



**Angelo State University**  
**Operating Policy and Procedure**

**OP 34.22: Bloodborne Pathogen Protection Program**

**ORIGIN**

**DATE:** September 1, 2007

**LAST**

**REVIEW:** November 14, 2011

**PURPOSE:** The purpose of this Operating Policy/Procedure (OP) is to protect workers from anticipated exposure to bloodborne pathogens, which include HBV and HIV. The purpose of this plan is to provide safe work practices to prevent exposure of Angelo State University employees whose job descriptions necessitate performing tasks that would result in occupational exposure to bodily fluids.

**REVIEW:** This OP will be reviewed by September 1 of each odd-numbered year by the director of environmental health, safety, and risk management with recommended revisions forwarded to the vice presidents to the president by October 15.

**POLICY/PROCEDURE**

1. References

Title 29 Code of Federal Regulations, Chapter 17, § 1910.1030 (29CFR1910.1030), and the *Accident Prevention Manual for Business and Industry*, 10th Edition, 1992.

2. Introduction

Exposure to blood and other bodily fluids can lead to numerous clinical diseases. Hepatitis B Virus (HBV) and the Human Immunodeficiency Virus (HIV) are examples of pathogens that can be transmitted via blood and other bodily fluids. 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.

3. Scope and Application

The bloodborne pathogen exposure control program (BPECP) covers all Angelo State University employees who could be "reasonably anticipated" to be exposed to bodily fluids while conducting their job 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 Angelo State 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 (e.g., giving CPR involving blood and other bodily fluids). In addition, this plan does not address employees whose immune systems are currently and/or previously impaired because of the HIV or from other causes.

#### 4. Terms and Definitions

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

- a. "Blood" means human blood, human blood components, and products made from human blood.
- 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 and HIV.
- c. "Bloodborne Pathogen Exposure Control Plan" (BPECP) means the Angelo State University 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. "Engineering controls" means controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazards from the workplace.
- f. "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.
- g. "HBV" means Hepatitis B Virus.
- h. "HIV" means Human Immunodeficiency Virus.
- i. "Occupational exposure" means 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.
- j. "Other potentially infectious materials" 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);  
and

- (3) HIV (containing cell or tissue cultures or organ cultures) and HIV or HBV (containing culture medium or other solutions), and blood, organs, or other tissues from experimental animals infected with HIV or HBV.
  - k. "Personal protective equipment (PPE)" is 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.
  - l. "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 other potentially infectious materials.
  - m. "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.
  - n. "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, and other bloodborne pathogens.
  - o. "Work practice controls" means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by two-handed technique).
5. Responsibilities
- a. The primary responsibilities of department heads are to:
    - (1) Be familiar with this plan and its contents and objectives;
    - (2) Support the plan and oversee its implementation; and
    - (3) Implement proper administrative and engineering controls in the work area.
  - b. Responsibilities of department managers and supervisors are to:
    - (1) Know where blood or other potentially infectious materials are used, produced, stored, or handled in any manner in the department;
    - (2) Be familiar with this plan and its contents and objectives;
    - (3) 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 (EHS&RM) if there is a question regarding risk of employee exposure.

- (4) Review and update the exposure information annually or more often, if necessary, to accommodate changes in an employee's task.
  - (5) Train and give employees applicable information before beginning specific tasks involving blood or other infectious materials;
  - (6) Identify and develop safety procedures when work activities involve risk of exposure to blood and other infectious materials. Procedures for spills, waste disposal, decontamination, and accident response procedures must be developed by each department.
  - (7) Determine which employees who have occupational exposure are required to have the Hepatitis B vaccination series;
  - (8) Provide the correct personal protective equipment at no cost to the employee who works with blood or bloodborne pathogens; and
  - (9) Monitor the work area for changing tasks and make corrections as needed.
- c. Angelo State 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) Attend the required training;
  - (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 EHS&RM is responsible for:
- (1) Developing and implementing the BPECP;
  - (2) Giving guidance on how to package waste contaminated with blood or other infectious materials;
  - (3) Providing general training to departments as requested;
  - (4) Conducting work-site surveys and informing departments of results;
  - (5) Approving the department's standard operating procedure;
  - (6) Advising employees of the proper PPE; and

- (7) Working with the medical community to carry out any medical surveillance of employees.

6. Employee Exposure Determination

a. Category A - Moderate to High Risk Exposure

- (1) Law enforcement officers; and
- (2) Athletic trainers.
- (3) Physical Therapy
- (4) Nursing

b. Category B - Low to Moderate Risk Exposure

- (1) Plumbers responsible for opening sewage lines;
- (2) Employees responsible for laundry cleaning; and
- (3) The Office of EHS&RM staff required to handle, clean up, and dispose of blood or other infectious materials.

c. Category C - No Risk to Low Risk Exposure

- (1) Office staff;
- (2) Custodians; and
- (3) Employees whose job description defines no task related to exposure.

d. Category D - Unclassified Risk Exposure

This exposure will be determined by the Office of EHS&RM on a case-by-case basis.

7. Employee Protection

- a. If the determination is made that an employee is potentially subject to exposure, the department must follow the BPECP.
- 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.

## 8. Workplace Practices

- a. Employees shall wash their hands immediately after removing gloves and after hand contact with blood.
- 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 other infectious materials are stored.

## 9. Housekeeping

- a. Work surfaces potentially contaminated with human blood or bodily fluids 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.

## 10. 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.

## 11. Training

- a. Training will be initiated by the manager or supervisor when an employee is assigned to a department where there is a chance for exposure. 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 other infectious materials;
  - (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.

## 12. 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.
- b. These labels shall be orange or orange-red with letters and symbols in a contrasting color.

- c. All infectious waste going 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.

### 13. Recordkeeping

- a. 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.

### 14. Medical Surveillance

- a. Employees who have been identified as having an exposure to blood must have made available to them a Hepatitis B vaccination within 10 working days. This will include all employees identified in section 6 above on employee exposure determination. 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*, EHS&RM, (Attachment A).
- c. Employees must sign a *Declination Statement*, EHS&RM, (Attachment B), 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.

### 15. References and Resources

- a. 29 CFR 1910.1030 Bloodborne Pathogens
- b. 29 CFR 1910.1020(e) Recordkeeping
- c. National Institutes of Health (NIH) 1993
- d. Accident Prevention Manual for Business and Industry, 10<sup>th</sup> Edition, 1992

Attachment A: [Exposure Incident Report](#)

Attachment B: [Declination Statement](#)