demonstration, and videos/DVDs can be used. (See Appendix D).

# RECOMMENDED COURSE CONTENT FOR SCHOOL EMPLOYEE HIV/AIDS AND BBP TRAINING

#### **WORKSHOP PURPOSE**

To provide mandated initial and annual BBP training to all school staff to meet Washington State requirements, including:

- History, epidemiology, symptoms, and treatment of HIV/AIDS.
- Methods of transmission of HIV and HBV.
- Methods of prevention including universal precautions.
- State and federal laws governing discrimination against persons with HIV/AIDS.
- State and federal laws regarding confidentiality of a person's HIV antibody status.

#### **WORKSHOP GOALS**

The workshop goals are to:

- Increase participants' knowledge of the history, epidemiology, symptoms, and treatment of HIV/AIDS and other bloodborne diseases.
- Increase participants' knowledge of rates of HIV/AIDS and other bloodborne viruses globally, nationally, and statewide.
- Increase participants' knowledge of how HIV/AIDS and other bloodborne viruses are transmitted, and what protective measures can be taken to prevent their transmissions.
- Familiarize participants with their school's exposure control plans.
- Increase participants' awareness of the need for safety and compliance with the laws, which surround this topic.

#### **BEHAVIORAL OBJECTIVES**

After completing the workshop, participants will be able to:

- Identify three diseases caused by bloodborne pathogens.
- Describe three ways bloodborne pathogens are transmitted.
- Identify how to access federal and state laws regarding HIV/AIDS.
- Describe at least two ways persons with HIV/AIDS, HBV are protected by law.
- Identify ways to access their school's exposure control plan.
- Describe at least three ways they can protect themselves from bloodborne pathogens.
- Describe at least three resources available to them.

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MA	TERIALS CHECKLIST		
	Name tags and registration materials Agenda Overhead projector or LCD (optional) Screen or Internet projection Internet access, if applicable Flipcharts and markers  Masking tape or wall tape Overhead Transparencies or PowerPoint Timer or watch with second hand Handouts, as indicated Handouts (resources and pre/post tests) Evaluation forms		
AD\	VANCE PREPARATION NEEDED		
1.	Make sure participants receive sufficient advance notice of training date and all necessary registration process information.		
2.	Determine if refreshments/lunch will be served. Communicate refreshment/lunch details to participants in their invitation. If refreshments/lunch will be provided, arrange for lunch delivery specifics with training site and/or caterer.		
3.	Check with school or training site in advance to determine:		
	<ul> <li>a. Availability of training materials (overhead, flip chart, etc.).</li> <li>b. Internet access coupled with LCD projector (optional).</li> <li>c. Appropriate room and room set-up.</li> <li>d. Number of expected participants.</li> </ul>		
4.	Prepare training materials for each participant.		
	Agenda and name tags. Copies of PowerPoint and/or overhead transparencies, presentation notes, if applicable. Handouts of resources, pre- and post-tests, and evaluation forms.		
5.	Select a pre- and post-test. The pre- and post-test should reflect the information being presented. Allow time for participants to take the tests. Selecting several test formats and/or content for use in different trainings will vary the training. (Samples of pre/post tests are included in Appendix B.)		
6.	A video/DVD may be used to accompany the training. Preview any video/DVD materials to be used. (Several video/DVD sources are listed in Appendix H.)		
7.	Select a short (no more than 10 minutes) warm-up activity to use during a shorter presentation. If doing a longer presentation, have a very brief energizer to use to get participants moving around.		

#### TRAINING OUTLINE

#### I. Purpose of the Training

- A. Washington State law (<u>RCW 70.24.290</u>) requires initial training for <u>all</u> staff on HIV/AIDS and other bloodborne pathogens including history, epidemiology, symptoms and treatment, methods of transmission, and methods of prevention. Additionally, information regarding confidentiality must be addressed.
- B. In 1991 the Occupational Safety and Health Administration (OSHA) finalized a federal regulation to protect employees against exposure to Bloodborne Pathogens (BBP), the "Bloodborne Pathogen Standard."
  - The BBP Standard requires an <u>annual</u> refresher training for <u>all</u> employees with occupational exposure (<u>WAC 296-823-12005</u>).
  - Inform employees how to obtain a copy of the standard (or provide a handout).

#### II. Importance of Addressing HIV/AIDS and Other Bloodborne Pathogens

- A. Data—globally, nationally, and for Washington State
- B. Current trends in data
- C. Impact on population

### III. Epidemiology and Symptoms of BBP

- A. Bloodborne pathogens definition
- B. Diseases caused by BBP
  - Hepatitis B
  - Hepatitis C
  - HIV/AIDS
- C. Description of the following diseases: Hepatitis B (HBV), Hepatitis C (HCV), and HIV/AIDS (See Appendix B.)
  - Definition
  - Incidence
  - Transmission
  - Durability of virus
- D. Symptoms of Hepatitis B (HBV), Hepatitis C (HCV), and HIV/AIDS
  - Acute
  - Chronic
  - Disease progression

#### IV. Modes and Rates/Risks of BBP Transmission

- A. How BBP are transmitted
  - Sources

- Potentially infectious body fluids
- B. How BBP are not transmitted
- C. Transmission Rates
- D. Risk of infection based on occupational exposure

#### V. Treatment and Preventative Vaccination

- A. Antiviral Drugs
- B. Hepatitis B Vaccine
  - Employee eligibility
  - Administration
  - Risks and benefits
  - Efficacy
  - Vaccine waiver options
  - How long is someone protected
  - Recommendations for booster shots

### VI. Laws that Protect Against Discrimination and Protect Confidentiality

A. Laws that protect an employee's confidentiality and protect them from discrimination (See Appendix A.)

#### VII. Exposure Control Plan

- A. Overview/Contents of the plan
- B. Responsibilities
- C. Implementation
- D. Location of copy of the plan
- E. Occupational exposure risk
- F. Refer to copies of the individual school/school district's plan (A sample exposure control plan can be found in Appendix E.)

#### **VIII. Control Measures**

- A. Standard/Universal precautions
  - Definition
  - Procedures involved
  - Demonstrate hand washing (or use video/DVD) (See Appendix B.)
  - Demonstrate removal of gloves (See Appendix B.)
- B. Personal protective equipment
  - Definition
  - Proper use
  - Location
  - Handling and decontamination
  - Disposal

- C. Handling of Biohazard Materials
  - Definition
  - Biohazard containers
  - Location and proper use
  - Warning labels and signs

#### IX. Hepatitis B Vaccination

- A. Eligibility
- B. Safety benefits
- C. Methods of administration
- D. Availability
- E. Signature accepting or declining vaccination

#### X. Post Exposure

- A. Procedure
- B. Evaluation and follow-up

#### XI. Resources

- A. Resources should be individualized for each district/school
- B. Providing a handout of resources is an option
- C. Videos/DVDs and handouts can be used to supplement the presentation (See Appendix B.)
- D. Emphasize the instructor's availability for questions and provide contact information
- E. Review how to access additional information including local health departments (See Appendix H.)

#### POWERPOINT PRESENTATION

A sample PowerPoint presentation that coordinates with this outline is available online at <a href="www.k12.wa.us/HealthServices/resources.aspx">www.k12.wa.us/HealthServices/resources.aspx</a>. It must be adapted to reflect each individual school district's Exposure Control Plan (ECP). A copy of the Bloodborne Pathogen Standard, <a href="www.lni.wa.gov/wisha/rules/bbpathogens/PDFs/823-Complete.pdf">www.lni.wa.gov/wisha/rules/bbpathogens/PDFs/823-Complete.pdf</a>, and the school district's ECP should be handed out or inform the participants how to obtain a copy.

It is important to note that presentations should be updated, as necessary, with current data and information. Visiting CDC's Web site, and other Web sites noted in this document, frequently and before a presentation, will help to ensure the presentation has current information.

The amount of time allocated for staff training is dependent on whether the employees are new and this is the initial training or if it is an annual update. Additionally, the length of time may be dependent on whether videos/DVDs are viewed to supplement the training. These agendas are samples and offered to provide suggestions for time only. Instructors will need to determine their agendas based on need.

# SAMPLE AGENDA (1.5 hours for new employee training) for use with handouts found in the Appendices.

8:30	Welcome and Introductions
8:40	Introduction and Purpose of Workshop
8:45	Pre-test
8:50	Data on HIV/AIDS and other bloodborne pathogens (BBP)
8:55	Epidemiology and symptoms of BBP
9:00	Modes of transmission of BBP
9:05	Treatment
9:10	Laws that protect against discrimination and protect confidentiality
9:15	Exposure Control Plan
9:20	Control Measures
9:30	Hepatitis B Vaccination
9:35	Post-Exposure
9:40	Resources
9:45	Discussion/Summary
9:50	Post-test
10:00	Adjourn

Online training can be used for new staff training. The required information, as outlined above, must be included. It is suggested that evaluation or "grading" of the pre- and post-tests be built into the computer program so that tests are evaluated automatically by the program with a pre-determined pass percentage established. The trainer or person in charge of training (human resources, school nurse, or other qualified trainer) can view the results of staff that do not pass the tests and provide follow-up. Online training must be followed-up with an opportunity for employees to meet with a knowledgeable trainer for an interactive question and answer session.

Documentation that staff participated in training and what the training entailed is required. (See Appendix C.)

#### **Annual Training**

# Annual training of school staff at risk for occupational exposure is required by law and should include:

- 1. Information on any updates in regard to occupational exposure to bloodborne pathogens including any new laws or state regulations.
- 2. Review employee's assurance of confidentiality and protection against discrimination. (See Appendix A.)
- 3. Review of Exposure Control Plan (ECP). Provide a copy of the plan and/or where it is located.
- 4. Review control measures outlined in the ECP (with special attention to hand washing, use of gloves, and other Personal Protective Equipment (PPE). (See handouts in Appendix B.)
- 5. Review eligibility for Hepatitis B vaccination.
- 6. Review post-exposure procedures as outlined in the ECP.
- 7. Provide resources.
- 8. Allow for interactive questions and answers.

#### This training can be accomplished in a variety of ways:

- Conduct a meeting, using the sample agenda for the new staff training provided on the previous page.
- Have staff view a video/DVD or PowerPoint slide presentation, either online or perhaps in a faculty planning or lunch room, at their convenience and within a reasonable time period. Then meet with staff at a faculty meeting or a specific meeting for this purpose to review any updates, provide handouts, and answer questions.
- School districts may choose to develop or purchase an online training course as long as it is accompanied by an opportunity for staff to meet with a knowledgeable trainer for an interactive question and answer session.

Documentation that staff participated in training and what the training entailed is required. (See Appendix C.)

Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

# **Section 6**

# References and Resources

#### REFERENCES

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- Centers for Disease Control and Prevention (CDC). 2007. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. www.cdc.gov/ncidod/dhqp/pdf/guidelines/Isolation2007.pdf.
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- 5. Camas School District Exposure Control Plan.

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- 6. Ozias, J. and Taliaferro, V. (eds). 2010. School Nurse Resource Manual A Guide to Practice, [Seventh Edition.] School Health Alert, Nashville, TN.
- 7. State of Washington, Office of Superintendent of Public Instruction, Department of Health. 2004. *Infectious Disease Control Guide for School Staff.*<a href="https://www.k12.wa.us/HealthServices/pubdocs/infectiousDiseaseControlguide3-11-04.pdf">www.k12.wa.us/HealthServices/pubdocs/infectiousDiseaseControlguide3-11-04.pdf</a>.
- 8. Tacoma Health Department. MRSA Toolkit for Middle and High Schools.

  Infection Control Guidance for Middle & High School Athletic Directors,

  www.tpchd.org/file\_viewer.php?id=2084.
- 9. United States Department of Labor, Occupational Safety and Health
  Administration. OSHA home/Bloodborne pathogens standards.

  www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=STANDA
  RDS&p\_id=10051.
- 10. Washington State Department of Health. 2009. Help Control the Spread of Infectious Diseases in Schools.

  www.doh.wa.gov/ehp/ts/School/diseasecontrol.pdf.

#### **RESOURCES**

- The Office of Superintendent of Public Instruction (OSPI) and the Washington State Department of Health (DOH) have developed a checklist which schools can use in developing the Exposure Control Plan. The checklist may be found in the document entitled School Health & Safety Guide (2003–p.38) at www.k12.wa.us/SchFacilities/Publications/pubdocs/CompleteSafety&HealthManual2 002-2003.pdf. (Note: This manual is currently under revision.)
- 2. The Washington State Department of Labor and Industries (L&I) has developed a sample template for an exposure control plan. It is accessible at <a href="https://www.lni.wa.gov/wisha/rules/bbpathogens/HTML/HT7.htm">www.lni.wa.gov/wisha/rules/bbpathogens/HTML/HT7.htm</a>. The template was developed with the small business employer in mind and needs to be adapted to fit your specific needs. When using templates, be sure all information contained in the program is specific to, and meets the needs of your workplace including modifying the template(s) to your own site, work practices, and personnel.
- 3. The Occupational and Safety Health Administration (OSHA) has Model Exposure Plans available at <a href="https://www.freeoshainfo.com/pubpages/Files/bbp/ModelPlansforBBP.pdf">www.freeoshainfo.com/pubpages/Files/bbp/ModelPlansforBBP.pdf</a>.
- 4. The Washington State DOH links to an infection control checklist for athletics from the Tacoma-Pierce County Health Department. This checklist can be accessed at <a href="https://www.tpchd.org/page.php?id=365">www.tpchd.org/page.php?id=365</a>.
- 5. The Washington State DOH provides guidance in the document, *Help Control the Spread of Infectious Diseases in Schools*, at <a href="https://www.doh.wa.gov/ehp/ts/school/diseasecontrol.pdf">www.doh.wa.gov/ehp/ts/school/diseasecontrol.pdf</a>.
- 6. Hand washing posters suitable for students are available from the Washington State Health Education Resource Exchange at <a href="https://example.com/hereids-projects/hand-washing">here.doh.wa.gov/materials-projects/hand-washing</a>.
- 7. Additional information is available from the Washington State DOH, School Environmental Health and Safety Program, at (360) 236-3072, or the Infectious Disease and Reproductive Health Program, at (360) 236-3424.
- 8. Specifications for School Buses, 2006 (p.20), available from OSPI, Student Transportation, at (360) 725-6120. This document is also available at www.k12.wa.us/transportation/pubdocs/06specmanual.pdf.

Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

# **APPENDIX A**

Laws That Affect HIV/Bloodborne Pathogens Policies for School Districts

#### **LEGAL REFERENCES**

Various laws establish parameters for the rights and privacy of individuals with HIV and other communicable diseases, and the requirements for staff training concerning HIV infection. This section provides links to the specific federal or state law/s and a brief description of the law. The Washington statutes cited are available at <a href="https://www.leg.wa.gov/Pages/home.aspx">www.leg.wa.gov/Pages/home.aspx</a>. This document, *Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens*, is provided as a resource. It is not intended as a substitute for legal counsel.

The following are the key legal references with implications for HIV policies for school districts:<sup>29</sup>

FEDERAL STATUTES			
Federal Laws Governing Discrimination of Persons with HIV/AIDS			
Americans with Disabilities Act of 1990	Disability discrimination prohibited.		
(ADA) Title 11 Section 504, Rehabilitation Act of 1973	Protects individuals infected with HIV /AIDS from discrimination. <sup>30</sup>		
Civil Rights Act of 1991	Prohibits discrimination on basis of disability.		
34 CFR Part 300 Individuals with Disabilities Act of 1997 (IDEA)	Guarantees access to education and related services to assist children with disabilities to benefit from special education.		
Federal Laws Regulating Confidentiality of a Person's HIV Status			
34 CFR 99 Family Educational Rights and Privacy Act (FERPA)	Provides privacy restrictions on student records in an educational setting.		
PL 104-91 Health Insurance Portability and Accountability Act of 1996 (HIPAA)	Establishes federal privacy standards to protect patients' medical records and other health information. The HIPAA Privacy Rule protects the privacy of individually identifiable health information. Under HIPAA, employers are required to protect the privacy of employees' personal health-related information by designating an in-house privacy official, adopting policies and procedures to keep this information private, and notifying employees of their privacy rights, among other things.		

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<sup>&</sup>lt;sup>29</sup> Adapted from *School HIV/AIDS Policy Tool Kit* (2003), Wisconsin Department of Public Instruction by Narra Smith Cox University of Wisconsin–Madison.

<sup>&</sup>lt;sup>30</sup> U.S. Department of Health and Human Services, Office for Civil Rights/CDC. (1993) <u>Your Rights as a Person With HIV Infection</u>, AIDS, or Related Conditions: In Federally Funded Health and Human <u>Service Programs</u>.

Federal Laws Addressing Rights of Students and Employees in Regard to HIV/AIDS and BBP		
<u>CPL 02-02-069 - CPL 2-2.69</u> (2001)	Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens. Revised Bloodborne Pathogens Standard expands bloodborne pathogens to include any pathogenic microorganism, including Hepatitis C virus (HCV) present in blood or other potentially infectious materials (OPIM).	
29 CFR Part 1910 (December, 2008)	Occupational safety; Bloodborne Pathogen Standard.	

Washington General Statute and Rules HIV/Bloodborne Pathogens Available at <a href="https://www.leg.wa.gov/legislature">www.leg.wa.gov/legislature</a>			
State Laws Regulating Training and Protection of School Employees			
RCW 70.24.290	Public School Employee–Rules for AIDS Education and Training authorizes the Office of Superintendent of Public Instruction (OSPI) to adopt rules requiring appropriate education and training of public school employee about the transmission, prevention, and treatment of HIV/AIDS. OSPI is required to develop course content in consultation with the Department of Health (DOH) under RCW 70.24.290.		
WAC 392-198	<ul> <li>Training—School Employees—HIV/AIDS         Requires all employees to have training and education, which includes:         <ul> <li>History, epidemiology, and treatment of HIV/AIDS.</li> <li>Methods of transmission of HIV.</li> <li>Methods of prevention including universal precautions.</li> <li>State and federal laws governing discrimination against persons with HIV/AIDS.</li> <li>State and federal laws regarding confidentiality of a person's HIV-antibody status.</li> </ul> </li> <li>Each school district shall ensure that newly hired school district employees shall receive the HIV/AIDS training prescribed in WAC 92-198-015 within six months from the first day of employment in the district.</li> </ul>		
(Continued on page 52)			

State Laws Regulating Training and Protection of School Employees (continued)			
WAC 296-823 or http://www.lni.wa.gov/wisha/Rules/bbpathogens/PDFs/823-Complete.pdf	Bloodborne Pathogens. Provides requirements to protect employees from exposure to blood or other potentially infectious materials (OPIM), which may contain bloodborne pathogens. Examples of bloodborne pathogens are the human immunodeficiency virus (HIV) and Hepatitis B virus (HBV). Mandates employers have an Exposure Control Plan and provide training for employees at		
State Laws Regulating Confidenti	risk for occupational exposure.  ality of a Person's HIV Antibody Status		
RCW 70.02.020	In Washington, physicians, other licensed health providers, and social workers, among others, are prohibited by statute from disclosing such confidential communications without the explicit consent of the client, except in specific circumstances.		
RCW 70.24.105	Protection against disclosure of test subject, diagnosis, or treatment. Also applies to any information relating to diagnosis of, or treatment for HIV infection and for any other confirmed sexually transmitted disease (STD).		
WAC 162-22-090	Employee health care information shall be kept in a confidential manner, separate from the employee's regular personnel files. The employer may share health care information only on a need-to-know basis.		
WAC 246-100-036	Communicable Disease Reporting and Confidentiality. The local (county) health officer shall establish plans, policies, and procedures for instituting emergency measures necessary to prevent the spread of communicable disease or contamination. They must also ensure anonymous HIV testing is reasonably available; make HIV testing, AIDS counseling, and pre-test and post-test counseling available; make information on anonymous HIV testing, AIDS counseling, and pre-test and post-test counseling available.		
WAC 246-101-101	Notifiable Conditions and the Health Care Provider. This section describes the conditions when Washington's health care providers must notify public health authorities.		
<u>WAC 246-101-105, 246-101-110, 246-101-115, 246-101-120</u>	Includes requirements for how notifications shall be made, when they shall be made, the content of these notifications, and how information regarding notifiable conditions cases must be handled and may be disclosed.		
	(Continued on page 53)		

State Laws Regulating Confidentiality of a Person's HIV Antibody Status (continued)		
WAC 246-101-120	All records containing patient identifying information are confidential.	
WAC 246-101-635	Except under certain conditions, Department (of Health) personnel must not disclose identifying information received as a result of receiving information regarding a notifiable conditions report of a case of AIDS or HIV. The state health officer is required to take measures to maintain confidentiality of patient information by all department employees with access to HIV identifying information.	
WAC 246-101-420	Responsibilities of Schools to Notify. Schools must notify the local health department of cases, or suspected cases, or outbreaks and suspected outbreaks of disease, which may be associated with the school. Schools must protect the confidentiality of persons with a notifiable condition, releasing identifying information only to other individuals responsible for protecting the health and well-being of the public. Schools shall establish and implement policies and procedures to maintain confidentiality related to medical information in their possession.	
WAC 246-110-020	Control of Communicable Disease. When there is an outbreak of a contagious disease within a school or day care center, the local health officer shall take all medically appropriate actions deemed to be necessary to control or eliminate the spread of the disease.	

State Laws Regulating Protection Against Discrimination		
RCW 49.60.174	People who are HIV-positive or who have AIDS are protected from employment discrimination under the Washington Law Against Discrimination (WLAD), which prohibits unfair practices in employment, real estate, public accommodation, credit, and insurance, with respect to actual or perceived HIV infection or actual or perceived Hepatitis C infection, perceived susceptibility to HIV or Hepatitis C infection, or a positive test for HIV or Hepatitis C.	
RCW 49.60.172	No person may require an individual to take an HIV test as a condition of hiring, promotion, or continued employment, unless absence of HIV infection is a bona fide occupational qualification for the job in question.	
(Continued on page 54)		

State Laws Regulating Protection Against Discrimination (continued)			
HB 3026 K-12 Education – Prohibition of Discrimination	In 2010, the Washington State Legislature and Governor Gregoire passed HB 3026, a new law regarding discrimination in public education.  Effective June 10, 2010, HB 3026 bans discrimination in public schools based on race, creed, religion, color, national origin, sexual orientation including gender expression or identity, veteran or military status, the presence of any sensory, mental, or physical disability, or the use of		
	a trained dog guide or service animal by a person with a disability. The OSPI Equity and Civil Rights Office, <a href="www.k12.wa.us/equity">www.k12.wa.us/equity</a> , is responsible for creating administrative rules to implement HB 3026.		

The following are summaries of the major federal laws, which impact HIV/Communicable Disease policies.

#### Americans with Disabilities Act (ADA)

The ADA prohibits discrimination on the basis of disability in employment, state and local government, public accommodations, commercial facilities, transportation, and telecommunications. To be protected by the ADA, one must have a disability or have a relationship or association with an individual with a disability. An individual with a disability is defined by the ADA as a person who has a physical or mental impairment which substantially limits one or more major life activities, a person who has a history or record of such impairment, or a person who is perceived by others as having such impairment. The ADA does not specifically name all of the impairments which are covered.<sup>31</sup>

A major life activity includes education. Therefore, if a student attends school and has a disability (of which HIV is one), the ADA affects the school's responsibility to the student. School teams are responsible for determining what barriers exist for a student with a disability and how to resolve those issues.

# The Family Educational Rights and Privacy Act (FERPA)<sup>32</sup>

FERPA (20 U.S.C. § 1232g; 34 CFR Part 99) is a federal law which protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high

<sup>&</sup>lt;sup>31</sup> U.S Department of Justice (2005). *A Guide to Disability Rights Laws.* www.usdoi.gov/crt/ada/cguide.htm.

<sup>&</sup>lt;sup>32</sup> U.S. Department of Education (2009). Family Educational Rights and Privacy Act (FERPA). Ed.gov. www.ed.gov/policy/gen/guid/fpco/ferpa/index.html.

school level. Parents or eligible students have the right to inspect and review the student's education records maintained by the school.

#### Individuals with Disabilities Education Act (IDEA)

IDEA (formerly called P.L. 94-142 or the Education for all Handicapped Children Act of 1975) requires public schools to make available to all eligible children with disabilities a free appropriate public education in the least restrictive environment appropriate to their individual needs. IDEA requires public school systems to develop appropriate "Individualized Education Programs" (IEPs) for each child. The specific special education and related services outlined in each IEP reflect the individualized needs of each student.<sup>33</sup>

The IEP outlines the specific services and supports the child needs within the least restrictive environment (LRE). The IEP and LRE provisions have been protected as basic rights of children with disabilities. Parent involvement is also a fundamental principle of IDEA. Parents must be fully informed of their children's rights, and they can participate in all decisions affecting their child. IDEA also outlines due process provisions, which allow parents to challenge school district decisions.

IDEA release and disclosure requirements are substantially identical to those in FERPA.

#### Section 504 of the 1973 Rehabilitation Act

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against persons with disabilities in all programs and activities conducted by recipients of federal financial assistance. This applies to employees of education agencies as well as to students.

In matters pertaining to education, the lead agency is the U.S. Office for Civil Rights, U.S. Department of Education (DOE). Section 504 has a substantial effect on education, since educational programs for students with disabilities must be equal to those provided to others. Educational agencies that receive U.S. DOE funds, either directly or indirectly, are considered recipients.

Like IDEA, Section 504 requires identification, evaluation, and provision of appropriate services, notification of parents, an individualized accommodation plan, and procedural safeguards. These activities must be performed in accordance with Section 504 regulations, which have some requirements that differ from those of IDEA.

<sup>&</sup>lt;sup>33</sup> U.S. Department of Justice (2005). *A Guide to Disability Rights Laws*. www.usdoj.gov/crt/ada/cguide.htm.

### Health Information Portability and Accountability Act of 1996 (HIPAA)

Public Law 104-191, HIPAA was implemented by the federal government to ensure uniform privacy protections of individual's health information including those with HIV. HIPAA provides privacy regulations to protect patients by limiting the ways health plans, pharmacies, hospitals, and other covered entities can use patient's personal medical information. The privacy rule of the law, however, provides a broad exemption for personal health information maintained in education records, **which is protected under FERPA**.<sup>34</sup>

### Bloodborne Pathogen Standard<sup>35</sup>

WAC 296-823 is a regulation requiring employers to protect employees from occupational exposure to bloodborne pathogens. Under 1910.1030, employers who have employees with occupational exposure (as defined by paragraph (b) of the standard) must establish an Exposure Control Plan (ECP), which describes how the following elements of the standard, at a minimum, will be implemented: Methods of compliance including engineering and work practice controls; personal protective equipment and housekeeping; Hepatitis B vaccination and Post-Exposure Evaluation and Follow-up; Communication of Hazards to Employees; and Recordkeeping including medical records, training records, and Sharps Injury Logs.

The ECP also must include an exposure determination which lists all job classifications in which **all** employees in those job classifications have occupational exposure; all job classifications in which **some** employees have occupational exposure; and those tasks and procedures in which occupational exposure occurs and are performed by those employees determined to be occupationally exposed. **Any employee**, who has been determined to be occupationally exposed, as defined by the standard, must be offered the Hepatitis B vaccination within 10 working days of initial assignment but after the employee has received the initial training required by this standard.

The ECP must be reviewed at least annually and updated whenever necessary to reflect new or modified tasks and procedures, which affect occupational exposure and also to reflect new or revised employee positions with occupational exposure. Although documentation of the review is not required, it is recommended the employer do so to ensure the review is being conducted at least on an annual basis and each affected employee has access to the most current plan.

Costanzo, Lisa (2006). Public Schools: Requirements for Written Programs, Occupationa Hygienist Volume No. 47, Fall 2006 CONN-OSHA Quarterly.

National Forum on Education Statistics (2004). Forum Guide to Protecting the Privacy of Student Information: State and Local Education Agencies, NCES 2004–330. Washington, DC., <a href="https://www.nces.ed.gov/pubs2004/privacy/index.asp">www.nces.ed.gov/pubs2004/privacy/index.asp</a>.
 Costanzo, Lisa (2006). Public Schools: Requirements for Written Programs, Occupational

In addition to the annual review of the ECP, the employer must provide information and training as outlined in paragraph (g) (2) (vii) to employees with occupational exposure at the time of initial assignment to tasks where occupational exposure may take place, at least annually thereafter (which means within one year of their previous training) and whenever changes (i.e., tasks or procedures) take place, which affect the employee's occupational exposure. Training must be documented in accordance with paragraph (h) (2) (i) of the standard.

Note: Occupational Safety & Health Administration (OSHA) has approved a Washington State plan. In Washington, state and local government employees must comply with the Washington Industrial Safety and Health Act (WISHA).

Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

# **APPENDIX B**

Sample Handouts and Pre/Post Tests for Training

#### **Brief Summary of the HIV Epidemic**

#### **Before 1959:**

HIV (the virus that causes AIDS) may have transferred to humans in Africa between 1884 and 1924. CDC identified a type of chimpanzee in West Africa as the source of HIV infection in humans. The virus most likely jumped to humans when humans hunted these chimpanzees for meat and came into contact with their infected blood.

- 1959 African man dies of a mysterious illness, later determined to be from complications related to an HIV infection.
- **1970s:** African doctors see a rise in infections and wasting—a growing epidemic.
- **1981:** HIV was first identified in the United States after a number of gay men started getting sick with a rare type of cancer.
- 1982: CDC formally establishes the term Acquired Immune Deficiency Syndrome (AIDS).
- **1983:** Canadian flight attendant dies of AIDS; believed to be responsible for introducing the virus into the U.S. general population.
- **1984:** Scientists identify HIV (initially called HTLV-III or LAV) as the cause of AIDS; Ryan White, an Indiana teenager with AIDS, is barred from school; goes on to speak out publicly against AIDS stigma and discrimination.
- **1985:** One HIV/AIDS case has been reported from each region of the world.
- **1986:** Ricky Ray, a nine-year-old hemophiliac with HIV, is barred from Florida school, and his family's home is burned by arsonists.
- **1987:** AZT is the first drug approved for treating AIDS.
- **1988:** U.S. National AIDS Education campaign conducted. A young girl with AIDS can only attend school if she is in a glass enclosure.
- **1992:** FDA approves the first drug to be used in combination with AZT.
- **1993** After a British study, the AZT debate emerges, with one side proclaiming AZT saves lives and the other denouncing AZT as useless.
- **1994:** AZT is shown to reduce the risk of mother-to-child transmission of HIV.
- **1996:** Combination antiretroviral treatment is shown to be highly effective against HIV progression.
- **1997:** AIDS deaths begin to decline in developed countries, due to the new drugs.
- **1998:** The first human trial in the United States of an HIV/AIDS vaccine begins; African AIDS activist is beaten to death by neighbors after publicly admitting she was HIV infected.
- **2000:** Among men who have sex with men in the U.S., African American and Latino cases exceed those among white men.
- **2002:** HIV is leading cause of death worldwide, among those aged 15–59. UNAIDS reports women comprise about half of all adults living with AIDS worldwide.
- **2003:** The first AIDS vaccine candidate to undergo a major trial is found to be ineffective.
- **2006:** Evidence that male circumcision reduces the risk of heterosexually acquired HIV infection in men by approximately 60 percent.
- 2007: Another major HIV vaccine trial is halted after preliminary results show no benefit.
- **2008:** CDC adjusted its estimate of new HIV infections because of new technology developed by the agency.
- **2009:** CDC estimates about 1 million people in the United States are living with HIV or AIDS. About one-quarter of these people do not know they are infected: not knowing puts them and others at risk.
- Sources: CDC: www.cdc.gov/hiv/topics/basic/index.htm#origin.

About.com: www.aids.about.com/od/newlydiagnosed/a/hivtimeline.htm.

Avert: www.avert.org/aids-timeline.htm.

#### **STANDARD PRECAUTIONS (includes universal precautions)**

**Definition:** Standard precautions (includes universal precautions) are recommended practice for protection against transmission of bloodborne pathogens and other infectious diseases in the workplace. In 1996 the CDC expanded the concept of infection control/universal precautions. Standard precautions apply to contact with blood, all body fluids, secretions (including respiratory secretions), and excretions (except sweat), whether they contain visible blood, and are based on the principle that these body fluids may contain transmissible infectious agents.

Note: In its 2007 update, CDC added respiratory hygiene/cough etiquette to their standard precautions. Respiratory hygiene has become a standard practice in school and community influenza control plans.

The key steps to preventing disease spread at school are hand washing, gloving, and hand washing after removing gloves and before working with the next person.

#### 1. Wash Hands

- Wash after touching any body fluid or contaminated object.
- Wash after gloves are removed and between patients.
- Use a plain (non-antimicrobial) soap, for routine hand washing, and water and vigorous scrubbing for at least 15 seconds. Then rinse under a stream of temperate (warm) water. Soap suspends soil and microorganisms allowing them to be washed off. Running water is necessary to carry away dirt and debris.
- Use an antimicrobial agent or a waterless antiseptic agent for specific circumstances (e.g., control of outbreaks or infections).
- Avoid chapped or cracked skin on hands.

#### 2. Gloves

- Wear gloves when touching blood, body fluids, excretions or secretions (except sweat), or contaminated items.
- Wear gloves when touching mucous membranes and non-intact skin.
- Change gloves between tasks on the same patient after contact with material that may have a high concentration of microbes.
- Teach staff, including bus drivers/monitors and trip sponsors, how to properly remove gloves.

#### 3. Needles

- Students should be advised to report needles but not touch them.
- Staff must use utility gloves when picking up needles/syringes from school grounds.
- Never recap needles. Use puncture resistant containers in which the entire needle unit can be disposed into, use a one-handed "scoop" technique, or use devices designed to hold the needle sheath. Puncture-resistant sharps containers should be located as closely as possible to the location where the needle is used.

### **STANDARD PRECAUTIONS (includes universal precautions)**

- Dispose of sharps in a solid container, e.g., commercial sharps box or other approved container, and transport to the reprocessing area. Check with the local health department for approved collection procedures.
- Take care to prevent injuries when using needles and other sharps.
- 4. Cardiopulmonary Resuscitation (CPR)
  - E. Use resuscitation shields with one-way valve (mouth-to-mouth, mouth-to-nose, mouth-to-nose and mouth).
- 5. Disposal of blood-containing materials
  - If a towel, cloth, or item of clothing is so saturated with blood that it would drip blood if compressed, then it should be disposed of in a biohazard bag or container.
  - Place other items that contain bodily fluids or excretions in a plastic bag, tie it, and place it in a second plastic bag. The second bag should then be tied.
  - School custodians should wear utility gloves for disposing of soiled items, plastic bags containing soiled items, and whenever there is a risk of puncture.
  - Broken glass should be vacuumed, swept, or picked up only with utility gloves.
     Dispose of broken glass in a container that keeps others from being cut.

Reference: CDC <u>2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings</u> and *School Nurse Resource Manual–A Guide to Practice* (Seventh Edition, Revised 2010)–School Health Alert.

## Comparison Summary Chart - Differences Between HBV, HCV, HIV/AIDS

	Hepatitis B	i iepatitis C	HIV/AIDS
Definition	Hepatitis B is an inflammatory liver disease caused by the Hepatitis B virus (HBV). Infection results in liver cell damage. 36	Hepatitis C is an inflammatory liver disease caused by the Hepatitis C virus (HCV), which infects liver cells.  Hepatitis C is the most common chronic bloodborne infection in the U.S., affecting three to five times as many people as HIV/AIDS. <sup>37</sup>	HIV stands for Human Immunodeficiency Virus. This virus causes AIDS. HIV attacks the immune system. The immune system gives bodies the ability to fight infections. HIV finds and destroys a type of white blood cell (T cells or CD4 cells), which the immune system must have to fight disease.  AIDS stands for Acquired Immunodeficiency Syndrome. AIDS is the final stage of HIV infection. It can take years for a person infected with HIV, even without treatment, to reach this stage. Having AIDS means the virus has weakened the immune system to the point at which the body has a difficult time fighting infection. 39
Acute Symptoms	Some have mild flu-like symptoms.  About 50 percent have no symptoms.  25 percent have severe symptoms: fatigue, nausea, loss of appetite, abdominal pain, fever, joint pain, jaundice, dark urine, and light stools.  Symptoms do resolve but the patient may still be infectious and may become chronically infected.	About 75–80 percent of persons have no signs or symptoms  Related symptoms may include fatigue, nausea, dark urine, abdominal pain, loss of appetite, and jaundice.	Many people who are infected with HIV do not have any symptoms at all for 10 years or more.  (Continued on page 63)

<sup>36</sup> Hepatitis Foundation International. *The ABC's of Hepatitis*. Retrieved on August 31, 2009, from www.hepfi.org/living/liv\_abc.html.

Greenview Foundation. University of Michigan. Retrieved August 31, 2009, from

www.hepcfund.org/hepatitis\_c.htm.

Senters for Disease Control and Prevention, HIV/AIDS Basic Information. Retrieved August 31, 2009,

from <a href="https://www.cdc.gov/hiv/topics/basic/index.htm">www.cdc.gov/hiv/topics/basic/index.htm</a>.

Genters for Disease Control and Prevention, HIV/AIDS Basic Information. Retrieved August 31, 2009,

from www.cdc.gov/hiv/topics/basic/index.htm.

# Comparison Summary Chart - Differences Between HBV, HCV, HIV/AIDS

	Hepatitis B	Hepatitis C	HIV/AIDS
Chronic Symptoms	Viral infection of liver is persistent.  May become a carrier and able to infect others.  Develop ongoing liver inflammation, cirrhosis of the liver, or liver cancer.  About 15–25 percent of people with chronic Hepatitis B die of liver disease.  Annual number of chronic liver disease deaths associated with Viral Hepatitis is 3,000.	70 percent develop liver disease, cirrhosis of the liver, or liver cancer.  Most common cause of chronic liver disease in western countries and currently accounts for 40–60 percent of adult liver transplants in the U.S. 41  One to five percent die from chronic HCV.  Annual number of chronic liver disease deaths associated with Viral Hepatitis is 12,000. 42	<ul> <li>The following may be warning signs of advanced HIV infection: 43</li> <li>Rapid weight loss.</li> <li>Dry cough.</li> <li>Recurring fever or profuse night sweats.</li> <li>Profound and unexplained fatigue.</li> <li>Swollen lymph glands in the armpits, groin, or neck.</li> <li>Diarrhea, which lasts for more than a week.</li> <li>White spots or unusual blemishes on the tongue, in the mouth, or in the throat.</li> <li>Pneumonia.</li> <li>Red, brown, pink, or purplish blotches on or under the skin or inside the mouth, nose, or eyelids.</li> <li>Memory loss, depression, and other neurological disorders. The WHO estimates that almost two million people (who had antiretroviral treatment) worldwide died from AIDs in 2008, and over 2.5 million without antiretroviral</li> </ul>

<sup>&</sup>lt;sup>40</sup> CDC Disease Burden from Viral Hepatitis A, B, and C in the United States 2009.

www.cdc.gov/hepatitis/statistics.htm.

41 Greenview Foundation, University of Michigan (2009). Hepatitis C Research. Retrieved August 31, 2009, from www.hepcfund.org/hepatitis\_c.htm.

<sup>&</sup>lt;sup>42</sup> CDC Disease Burden from Viral Hepatitis A, B, C in the United States 2009. www.cdc.gov/hepatitis/statistics.htm.

<sup>&</sup>lt;sup>43</sup> CDC, (2007). *HIV/AIDS Questions and Answers*. Retrieved August 31, 2009, from www.cdc.gov/hiv/resources/qa/qa5.htm.

44 lbid.

<sup>&</sup>lt;sup>45</sup> UNAIDS - Epidemiology slides: 2009 AIDS epidemic update. www.unaids.org/en/KnowledgeCentre/HIVData/Epidemiology/2009\_epislides.asp.

## Comparison Summary Chart - Differences Between HBV, HCV, HIV/AIDS

	Hepatitis B	Hepatitis C	HIV/AIDS
Incidence	In the U.S. an estimated 1.25 million chronic HBV carriers.	Estimated 4 million Americans have been infected with HCV (about 2 percent of the population).	CDC estimated 1.1 million people living with HIV/AIDS in the U.S. (2006).
	About 5 percent of adult cases result in chronic condition which can lead to serious liver	About 80 percent result in a chronic condition which can lead to serious liver problems	Estimated 21% of those are undiagnosed and unaware of their infection.
	problems and death (approximately 5,000/year in U.S.).46	and death (about 10,000– 12,000/year in the U.S.). <sup>47</sup>	Estimated 56,000 new HIV infections each year in the U.S.
Treatment	Vaccine is available to prevent HBV.	Currently, the only treatment is a combination therapy of 2	No cure or vaccine.
	Series of three shots.  Antibodies last for 8–13	drugs. This treatment can lead to virus clearance in roughly 50 percent of patients. However, the	Treatment regimes are expensive and complex and include combination antiretroviral medications.
	years plus.	treatment is expensive and associated with many side	
	No recommendations from CDC for a booster. There are two	At this time, there is no	
	medications to treat chronic HBV.	vaccine for Hepatitis C.48	

Greenview Foundation, University of Michigan (2009). Hepatitis C Research. Retrieved August 31, 2009, from <a href="www.hepcfund.org/hepatitis\_c.htm">www.hepcfund.org/hepatitis\_c.htm</a>.
 Ibid.
 Greenview Foundation, University of Michigan (2009). Hepatitis C Research. Retrieved August 31, 2009.

<sup>2009,</sup> from <a href="www.hepcfund.org/hepatitis\_c.htm">www.hepcfund.org/hepatitis\_c.htm</a>.

#### HANDWASHING PROCEDURE



1. Wet hands thoroughly.



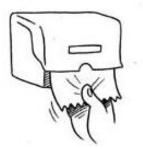
2. Apply soap.



3. Rub hands vigorously for for 15–20 seconds or more.



4. Rinse thoroughly.



5. Use disposable towel to dry hands thoroughly.



6. Use towel to turn off faucet.

# Hand hygiene with soap and water



Wet hands with water



apply enough soap to cover all hand surfaces



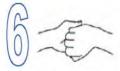
rub hands palm to palm



right palm over left dorsum with interlaced fingers and vice versa



palm to palm with fingers interlaced



backs of fingers to opposing palms with fingers interlocked



rotational rubbing of left thumb clasped in right palm and vice versa



rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



rinse hands with water



dry thoroughly with a single use towel



use towel to turn off faucet



...and your hands are safe.

Pandemic influenza training modules for humanitarian agencies Module 4: infection prevention and control



# Hand hygiene with alcohol-based rub



Apply a palmful of the product in a cupped hand and cover all surfaces.





palm to palm with fingers interlaced



rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa





Rub hands palm to palm



backs of fingers to opposing palms with fingers interlocked





...once dry, your hands are safe.





Right palm over left dorsum with interlaced fingers and vice versa

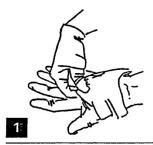


rotational rubbing of left thumb clasped in right palm and vice versa

Pandemic influenza training modules for humanitarian agencies Module 4: infection prevention and control



### **Correct Procedure for Removing Gloves**



Grasp glove at heel of hand without touching skin



Pull glove toward fingers



Remove glove from hand



While holding soiled glove, insert index finger and middle of free hand under glove at cuff



Pull glove toward fingers



6.



As glove is removed it is turned inside out, over the glove that has already been removed



Discard contaminated gloves in appropriate waste container and wash hands

Jame	
School/Building	
<u></u>	
PRE/POST TEST (used and adapted with permission from Indiana Department of Educations: Answer the following questions prior to the presentation. Once the present oncluded, return to this document and answer the questions again in the "post test" ection for each question.	ntation has
. Which of the following should be thrown into a special "medical waste" tras receptacle?  (a) A tissue with mucus. (b) A plastic bandage with a small drop of blood. (c) A paper towel completely soaked with blood. (d) All of the above.  POST TEST  (a) A tissue with mucus. (b) A plastic bandage with a small drop of blood. (c) A paper towel completely soaked with blood. (d) All of the above.  ALL vomit should be considered a risk for bloodborne pathogen transmissing (a) True. (b) False.	
<u>POST TEST</u> (a) True.	
(b) False.	
<ul> <li>Used lancets and syringes with needles should be discarded in</li> <li>(a) A "sharps" container.</li> <li>(b) A "sharps" container OR a "medical wastes" trash bag if the needle is recalled (c) The regular trash if the needle is recapped.</li> <li>(d) All of the above.</li> </ul> POST TEST <ul> <li>(a) A "sharps" container.</li> </ul>	apped.
(a) A sharps container. (b) A "sharps" container OR a "medical wastes" if the needle is recapped. (c) The regular trash if the needle is recapped. (d) All of the above.	rash bag
<ul> <li>A "pathogen" is any microorganism that causes disease.</li> <li>(a) True.</li> <li>(b) False.</li> </ul>	
<u>POST TEST</u> (a) True.	
(b) False.	

		<u>POST TEST</u>
		(a) True.
		(b) False.
6.	The Hepatitis B virus can some (a) True. (b) False.	survive well outside the human body.
		POST TEST
		(a) True.
		(b) False.
<b>/</b> .	(a) HIV. (b) Hepatitis B. (c) Hepatitis C. (d) None of the above.	for which of the following?
		POST TEST
		POST TEST (a) HIV.
		(a) HIV.
		(a) HIV. (b) Hepatitis B.

8. The best action to follow when encountering any bodily fluid is . . .

(c) "If you see no red or green, then it should be safe to clean."

(a) "Wipe it up quickly, if the person looks sickly."(b) "Just let it dry, and the bad stuff will die."

(d) "If it's wet, and it's not yours, don't touch it."

5. HIV can survive well outside the human body.

(a) True. (b) False.

- POST TEST

  (a) "Wipe it up quickly, if the person looks sickly."
  - (b) "Just let it dry, and the bad stuff will die."
  - (c) "If you see no red or green, then it should be safe to clean."
  - (d) "If it's wet, and it's not yours, don't touch it."

9.	The best barrier method to pathogens you may enco	for protecting yourself from exposure to any bloodborne
	(a) A paper towel.	uniter at school is
	(b) Non-latex (or other	medical grade) gloves
		h has been soaked in a bleach/water solution.
	(d) Either (b) or (c).	
	( , ( , ( , ( , ( , ( , ( , ( , ( , ( ,	POST TEST
		(a) A paper towel.
		(b) Non-latex (or other medical grade) gloves.
		(c) A hand towel, which has been soaked in a bleach/wate
		solution.
		(d) Either (b) or (c).
10	Washing your hands ofto	
10	. Washing your hands afte	r cleaning up bodily fluids is not necessary if gloves were
	(a) True.	
	(b) False.	
	(3) 1 3331	POST TEST
		(a) True.
		(b) False.
11	Individuals with minor ou	ts or bloody wounds should be instructed to apply pressure
	to the injury themselves.	is of bloody woulds should be instructed to apply pressure
	(a) True.	
	(b) False.	
		POST TEST
		(a) True.
		(b) False.
12	Standard progrutions (in	cludes universal precautions) for handling bodily fluids only
12		an injured or sick individual is known to have an infectious
	disease.	
	(a) True.	
	(b) False.	
		POST TEST
		(a) True.
		(b) False.

#### 13. [QUESTION FOR TEACHERS and SCHOOL STAFF].

You should fill out a report per your school's "Post- Exposure Control Plan" in the following situation/s:

- (a) You were pricked by a medical syringe which was thrown in a school trash can.
- (b) You cleaned up a puddle of blood while wearing non-latex gloves.
- (c) You used a tissue as the only barrier when stopping a child's nose from bleeding.
- (d) All of the above.
- (e) Both (a) and (c).

#### POST TEST

- (a) You were pricked by a medical syringe which was thrown in a school trash can.
- (b) You cleaned up a puddle of blood while wearing non-latex gloves.
- (c) You used a tissue as the only barrier when stopping a child's nose from bleeding.
- (d) All of the above.
- (e) Both (a) and (c).

### **ANSWERS**

- 1. (c) A paper towel completely soaked with blood.
- 2. (b) False.
- 3. (a) A "sharps" container.
- 4. (a) True.
- 5. (b) False.
- 6. (a) True.
- 7. (b) Hepatitis B.
- 8. (d) "If it's wet, and it's not yours, don't touch it."
- 9. (b) Non-latex (or other medical grade) gloves.
- 10. (b) False.
- 11. (a) True.
- 12. (b) False.
- 13. (e) Both (a) and (c).

An additional sample of pre/post tests, provide by North Central Educational Service District (ESD), may be found at:

www.ncesd.org/167310410151051473/lib/167310410151051473/Training\_Quiz.doc.

Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

### **APPENDIX C**

**Sample Forms** 

A more complete resource of forms and documentation tools may be found on the WISHA Web site, <a href="www.lni.wa.gov/wisha/rules/bbpathogens/default.htm">www.lni.wa.gov/wisha/rules/bbpathogens/default.htm</a>.

# SAMPLE Hepatitis B Vaccine Declination Form

(Adapted from the Washington State Department of Labor and Industries)

Facility Name:
I understand that due to my occupational exposure to blood or other potentially infectious materials (OPIM), I may be at risk of acquiring Hepatitis B virus (HBV) infection.
You have given me the opportunity to be vaccinated with the Hepatitis B vaccine at no charge to myself.
However, I decline the 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.  I have already received the Hepatitis B vaccination series.
Dates vaccine received:
Employee's Name (Print)
Employee's Signature
Date

### SAMPLE

### **Training Documentation Form**

(Adapted from Washington State Department of Labor and Industries)

Facility Name
Training Subject or Title
Training Dates
Contents or summary of the training sessions.
Employees who completed this training:  Name  Job Title
Trainer/s
Qualifications
Note: Training records must be maintained for three years after the data of the

Note: Training records must be maintained for three years after the date of the training.

# SAMPLE BLOODBORNE PATHOGENS TRAINING RECORD

(Adapted from the Washington State Department of Labor and Industries)

A training session was conducted for employees at <u>(name of school/other)</u> regarding occupational exposure to bloodborne pathogens on <u>(date of training)</u>.

The training consisted of:

- A. An explanation of WAC 296-62-08001 Bloodborne Pathogens.
- 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, which may involve exposure to blood and other potentially infectious materials.
- F. An explanation of the use and limitations of methods, which 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 on 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, which will be made available.
- L. Information on the post-exposure evaluation and follow-up 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.
- N. An opportunity for interactive questions and answers with the person conducting the training session.

The	The trainers (and their qualifications) were:				
1					
2.					
3.					
_					

(The list of attendees is attached.)

#### SAMPLE-SHARPS INJURY LOG

### Use with Chapter 296-823 WAC, Occupational Exposure to Bloodborne Pathogens

Establishment Name:		Year
---------------------	--	------

The Bloodborne Pathogen rule requires that you establish and maintain a Sharps Injury Log to record all contaminated sharps injuries in a facility. The purpose of this log is to help you evaluate and identify problem devices or procedures that require attention.

The Sharps Injury Log needs to do all of the following:

- Maintain sharps injuries separately from other injuries and illness kept on the Injury and Illness Log required by WAC 296-27, Recordkeeping.
- Include ALL sharps injuries that occur during a calendar year.
- Be retained for five years beyond the completion of that calendar year.
- Preserves the confidentiality of affected employees.

Date	Case/Report No.	Type of Device	Brand Name of Device	Work Area Where Injury Occurred, i.e., Geriatrics, Lab	Brief Description of How the Incident Occurred. Examples: Procedure being done, action being performed (injection, disposal), body part injured.

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### **APPENDIX D**

# Adult Learning Principles

### **Adult Learning Principles**

The summary below was drawn from several sources. 49, 50, 51

Adult learners bring experiences and self-awareness to learning. As an instructor, it is important to understand adult learning styles. There are three learning domains: Cognitive, affective, and behavioral. The table below shows examples of activities in each of the three domains. Using teaching techniques from each of these domains is most effective.

Cognitive Knowledge or a body of subject matter	Affective Attitudes and beliefs	Behavioral Practical application
Lectures	Clarifying exercises	Role play
Brainstorming	Group process	Simulation
Discussions	Consensus seeking activities	Teach backs

The three primary learning styles are: Visual, auditory, and kinesthetic.

- Visual learners tend to learn by looking, seeing, viewing, and watching.
   Visual learners need to see an instructor's facial expressions and body
   language to fully understand the content of a lesson. They tend to sit at
   the front of the classroom to avoid visual distractions. They tend to think
   in pictures and learn best from visual displays. During a lecture or
   discussion, they tend to take detailed notes to absorb information.
- Auditory learners tend to learn by listening, hearing, and speaking.
   Auditory learners learn best through lectures, discussions, and brainstorming. They interpret the underlying meaning of speech by listening to voice tone, pitch, speed, and other speech nuances. Written information has little meaning to them until they hear it. They benefit best by reading text out loud and using a tape/digital recorder.
- **Kinesthetic** learners tend to learn by experiencing, moving, and doing.

<sup>49</sup> East Bay AIDS Education Training. *Principles of Adult Learners, from Getting the Most Out of Your AIDS/HIV Trainings*. Retrieved August 14, 2009, from

East Bay AIDS Education Training. *Principles of Adult Learners, Getting the Most out of Your AIDS/HIV Trainings*. Retrieved August 14, 2009, from <a href="http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-1.htm">http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-1.htm</a>.

http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-1.htm.

National Highway Institute *Adult Learning Considerations*. Retrieved August 14, 2009, from www.nhi.fhwa.dot.gov/resources/docs/Adult Learning Considerations.pdf.

We retain approximately
10 percent of what we see,
30 percent to 40 percent of what
we see and hear, and 90 percent
of what we see, hear, and do.

**Kinesthetic** learners learn best through a hands-on approach and actively exploring the physical world around them. They have difficulty sitting still for long periods of time and easily become distracted by their need for activity and exploration. We all have the capability to learn via all three styles, but are usually dominant in one. Training should take into account all three styles.

Teaching techniques which appeal to each of the three styles of learning:

Visual	Auditory	Kinesthetic
Transparencies	Lectures	Role play
Videos/DVDs/slides Group discussions		Simulation
Flip charts	Informal conversations	Writing/taking notes
Demonstrations	Stories and examples	Practice demonstrations
	Brainstorms	Activities

The following table is a summary of adult attributes and instructor response to these attributes in trainings. <sup>52</sup>

Adult Attributes	How an Instructor Can Respond
Adults are people with years of experience and a wealth of information.	Focus on the strengths learners bring to the classroom, not just gaps in their knowledge. Provide opportunities for dialogue within the group. Tap their experience as a major source of enrichment to the class. Remember the
	teacher need not have all the answers as long as they know where to go or who to call to get the answers. Students can be resources to the teacher and to each other.
	(Continued on page 82)

<sup>&</sup>lt;sup>52</sup> East Bay AIDS Education Training. *Principles of Adult Learners, Getting the Most out of Your AIDS/HIV Trainings*. Retrieved August 14, 2009, from <a href="http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-1.htm">http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-1.htm</a>.

Adult Attributes	How an Instructor Can Respond
Adults have established values, beliefs, and opinions.	Demonstrate respect for differing beliefs, religions, value systems, and lifestyles. Let learners know they are entitled to their values, beliefs, and opinions, but everyone in the room may not share their beliefs. Allow debate and challenge of ideas.
Adults are people whose style and pace of learning has probably changed.	Use a variety of teaching strategies such as small group problem solving and discussion. Use auditory, visual, tactile and participatory teaching methods.  Most adults prefer teaching methods other than lecture.
Adults relate new knowledge and information to previously learned information and experiences.	Assess the specific learning needs of your audience before your class or at the beginning of the class. Present single concepts and focus on application of concepts to relevant practical situations. Summarize frequently to increase retention and recall. Material outside of the context of participants' experiences and knowledge becomes meaningless.
Adults are people with bodies influenced by gravity.	Plan frequent breaks, even if they are two-minute "stretch" breaks. During a lecture, a short break every 45–60 minutes is sufficient. In more interactive teaching situations, breaks can be spaced 60–90 minutes apart.
Adults have pride.	Support the students as individuals. Self-esteem and ego are at risk in a classroom environment, which is not perceived as safe or supportive. People will not ask questions or participate in learning if they are afraid of being put down or ridiculed. Allow people to admit confusion, ignorance, fears, biases, and different opinions. Acknowledge or thank students for their responses and questions. Treat all questions and comments with respect. Avoid saying, "I just covered that," when someone asks a repetitive question. Remember, the only foolish question is the unasked question.  (Continued on page 83)

Adult Attributes	How an Instructor Can Respond
Adults have a deep need to be self-directing.	Engage the students in a process of mutual inquiry. Avoid merely transmitting knowledge or expecting total agreement. Don't "spoon-feed" the participants.
Individual differences among people increase with age.	Take into account differences in style, time, types, and pace of learning. Use auditory, visual, tactile, and participatory teaching methods.
Adults tend to have a problem centered orientation to learning.	Emphasize how learning can be applied in a practical setting. Use case studies, problem solving groups, and participatory activities to enhance learning. Adults generally want to immediately apply new information or skills to current problems or situations.

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### **APPENDIX E**

**Exposure Control Plan Checklist for School Districts** 

### **BLOODBORNE PATHOGENS AND EXPOSURE CONTROL PLAN**

This form can be used in reviewing/developing school's exposure control plan.

2.

3.

4.

□ Leakproof.

□ Labeled as biohazard.

00 000 0000	Identification of all employees/job descriptions directly exposed or likely to be exposed to blood or other potentially infectious materials.  HBV vaccinations offered to employees with potential BBP exposure risk and at no cost to employee.  Precautions to prevent injuries when handling needles and other sharps.  Review of personal protective requirements (eye protection, masks, gowns, hand washing).  Addresses proper labeling and bagging procedures.  Identifies operations involving substantial risk of direct exposure to body fluids.  Addresses proper precautions to be taken while cleaning rooms and blood spills.  Addresses laundry practices involving risk of direct exposure to body fluids.  Addresses disposal of potentially contaminated items.  Addresses follow-up procedures after possible exposure to HIV/HBV.  Addresses training responsibility and content.  Addresses recordkeeping requirements.  Addresses how and when to report exposure incident.		
Stan	dard/Universal Precautions		
00000	Protective gloves (non-latex) readily available. Gowns (spill resistant, closed front, long sleeve, if indicated). Hand washing following glove removal, before eating, drinking, and smoking. Addresses reporting of needlestick injuries and other potential exposures. Hand washing facilities readily accessible to employees. Hand cleansers/towelettes available. Appropriate gloves used when exposure to potentially infectious material can reasonably be anticipated. Single-use gloves disposed of when barrier is compromised or after one use. Reusable utility gloves inspected and decontaminated effectively.		
Hous	sekeeping		
0	Worksite is in a clean and sanitary condition. A policy to assure prompt disinfection of contaminated surface coverings and receptacles is in effect.		
Regulated Waste			
Con	taminated sharps containers are: Closable. Puncture resistant.		

Appendix E – Exposure Control Plan Checklist for School Districts

	Easily accessible to users.  Maintained upright throughout use.
0 0 0	Addition, other regulated waste containers are: Able to contain contents. Closed prior to removal. Disposed of in accordance with applicable regulation and minimal handling and agitation. Bagged/containerized at the location where it is used. Contaminated laundry is handled with gloves and other appropriate Personal Protective Equipment (PPE).
Infor	mation and Training
	For all new school employees within six months of being hired. For all employees identified being at risk for occupational exposure and at least annual thereafter. When changes in tasks or procedures occur. At a level appropriate for the employees education level and language.
000000000000	training includes the following: Accessible copy of the standard and explanation available. A general explanation of epidemiology and symptoms of bloodborne diseases. Modes of transmission. Explanation of and availability of the employer's exposure control plan. Potential exposure task recognition. Explanation of use and limitations of controls and PPE. All phases of handling PPE. Explanation of PPE selection. Information on HBV vaccination. Emergency actions and procedures. Procedures for an exposure incident. Procedures for post-exposure evaluation. An explanation of signs and labels and/or color coding. An opportunity for interactive questions.

### 6. Recordkeeping

5.

There are two types of records that must be kept on school employees. One is medical record on employees who sustain an occupational exposure. The other is training records.

#### **Medical Records**

☐ Medical records are **confidential** and kept for each exposed employee and retained for at least the duration of the employee's tenure, plus 30 years.

	records include the following:			
0	Name and social security number of the employee.  A copy of the employee's HBV vaccination status and related information.			
	Follow-up information, when applicable.			
	Healthcare professional's written opinions.			
	A copy of information provided to the healthcare professional.			
	The employer has procedures to ensure confidentiality.			
	The record may be kept in the school nurse's files on site or retained by the healthcare provider who rendered services. <sup>53</sup>			
Tla a				
ine	BBP training records include the following:			
	Dates of the training sessions.			
	A summary of the contents of the training sessions.			
	The names and qualifications of the persons conducting the training.			
	The names and job titles of all persons training.			
	Training records are maintained for three years. All medical and training			
	records are available upon request to the Washington State Department of Labor and Industries.			
	Labor and maddines.			
	Sample Exposure Control Plans (ECP)			
Was	hington State Department of Labor and Industries has developed a sample			
	plate for an exposure control plan (EPC),			
	v.lni.wa.gov/wisha/rules/bbpathogens/HTML/HT7.htm. EPC was developed			
	the small business employer in mind and needs to be adapted to fit your			
specific needs. Be sure to consult <u>WAC 296-823</u> , Occupational Exposure to Bloodborne Pathogens, for requirements that apply to your workplace.				
	has School District has a sample of a school district's ECP that may be			
	essed at v.camas.wednet.edu/district/staff_corner/training/Exposure_Control_Plan_Traini			
ng.d				

1.

2.

Champion, C. 2005. Occupational Exposure to Bloodborne Pathogens, National Association of School Nurses, Inc., Silver Spring, MD.

Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

### **APPENDIX F**

Washington State
Local Health
Jurisdictions/Departments

### **Washington State Local Health Jurisdictions/Departments**

Local health departments provide information and resources for schools in regards to HIV/AIDS and other bloodborne pathogens diseases such as HBV and Hepatitis. The following are links to individual county health departments in Washington State.

Adams County	Asotin County	Benton-Franklin County	
Chelan-Douglas County	Clallam County	Clark County	
Columbia County	Cowlitz County	Ferry County (Northeast Tri County HD)	
Garfield County	Grant County	Grays Harbor County	
Island County	<u>Jefferson County</u>	Kitsap County	
Kittitas County	Klickitat County	Lewis County	
Lincoln County	Mason County	Okanogan County	
Pacific County	Pend Oreille County (Northeast Tri County HD)	San Juan County	
Seattle/King County	Skagit County	Skamania County	
Snohomish County	Spokane County	Stevens County (Northeast Tri County HD)	
Tacoma/Pierce County	Thurston County	Wahkiakum County	
Walla Walla County	Whatcom County	Yakima County	

Guidelines for Implementation of School Employee Training on HIV/AIDS and Other Bloodborne Pathogens

### **APPENDIX G**

Washington State
Department of
Labor and Industry
(L&I) Consultants

The Washington State Department of Labor and Industries (L&I) has consultants available to assist employers including schools. This contact Information is listed below and can also be accessed at <a href="www.lni.wa.gov/Safety/Basics/Assistance/Consultation/consultants.asp">www.lni.wa.gov/Safety/Basics/Assistance/Consultation/consultants.asp</a>. To request a consultation or to get questions answered, call an L&I regional office near you and ask for the DOSH consultation supervisor.

REGION	Counties	Phone	E-mail
REGION 1	<ul><li>Island</li><li>San Juan</li><li>Skagit</li><li>Snohomish</li><li>Whatcom</li></ul>	425-290-1431	DRES235@LNI.wa.gov
REGION 2	• King	206-515-2837	SOLT235@LNI.wa.gov
REGION 3	<ul><li>Clallam</li><li>Jefferson</li><li>Kitsap</li><li>Pierce</li></ul>	253-596-3917	MAHA235@LNI.wa.gov
REGION 4	<ul> <li>Clark</li> <li>Cowlitz</li> <li>Grays Harbor</li> <li>Klickitat</li> <li>Lewis</li> <li>Mason</li> <li>Pacific</li> <li>Skamania</li> <li>Thurston</li> <li>Wahkiakum</li> </ul>	360-902-5472	COOR235@LNI.wa.gov
REGION 5	<ul> <li>Adams (west county)</li> <li>Benton</li> <li>Chelan</li> <li>Columbia</li> <li>Douglas</li> <li>Franklin</li> <li>Grant</li> <li>Kittitas</li> <li>Okanogan</li> <li>Walla Walla</li> <li>Yakima</li> </ul>	509-886-6570	MCFJ235@LNI.wa.gov
REGION 6	<ul> <li>Adams (east county)</li> <li>Asotin</li> <li>Ferry</li> <li>Garfield</li> <li>Lincoln</li> <li>Pend Oreille</li> <li>Spokane</li> <li>Stevens</li> <li>Whitman</li> </ul>	509-324-2543	POAG235@LNI.wa.gov

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### **APPENDIX H**

# Additional Resources

### **Additional Resources for Training**

#### Videos/DVDs

- 1. "Mr. Teech Learns a Lesson: A Guide for Universal Precautions and Bloodborne Pathogen Training." This is a free training tool, created by the Indiana Department of Education, HIV/STD Prevention Program, and is available online and in DVD format for school staff, students, and anyone responsible for receiving Universal Precautions and Bloodborne Pathogen education. This instructional video tool, used in conjunction with the supplemental written materials, was designed to satisfy each of the Indiana and federally required training elements, all incorporated in an informative, but fun format! Indiana State Department of Education.
  Copyright: 2002. Time: 20 min.
- 2. From Washington State Department of Labor and Industries (L&I): Numerous videos/DVDs are available at www.lni.wa.gov/Safety/TrainTools/Videos/Library/catalog.asp?VideoID=V1091.

#### **PowerPoint Presentations**

Washington State L&I offers many resources, among them the following presentations:

- 1. Revised Bloodborne Pathogens Standard (WAC 296-823).
- 2. What are Bloodborne Pathogens?

#### **Factsheets or Other Handouts**

From CDC, free of charge. Order at <a href="https://wwwn.cdc.gov/pubs/hiv.aspx">wwwn.cdc.gov/pubs/hiv.aspx</a>.

- 1. Bookmark: HIV/AIDS Prevention. (Contact information for CDC-Info and the CDC HIV/AIDS website).
- 2. Pocket Guide: HIV/AIDS Information.

#### Free to Download

- 1. CDC, HIV/AIDS Questions and Answers, www.cdc.gov/hiv/resources/ga/ga5.htm.
- 2. CDC, HIV/AIDS Basic Information. Retrieved from www.cdc.gov/hiv/topics/basic/index.htm.
- 3. CDC, HIV and AIDS: Are You at Risk? <a href="www.cdc.gov/hiv/resources/qa/qa5.htm">www.cdc.gov/hiv/resources/qa/qa5.htm</a>. (Click "PDF" for print version of the brochure.)
- CDC's National Institute for Occupational Safety and Health (NIOSH) has produced guidance on applying OSHA regulations to schools, <a href="https://www.cdc.gov/niosh/docs/2004-101/default.html">www.cdc.gov/niosh/docs/2004-101/default.html</a>.

#### **Posters**

A poster depicting proper hand-washing techniques is available in two sizes: 8x11 and 11x15. The laminated poster is entitled, "BE A GERM BUSTER. WASH YOUR HANDS."

Available from Health Education Resource Exchange, Washington State DOH, <a href="http://here.doh.wa.gov/materials-projects/hand-washing">http://here.doh.wa.gov/materials-projects/hand-washing</a>.

### **Other Documents**

The National Association of State Boards of Education (NASBE) has developed a sample policy concerning HIV infection. Go to

http://nasbe.org/index.php/component/content/article/78-model-policies/120-policies-concerning-students-and-staff-with-hiv-infection.

State of Washington, Office of Superintendent of Public Instruction. *Infectious Disease Control Guide for School Staff* (April 2004). Available at www.k12.wa.us/HealthServices/resources.aspx.

#### **Web Sites**

Centers for Disease Control and Prevention (CDC)

Web site: www.cdc.gov/.

HIV/AIDS information: www.cdc.gov/hiv/.

Occupational Safety and Health Administration (OSHA)

Web site: www.osha.gov.

Seattle Children's Hospital Information on HIV/AIDS

Web site: www.seattlechildrens.org/search-results.aspx?term=HIV.

Washington Industrial Safety and Health Act (WISHA)

Web site: www.lni.wa.gov/wisha/.

Washington State DOH

Web site: http://www.doh.wa.gov/cfh/hiv/default.htm.

Washington State DOH, Communicable Disease, HIV/AIDS Web site: <a href="http://www.doh.wa.gov/cfh/hiv/prevention/default.htm">http://www.doh.wa.gov/cfh/hiv/prevention/default.htm</a>.

Washington State DOH, School Environmental Health and Safety Program

Web site: www.doh.wa.gov/ehp/ts/School/default.htm.

Washington State Department of Labor and Industries (L&I)

Web site: www.lni.wa.gov/Safety/Topics/AtoZ/default.asp?KWID=39.

Washington State Legislature for information on WACs and RCWs Web site: <a href="http://search.leg.wa.gov/pub/textsearch/default.asp">http://search.leg.wa.gov/pub/textsearch/default.asp</a>.

Guidelines for Implementation of Bloodborne Pathogen and HIV School Employee Training

### **GLOSSARY**

AIDS	Acquired Immunodeficiency Syndrome (AIDS), the most severe manifestation of infection with the human immunodeficiency virus (HIV).		
Antibody	Substance that a person's immune system develops to help fight infection.		
Blood	Refers to human blood, human blood components, and products made from human blood. The term "human blood components" includes plasma, platelets, and serosanguinous fluids (e.g., exudates from wounds).		
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), human immunodeficiency virus (HIV), and Hepatitis C virus (HCV). Other examples include malaria, syphilis, babesiosis, brucellosis, leptospirosis, Creutzfeldt-Jakob disease, Human T-lymphotrophic Virus Type 1, and viral hemorrhagic fever.		
Centers for Disease Control and Prevention (CDC)	Federal health agency, which is a branch of the U.S. Department of Health and Human Services (DSHS). CDC provides national health and safety guidelines and statistical data on AIDS and other diseases.		
Contaminated	The presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.		
Contaminated Laundry	Laundry that has been soiled with blood or other potentially infectious materials or may contain contaminated sharps.		
Contaminated Sharps	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	The use of physical or chemical means to remove, inactivate, or destroy bloodborne 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.		
Disinfect	Cleanse and free from infection by destroying harmful microorganisms.		
DOSH	The Washington State Department of Labor and Industries (L&I), Division of Occupational Safety and Health (DOSH), is responsible for administering the requirements under WISHA.		

Engineering Controls	Controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazard from the workplace.		
Exposure Incident	A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee's duties. "Non-intact skin" includes skin with dermatitis, hang nails, cuts, abrasions, chafing, etc.		
Hand washing Facilities	A facility providing an adequate supply of running potable water, soap, single-use towels or hot air drying machines.		
HBV	Hepatitis B virus is a viral infection that affects the liver. The effects of the disease on the liver can range from mild to severe or fatal.		
HCV	Hepatitis C virus is a viral infection that affects the liver. Hepatitis C is a leading indication for liver transplant.		
High-Risk Behavior	A term that describes certain activities that increase the risk of transmitting HIV or HBV. These include anal intercourse, vaginal intercourse without a condom, oral-anal contact, semen in the mouth, sharing intravenous needles, and intimate blood contact.		
HIV	Human Immunodeficiency Virus.		
Immune System	A body system that helps resists disease-causing germs, viruses, or other infections.		
Infection	A condition or state of the body in which a disease-causing agent has entered.		
Mucous Membrane	A moist layer of tissue that lines the mouth, eyes, nostrils, vagina, anus, or urethra.		
Non-intact Skin	Skin that is chapped, abraded, weeping, or has rashes or eruptions.		
Occupational Exposure	Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties. The term "reasonably anticipated" includes the potential for exposure as well as actual exposure.		
Other Potentially Infectious Materials (OPIM)	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.  (Continued on next page)		

Other Potentially Infectious Materials (OPIM) (continued)	<ul> <li>Any unfixed tissue or organ (other than intact skin) from a human (living or dead).</li> <li>HIV-containing cell or tissue cultures, organ cultures, and HIV or HBV-containing culture medium or other solutions; blood, organs, or other tissues from experimental animals infected with HIV or HBV.</li> </ul>		
Parenteral	The piercing of mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.		
Pathogen	A disease-causing substance.		
Personal Protective Equipment (PPE)	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.		
Regulated Waste	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 micro-biological wastes containing blood or other potentially infectious materials.		
Sharps	(See Contaminated Sharps.)		
Standard Precautions	In 1996 CDC expanded the concept of infection control/universal precautions. Standard Precautions combine the major features of universal precautions and Body Substance Isolation (BSI) and are based on the principle that all blood, body fluids, secretions (including respiratory secretions), excretions except sweat, non-intact skin, and mucous membranes may contain transmissible infectious agents. Standard Precautions include a group of infection prevention practices that apply to all persons, regardless of suspected or confirmed infection status, in any setting in which healthcare is delivered. These include: Hand hygiene, use of personal protective equipment depending on the anticipated exposure, and safe injection practices. Also, equipment or items in the environment likely to have been contaminated with infectious body fluids must be handled in a manner to prevent transmission of infectious agents (e.g., wear gloves for direct contact, contain heavily soiled equipment, properly clean and disinfect or sterilize reusable equipment). (Excerpted from CDC, 2007 Guideline for Isolation Precautions in Hospitals.)		

Sterilize	The use of a physical or chemical procedure to destroy all microbial life.			
Syndrome	A collection of signs and symptoms that occur together.			
Universal Precautions  An approach to infection control was developed in the 1980s as a result of the human immunodeficiency visepidemic. According to the concept of universal preall human blood and certain human body fluids are the if known to be infectious for HIV, HBV, and other bloopathogens.				
WISHA	The Washington Industrial Safety and Health Act (WISHA), Chapter 49.17 of the Revised Code of Washington (RCW), enacted in 1973 by the Washington State legislature. The Washington State constitution of 1889 says, "The legislature shall pass necessary laws for the protection of persons working in mines, factories, and other employments dangerous to life or deleterious to health, and fix pains and penalties for enforcement of the same." (Article II, Section 35) DOSH gives the Department of Labor and Industries a primary responsibility for worker health and safety in Washington.			
Vaccine	A substance that produces or increases immunity and protection against a particular disease.			
Virus	An organism that causes disease.			
Work Practice Controls	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).			

Office of Superintendent of Public Instruction
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