Angelo State University
Operating Policy and Procedure

OP 34.22: Bloodborne Pathogens Protection Program

DATE: October 11, 2021

PURPOSE: The purpose of this Operating Policy/Procedure (OP) is to provide safe work practices to prevent employees from anticipated exposure to bloodborne pathogens, which include HBV, HCV and HIV.

REVIEW: This OP will be reviewed in October every three years, or as needed, by the director of risk and emergency management with recommended revisions forwarded to the vice president for finance and administration to the president.

POLICY/PROCEDURE

1. Introduction

OSHA regulation, "Occupational Exposure to Bloodborne Pathogens; Final Rule" (29 CFR Part 1910.1030), establishes the requirement for employers to develop plans and procedures to eliminate or minimize the risk of employee exposure to blood or other potentially infectious materials (OPIM). Exposure to blood and other bodily fluids can lead to numerous clinical diseases. Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and the Human Immunodeficiency Virus (HIV) are examples of pathogens that can be transmitted via blood and OPIM. These agents are referred to as bloodborne pathogens. Because they can cause serious illness or death, operational guidelines must be followed to protect workers against exposures.

2. Scope and Application

The bloodborne pathogens exposure control program (BPECP) covers all university employees who could be "reasonably anticipated" to be exposed to bodily fluids while conducting their job-related duties. The BPECP details procedures for identifying occupational exposures to bloodborne pathogens, work practice controls, personal protection, housekeeping requirements, training, and medical surveillance.

The requirements of this plan apply to all university employees, contract workers, and employees of firms working at locations where Angelo State University has management control. However, the plan does not address employees willingly responding to emergencies by choice i.e., administering CPR. In addition, this plan does not address employees whose immune systems are currently and/or previously impaired because of HIV or other causes.
3. Terms and Definitions

Most of the terms and definitions in this plan are taken from 29 CFR1910.1030, "Occupational Exposure to Bloodborne Pathogens," 1996.


b. "Bloodborne pathogens" means pathogenic microorganisms that are present in human blood that can cause disease in humans. These pathogens include, but are not limited to, HBV, HCV and HIV.

c. "Bloodborne Pathogens Exposure Control Plan" (BPECP). The written plan to prevent employee exposure to bloodborne pathogens in the workplace.

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

e. "Decontamination" means 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.

f. "Engineering controls" means controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazards from the workplace.

g. "Exposure incident" means 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.

h. "Occupational exposure" means the reasonable expectation of skin, eye, mucous membrane, or parenteral contact with blood or OPIM resulting from the performance of an employee's duties.

i. "Occupational routes of transmission" are the methods by which bloodborne pathogens can be transmitted and are 1) needle stick or cut from a contaminated sharp object; 2) splash to eyes, nose or mouth; or 3) contact with broken skin.

j. "Other potentially infectious materials" (OPIM) means:

(1) Human bodily fluids such as semen, vaginal secretions, cerebrospinal fluids (brain or spinal fluid), synovial fluid (joint fluid), pleural fluid (lung and chest fluids), pericardial fluid (fluid in the heart sac), peritoneal fluid (serous fluid around the abdominopelvic walls), amniotic fluid (membrane enveloping the fetus), saliva in dental procedures, any bodily fluid that is visibly contaminated with blood, and all bodily fluids in situations where it is difficult or impossible to differentiate between bodily fluids;

(2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead);
(3) HIV (containing cell or tissue cultures or organ cultures) and HIV, HBV, or HCV (containing culture medium or other solutions), and blood, organs, or other tissues from experimental animals infected with HIV, HBV, or HCV.

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

l. "Personal protective equipment" (PPE) is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes are not intended to function as protection against a hazard and are not considered PPE.

m. "Regulated waste" means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or OPIM.

n. "Sharps" means any object that can penetrate the skin including, but not limited to, hypodermic needles, scalped blades, microtome blades, razor blades, lancets, dental scalers, broken glass, pipettes, capillary tubes, and exposed ends of dental wires.

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

p. "Work practices" means procedures that reduce the likelihood of exposure by altering the manner in which a task is performed (i.e., prohibiting recapping of needles by two-handed technique).

4. Responsibilities

a. The primary responsibilities of department heads are to:

   (1) Develop the departmental BPECP;

   (2) Be familiar with this plan and its contents and objectives;

   (3) Support the plan and oversee its implementation; and

   (4) Implement proper administrative and engineering controls in the work area.

b. Responsibilities of department managers and supervisors are to:

   (1) Implement the BPECP;

   (2) Be familiar with this plan and its contents and objectives;

   (3) Know where blood or OPIM are used, produced, stored, or handled in any manner in the department;
(4) Identify employees who may be at risk of exposure and implement this plan. Risk is determined by reviewing each task related to fulfilling an employee's job description that could result in an exposure. Departments are expected to consult with the Office of Environmental Health, Safety & Risk Management (EHSRM) if there is a question regarding risk of employee exposure;

(5) Review and update the exposure information annually or more often, as necessary, to accommodate changes in an employee's task;

(6) Provide BPECP training to applicable employees on an annual basis;

(7) Train and/or provide employees with applicable information before beginning specific tasks involving blood or OPIM;

(8) Identify and develop work practices when work activities involve risk of exposure to blood or OPIM. Procedures for spills, waste disposal, decontamination, and accident response procedures must be developed by each department and at risk employees must be trained on these procedures;

(9) Determine which employees who have occupational exposure are required to have the Hepatitis B vaccination series;

(10) Provide the correct PPE at no cost to the employee who works with blood or OPIM; and

(11) Monitor the work area for changing tasks and make corrections as needed.

c. University employees will:

(1) Be familiar with this plan;

(2) Conduct each task in accordance with their training or department’s standard operating procedure;

(3) Follow established university procedures;

(4) Complete required training, as assigned;

(5) Participate in the immunization program;

(6) Use PPE and other protective devices as required; and

(7) Report to their manager or supervisor any deficiencies and any exposures.

d. The Office of EHSRM is responsible for:

(1) Developing the BPECP;

(2) Giving guidance on how to package waste contaminated with blood or OPIM;
(3) Providing general training to departments as requested; Bloodborne Pathogens Training has been created in Blackboard for use.

(4) Conducting work-site surveys and informing departments of results;

(5) Approving the department's standard operating procedure;

(6) Advising departments of the proper PPE; and

5. **Employee Exposure Determination**

   a. **Category 1 - Moderate to High Risk Exposure**
      
      (1) Athletic Trainers;
      
      (2) Physical Therapy; and
      
      (3) Police Officers

   b. **Category 2 - Low to Moderate Risk Exposure**
      
      (1) Plumbers;
      
      (2) Custodians;
      
      (3) Agriculture, Biology, Chemistry & Biochemistry, Nursing, and Kinesiology faculty;
      
      (4) Employees responsible for laundry; and
      
      (5) EHSRM staff required to handle, clean up, or dispose of blood or OPIM.

   c. **Category 3 - No Risk to Low Risk Exposure**
      
      (1) Office staff; and
      
      (2) Employees whose job description defines no task related to exposure.

6. **Employee Protection**

   a. If the determination is made that an employee is potentially subject to exposure, the department must follow the BPEC.
   
   b. Engineering controls will be used as a primary method to reduce work exposure (e.g., disposable bags, sharps containers, and self-sheathing needles).
   
   c. Departments must provide, at no cost to the employee, and require employees to use equipment such as gloves, gowns, masks, and eye protection, as well as repair or replace those items when necessary.
7. **Workplace Practices**

   a. Employees shall wash their hands immediately after removing gloves and after hand contact with blood or OPIM.

   b. All PPE must be removed immediately upon leaving the work area.

   c. Used needles and other sharps shall not be sheaved, bent, broken, recapped, or resheathed by hand.

   d. Eating, drinking, smoking, applying cosmetics, and handling contact lenses are prohibited in work areas where the potential for exposure exists.

   e. Food and drinks shall not be stored in the same refrigerators or cabinets where blood or OPIM are stored.

   f. Employees must wear closed toed shoes to prevent cuts or spills to the feet.

   g. Protective clothing will be considered regulated contaminated waste and will be disposed of in accordance with this procedures.

   h. Any person who has contact (i.e., involved in bagging, transport, or laundering) with contaminated laundry will wear gloves and other appropriate personal protective equipment and adhere to universal precautions.

8. **Housekeeping**

   a. Work surfaces potentially contaminated with human blood, bodily fluids, or OPIM shall be decontaminated before beginning work and at the end of each day with freshly diluted household bleach at the ratio of 1:10 (1 part bleach to 10 parts water).

   b. Equipment shall be checked routinely and decontaminated prior to servicing or shipping.

   c. All containers intended for reuse shall be inspected, cleaned, and disinfected on a regular schedule.

   d. Broken glassware shall not be picked up by hand. A broom and dustpan or forceps should be used.

   e. Specimens of blood shall be placed in a closeable, leak-proof container and labeled with the biohazard emblem.

9. **Sharps**

   a. "Sharps" is a generic term dealing with any item that can puncture, cut, or scrape body parts.

   b. Sharps must be disposed of in an approved container that is puncture resistant, leak resistant, and cannot be opened without great difficulty. The sharps container must always be kept close to the work area so transporting a sharp is not required.
c. Sharps containers must be red in color with biohazard labels.

10. Training

a. Blackboard training (i.e., Bloodborne Pathogen Awareness Training at Link A) will be initiated by the manager or supervisor when an employee is assigned to a department where there is a chance for exposure. Initial and recurring annual training will include the following:

(1) A copy of the bloodborne pathogen standard;
(2) A general explanation of bloodborne pathogen diseases;
(3) Modes of transmission;
(4) Copy of the bloodborne pathogen exposure control plan;
(5) Methods for identifying tasks that may involve exposure to blood and OPIM;
(6) Practices that will prevent exposure, including engineering controls, work practices, and PPE;
(7) Information on Hepatitis B vaccine;
(8) Response to emergencies involving blood;
(9) How to handle exposure incidents;
(10) Post-exposure evaluation and counseling for employees; and
(11) Signs, labels, and color-coding.

c. Training records must be maintained by the department for three years. They must include:

(1) Date and location of training;
(2) Contents of the training;
(3) Trainer's name; and
(4) Names and job titles of trainees.

11. Labeling

a. Warning labels shall be affixed to containers of infectious waste, refrigerators, freezers containing blood, and all other containers used to transport potentially infectious materials. Labels should clearly state that food or drinks are not to be stored in these refrigerators and freezers.
b. These labels shall be orange or orange-red with letters and symbols in a contrasting color.

c. All infectious waste designated for disposal shall be in closeable, leak-proof containers that are color-coded and labeled.

d. Disposal of all infectious waste shall be in accordance with applicable federal, state, and local regulations.

12. Recordkeeping

a. In accordance with 29 CFR 1910.1020(e), "Recordkeeping": confidential health records shall be maintained for the length of employment plus 30 years.

b. Health records must include the employee's name, social security number, Hepatitis B vaccination records, records of any exposure incidents, copies of all physical examinations, and a copy of the physician's written opinion about past exposures.

c. Medical records must be made available to the employee and/or to anyone with written consent from the employee. These records are not available to the employer.

13. Exposure Procedures

a. Employees involved in an exposure incident should be directed to obtain immediately treatment at the nearest emergency medical treatment facility.

b. Students involved in an exposure incident during normal business hours should be directed to report to the University Clinic for treatment. After normal hours, they should be directed to report to the nearest emergency medical treatment facility.

c. Visitors involved in an exposure incident should be directed to report to the nearest emergency medical treatment facility.

14. Medical Surveillance

a. Employees who have been identified as having an exposure to blood or OPIM must have made available to them a Hepatitis B vaccination within 10 working days. The boosters will be furnished to the employee at no cost. If there are boosters to be administered, they must be made available to the employee.

b. Employees who have had an exposure must receive a follow-up evaluation at no cost to the employee. They must also file the Exposure Incident Report, (Link B) with EHSRM.

c. Employees must sign a Declination Statement, (Link C), if they choose to not be vaccinated for Hepatitis B after an exposure. However, if the employee chooses to have the series of shots at a later date, there will be no cost to the employee.

Link A: Bloodborne Pathogen Awareness Training
Link B: Exposure Incident Report
Link C: Declination Statement