Situation Description

Bloodborne pathogens are pathogenic-micro-organisms in human blood that can cause disease. They included the Hepatitis B virus (HBV), which attacks the liver, and the human immunodeficiency virus (HIV), which causes AIDS (Acquired Immunodeficiency Syndrome).

Occupational transmission of HIV is relatively rare, but the lethal nature of HIV requires that every possible measure be taken to prevent exposure. This program recommends guidelines to limited occupational exposures to blood and other potentially infectious materials because and exposure could result in transmission of the bloodborne pathogens that could lead to a serious disease or death.

The Bloodborne Pathogens Standard, codified at 29 CFR 1910.1030, was promulgated by the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA). This standard applies to employers with a history of employee exposure or those who can reasonably anticipate that one or more of their employees, as part of their employment duties, will have exposure to human blood or other potentially infectious body fluids (including cleaning and disposing of any wastes generated during an incident). The regulation states that an employer must follow all parts of the standard if even one employee has potential exposure to blood and body fluids as part of their job.

The implementation of this bloodborne pathogens policy is intended to reduce or eliminate employee exposure to bloodborne pathogens and comply with the OSHA Bloodborne Pathogens Standard. Compliance with this standard in no way extends an employee's liability to treat an injury or provide first aid to a fellow employee or student. It simply outlines safety procedures to be followed in the event that a situation in which exposure to potentially infectious body fluids is encountered.

The bloodborne pathogens standard requires employers to develop and implement a written exposure control plan that is designed to eliminate or minimize employee exposure to bloodborne pathogens. This exposure control plan must contain methods of implementation for each element of the standard. It must be made available to employees, OSHA and NIOSH upon request. The exposure control plan must be reviewed and updated annually.
Exposure Control Plan

Exposure Determination
OSHA requires employers to perform an exposure determination ascertaining which employees may incur occupational exposure. Occupational exposure is defined by the OSHA standard as reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials (OPIM). This exposure determination is required to include a listing of all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. All Washington Adventist University employees in the following job classifications have the potential for exposure to bloodborne pathogens: teaching faculty, security, physical plant, dining service, student development, and student employees working in these classifications. The potential for exposure exists as a result of the supervision of student activities in classrooms, laboratories, studios, theaters, athletic dept, residence and dining halls, and on off-campus trips. No Washington Adventist University employees are designated to render first aid as part of their primary job assignment nor does any employee have first-responder or emergency medical treatment responsibility. Occupational exposure of employees within the specified classifications is limited to collateral duty that may exist when responding to workplace incidents. One exception to this classification is the Director of Student Health who is covered under the plan of another employer.

Methods of Compliance
OSHA requires that this plan also include a schedule and method of implementation for the various requirements of the standard. The employer must take appropriate preventative measures against an exposure incident which is defined by the OSHA standard as specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIM. At Hendrix College these include the following controls to reduce or eliminate such exposure.

General
"Universal Precautions"
Universal body substance avoidance precautions must be observed to prevent contact with blood or other potentially infectious materials. Practicing universal precautions involves handling all blood and body fluids as though they were infected with human immunodeficiency virus (HIV) or hepatitis B virus (HBV). All blood or OPIM will be considered infectious regardless of the perceived status of the source individual. The following controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment (PPE) shall also be used. PPE kits include a pair of latex gloves, cleaning towel, disinfectant towelette, and an antiseptic towelette which are contained in a zip-lock bag to be used for disposal of contaminated items.
**Engineering Controls**
Engineering controls are those controls that remove the hazard or isolate the employee from exposure. The Washington Adventist University (WAU) Science Building (building #3) provides hand washing facilities which are readily accessible to employees. OSHA requires that these facilities be readily accessible after incurring exposure. If hand washing facilities are not readily available, the employer is required to provide either an antiseptic cleanser in conjunction with a clean cloth/paper towel or antiseptic towelettes. If these alternatives are used then the hands are to be washed with soap and running water as soon as feasible. Antiseptic towelettes will be provided to all employees and additional or replacement towelettes can be obtained whenever required from the campus Chemical Hygiene Officer office.

**Work Practice Controls**
Work practice controls are policies, procedures and techniques which reduce the likelihood of exposure through the alteration of the manner in which the task is performed. Disposable (single-use) latex gloves shall be worn whenever it can be reasonably anticipated that the employee may have hand contact with blood, mucous membranes, non-intact skin, or other potentially infectious materials. Hypoallergenic gloves, glove liners, powerless gloves, or other similar alternatives must be provided to those employees who are allergic to the gloves normally provided. Gloves must be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. They are not to be reused. Gloves must be removed prior to leaving the work area. They shall be placed in a closable, leak proof container (Ziploc bag) for disposal in a lined waste container that protects other employees from direct physical contact. Hands must be washed immediately or as soon as feasible after removal of gloves. Employees must wash hands and any other potentially contaminated skin area with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials. All garments which are penetrated by blood shall be removed immediately or as soon as feasible and should be contained or isolated in a manner that is consistent with the previously mentioned universal precautions.

**Cleaning Contaminated Surfaces**
All equipment and environmental working surfaces shall be cleaned and decontaminated after contact with blood or OPIM. Contaminated surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures. Small amounts of blood or other potentially infectious materials can be removed using the components of the PPE kits. However, larger amounts may require methods employed by the housekeeping staff, which includes the use of protective gloves and disinfectants. Surfaces within food preparation areas may be decontaminated with a 10%-50% solution of household bleach. Broken glassware or other sharps such as hypodermic needles which may be contaminated shall not be picked up directly with the hands. They shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps. Contaminated sharps shall be discarded immediately or as soon as feasible in a sharps container specified for such disposal.
Reporting Procedures for First Aid or OPIM Incidents
Following all first aid incidents or events where an employee has rendered assistance in any situation involving the presence of blood or OPIM, a report must be made to the Department of Public Safety Director and Human Resources, or the employee's direct supervisor. All reports will be forwarded to and maintained by the Department of Facility Services Director (Steve Lapham, telephone number 301-891-4161).

The report shall indicate the names of the persons involved, the date and time of the incident, and a determination of whether any employees incurred exposure to blood or OPIM.

The report shall indicate that the employee was advised to consult with a physician or other licensed healthcare professional concerning additional precautions such as the post-exposure hepatitis B vaccine. The report will then indicate the intentions of the employee to receive or decline the post-exposure hepatitis B vaccination as well as their intent to seek further medical treatment or consultation. A signed waiver will indicate an employee's intentions to decline the hepatitis B vaccination.

Medical Evaluation and Follow-up of Exposure Incidents
Following the determination of an exposure incident, WAU shall make immediately available to the exposed employee a confidential medical evaluation and follow-up including at least the following elements:

1. Documentation of the route(s) of exposure, and the circumstances related to the incident.
2. Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law. The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the employer shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented. When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated. Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.
3. Collection and testing of blood for HBV and HIV serological status. The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained. If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.
4. Post-exposure prophylaxis, when medically indicated, as recommended by the U. S. Public Health Service will be offered to the employee.
5. Counseling. The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident.
6. Evaluation of reported illnesses. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.

WAU shall ensure that the healthcare professional responsible for the employee's hepatitis B vaccination is provided a copy of the OSHA standard.

WAU shall ensure that the healthcare professional evaluating an employee after an exposure incident is provided the following information:

1. A copy of the OSHA standard.
2. A description of the exposed employee's duties as they relate to the exposure incident.
3. Documentation of the route(s) of exposure and circumstances under which exposure occurred.
4. Results of the source individual's blood testing, if available.
5. All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain.

The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The healthcare professional's written opinion for hepatitis B vaccination shall be limited to whether hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination. The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to an indication that the employee has been informed of the results of the evaluation and that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment. All other findings or diagnoses shall remain confidential and shall not be included in the written report.

Communication of Hazards to Employees
The employer shall ensure that all employees with occupational exposure participate in a training program which must be provided at no cost to the employee and during working hours. Training shall be provided at the time of initial employment and at least annually thereafter. Annual training for all employees shall be provided within one year of their previous training. Employers shall provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created. Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used. The training program shall contain at a minimum the following elements:

1. An accessible copy of the regulatory text of the OSHA standard for bloodborne pathogens and an explanation of its contents.
2. A general explanation of the epidemiology and symptoms of bloodborne diseases.
3. An explanation of the modes of transmission of bloodborne pathogens.
4. A copy of this exposure control plan and an explanation of its contents.
5. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
6. An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment.
7. Information on the types, proper use, location, removal, handling, and disposal of personal protective equipment.
8. Information on the post-exposure hepatitis B vaccine and information on its efficacy, safety, method of administration, and availability.
9. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
10. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident.
12. Information on medical follow-up, as required by 29 CFR 1910.1030(g)(2)(vii)(K), following an exposure incident.
13. An opportunity for interactive questions and answers with the person conducting the training session. The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.

**Employee Records**

WAU Human Resources shall establish and maintain an accurate record for each employee with occupational exposure. This record shall include:

1. The name and social security number of the employee.
2. A copy of all incident reports involving the employee
3. A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination.
4. A copy of all results of examinations, medical testing, and follow-up procedures.
5. The employer's copy of the healthcare professional's written opinion.

WAU Human Resources shall ensure that employee medical records are kept confidential and are not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by this standard or as may be required by law. Employee medical records required by this section shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, to the HR Director, and to the Assistant Secretary. Washington Adventist Hospital shall maintain the records for at least the duration of employment plus 30 years.

**Training records shall include the following information:**

1. The dates of the training session.
2. The contents or a summary of the training session.
3. The names and qualifications of persons conducting the training.
4. The names and job titles of all persons attending the training sessions.

Training records shall be maintained for three years from the date on which the training occurred. Employee training records required by this section shall be made available upon request for examination and copying to employees, to employee representatives, to the Director, and to the Assistant Secretary. Washington Adventist University shall comply with the requirements involving transfer of records set forth in 29 CFR § 1910.1020(h). If WAU ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, it shall notify the HR Director, at least three months prior to their disposal and transmit them to the HR Director, if required by the Director to do so, within that three month period.

Additional Decontamination Procedures

Housekeeping

All cleaning and removal of blood or other potentially infectious material from environmental surfaces should be done while wearing latex gloves. Any blood or other body fluids, including saliva, semen and vomit should be considered infectious. Most gross contamination can be removed with the proper use of PPE kits that are provided to each housekeeping employee. If large amounts of blood require additional blotting with Wypals, dispose of the contaminated towels in a bag that can be tied closed and then placed in a second lined trash container. If mopping is required for removal, ready-to-use disinfectant can be applied and removed using a mop and mop bucket. After gross contamination has been removed, the surface can be decontaminated with a mixture of Quat 128 or Quat 256. The disinfectant should remain on the surface for 10 minutes to allow adequate time for the elimination of HBV or HIV.

References:

Literature used to prepare this bloodborne pathogens policy.