# ARKANSAS STATE UNIVERSITY GOVERNING PRINCIPLES FOR BLOODBORNE PATHOGENS

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### **1.0 INTRODUCTION**

Arkansas State University (ASU) is committed to providing its employees, students, and affiliated workers with a safe working environment.

### 2.0 PURPOSE

The University's Bloodborne Pathogens Governing Principles were developed to assure the appropriate and safe use of potentially infectious blood or body fluids.

### 3.0 **DEFINITIONS**

- Affiliated Workers. Affiliated workers are those who are not employees nor students, but are nevertheless participants in the University's educational and/or research programs.
- **Bloodborne Pathogens.** Pathogenic microorganisms that are present in human blood and can cause disease in humans. Examples of these pathogens include Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus, Malaria, Syphilis, Babesiosis, Brucellosis, Leptospriosis, Arboviral Infections, Creutzfeld-Jakob Disease,Human T-Lymphotrophic Virus Type I, and Viral Hemorrhagic Fever.
- Universal Precautions. Universal Precautions refer to the treatment of potentially infectious blood or body fluids. These precautions are observed for all human blood, blood products, certain body fluids (semen, vaginal, cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic), body fluids with visible blood, unfixed human tissue or organ, animal blood and tissue with known zoonotic disease or unknown sources.

### 4.0 APPLICABILITY

All of the University's employees, staff, and affiliated workers

### 5.0 **REGULATIONS**

Bloodborne Pathogens Regulations (29 CFR) - 1910.1030: http://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=STANDARDS&p\_id=100 51 Transfer of Select Agents of Human Disease, Center for Disease Control (42 CFR Part 72.6):

References for Inactivation of HIV and Herpes B include <u>http://www.cdc.gov/od/ohs/biosfty/inacthiv.htm</u> and http://www.cdc.gov/od/ohs/buisfty/herpesBinfo.htm

## 6.0 GOVERNING PRINCIPLES

All blood or other potentially infectious materials (OPIM) will be considered infectious regardless of the perceived status of the source individual. These precautions will be observed at the University to prevent contact with potentially infectious materials.

All employees are required to adhere to the provisions herein for infectious materials that may include:

- amniotic fluid,
- blood from experimental animals infected with HIV, HBV or other infectious diseases.
- body fluids that are visibly contaminated with blood
- body fluids,
- cerebrospinal fluid,
- human immunodeficiency virus (HIV)-containing cell or tissue cultures,
- organ cultures and HIV or hepatitis B (HBV)-containing culture medium
- pericardial fluid,
- peritoneal fluid,
- pleural fluid,
- saliva,
- semen,
- synovial fluid,
- unfixed tissue or organ other than intact skin from a human (living or dead);
- vaginal secretions.

#### 7.0 Roles and Responsibilities

#### **Principal Investigators and Supervisors**

Each Principal Investigator and Supervisor should review and prepare specific Exposure Control Plans for their laboratories. Elements of the plan should include:

- Reviewing work assignments to determine employee potential for exposure to labacquired infections;
- Identifying responsibilities of employees covered by the Exposure Control Plan;
- Developing universal precautions and specific measures to minimize the risk of exposure

- Ensuring the engineering controls Biological safety cabinet, centrifuge safety cups, sharps containers, etc. are in place;
- Requiring safe work practices; e.g., hand washing, personal hygiene, labeling, sharps handling, etc.
- Requiring the use of Personal Protective Equipment (PPE) gloves, lab coat, safety glasses, HEPA mask, etc. as needed;
- Maintaining a clean environment;
- Decontaminating the work environment as appropriate;
- Disposing of hazardous materials as directed;
- Developing a Laboratory Specific Emergency Plan should there be an exposure or release;
- Maintaining Exposure Incident Reporting and Recordkeeping.
- Ensuring that employees participate in initial and refresher training. Training

## 8.0 **PROCEDURES**

Universal precautions and the laboratory specific exposure control plan are measures that promote University protection for those faculty, staff, students, or ancillary workers who may be at risk of exposure to bloodborne pathogens such as hepatitis B (HBV), hepatitis C, and human immunodeficiency virus (HIV).

The simple "ABCDE's" of laboratory infection control are:

- Avoid contact with potentially infectious materials (Protective gloves, glasses, lab coat & HEPA respirator).
- **B**e prepared with the proper supplies and equipment (Biological safety spill kits, safety equipment, etc.).
- Clean and sanitize contaminated surfaces with a proper disinfectant.
- Dispose or treat biohazardous waste, sharps, contaminated clothing, etc. properly.
- Every time, remember to wash your hands well and no eating, drinking, smoking, etc. in laboratory.

Other common sense precautions include:

- Placing a biohazard warning sign with the universal biohazard symbol on the access door to the lab work area;
- Limiting or restricting access to the lab when work is in progress.
- Storing all human tissue, body fluid, or other potentially infectious materials in a container labeled with a biohazard symbol. Primary container must prevent leakage (capped test tube, centrifuge tube, etc) during collection, handling, and storage. If the specimens are transported through hallways, the primary containers must be placed in a secondary storage container (bucket, beaker, cooler, etc.) which would contain the contents if the primary container if it were to leak or break.
- Handling blood, blood products, or bodily fluids in an area that can be readily decontaminated.
- Disinfecting before and after handling microorganisms.

- Immediately disinfecting and cleaning spills using appropriate decontamination procedures as determined by the lab supervisor.
- Wearing eye protection when it is reasonably anticipated that blood or other potentially infectious materials may make contact with the mucus membranes of the eye.
- Wearing lab coats and uniforms (coats, gowns, smocks, aprons, or uniforms with long sleeves) must be worn in the lab.
- Removing lab coats and/or uniforms before leaving the lab for non-lab areas.
- Wearing closed-toed shoes only. (Sandals and open-toed shoes are not permitted.)
- Wearing gloves when activities may result in direct skin contact with potentially infectious fluids or tissues. This is particularly important for workers who have dermatitis or other lesions on their hands.
- Washing one's hands immediately upon removal of gloves and upon any contact with potential BBP materials.
- Never eating, drinking, smoking, applying cosmetics or lip balm, or handling contact lenses.
- Never using needles and other sharps that have been sheared, bent, broken, recapped, or re-sheathed by hand.
- Never removing needles from disposable syringes.
- Disposing of all sharps, contaminated or not, in a puncture-resistant hard sided, labeled, sharps container.
- Never handling broken glassware with a gloved or bare hand.
- Disposing of contaminated broken glass in a puncture-resistant, hard-sided container;
- Disposing of all biohazardous waste in accordance with ASU policy.
- After any direct exposure to BBP, immediately washing the affected area with soap and water. Seek medical attention immediately.
- Reporting animal bites and scratches. Wash all wound areas and seek medical attention immediately.

Sharps containers and Biological Spill Care Kits are available at EHS (2862).