

# ASU fact sheet | Experiments involving bloodborne pathogens

## Introduction

The law governing Bloodborne Pathogens, OSHA 29 CFR 1910.1030, was passed in 1991. It was enacted to protect employees who are "reasonably anticipated" as the result of performing their job duties to have contact with human blood, tissue, and other potentially infectious materials, including all human cell lines. ASU offers Hepatitis B Virus (HBV) and Hepatitis A Virus (HAV) vaccinations to several job categories, and is required to have a Bloodborne Pathogens Exposure Control Plan. There are many routes of exposure, such as needlesticks, exposure to broken glass, sharps (razor blades, scalpels), mucous membrane contact (eyes, nose, mouth), or contact of blood with broken or cut skin. All work with human blood, tissue or other potentially infectious materials must be approved by the Institutional Biosafety Committee, or IBC.

## Applicable ASU policies

EHS 101 - Bloodborne Pathogens and Needlestick Prevention. EHS 406 - Shipping and Receiving Hazardous Materials.

## **ASU** guidelines

Biosafety Manual Bioodborne Pathogen Exposure Control Plan Biological Hazardous Waste Handling Procedures Laboratory-specific biosafety standard operating procedures, or SOPs; EHS has a <u>template</u> that may be used to create SOPs.

### Regulations

Occupational Exposures to Bloodborne Pathogens (U.S. Department of Labor, 29 CFR § 1910.1030) Needlestick Safety and Prevention Act

### Summary of requirements

IBC registration and approval of all work with human blood, tissue, other potentially infectious material including all human cell lines. Containment level for work with bloodborne pathogens is determined by IBC based on a risk assessment and recommendations in the Biosafety in Microbiological and Biomedical Laboratories, or BMBL (in most cases this will be BSL-2).

### **Biosafety training**

ASU Biosafety Training must be taken prior to initial work with biohazardous materials and then at least every four years thereafter. More frequent training may be required if there are any significant findings during an inspection, after an accident or injury involving biohazards, when biosafety procedures or policies change or after an adverse event in the laboratory. The ASU Biosafety Training is available on the <u>EHS training webpage</u>.

## Bloodborne pathogens training

Work with pathogens that fall under the Occupational Health and Safety Administration's, or OSHA's Bloodborne Pathogen Standard, 29 CFR 1910.1030 requires training regarding bloodborne pathogens be provided "at the time of initial assignment to tasks where occupational exposure may take place" and "at least annually thereafter." Examples of bloodborne pathogens include human organs, tissues, blood or blood products, cell lines or any other material of human origin, as well as microorganisms that may be present in human blood which can cause disease

in humans (e.g., HBV, Human Immunodeficiency Virus). Please refer to the <u>ASU Bloodborne Pathogens</u> <u>Exposure Control Plan</u> for additional information. The Bloodborne Pathogens Training is available on the <u>EHS training webpage</u>.

## Reporting

The Principal Investigator must report all research-related accidents or illnesses to EHS and the IBC. The IBC is responsible for reporting any significant problems with or violations of the National Institutes of Health, or NIH, Guidelines and any significant research-related accidents or illnesses to NIH within 30 days unless the IBC determines that a report has already been filed by the Principal Investigator.

It is highly recommended that post-exposure treatment be started as soon as possible following an exposure incident. If an exposure occurs, the individual should immediately go to <u>ASU Employee Health</u> (ASU employees), or <u>ASU Health Services</u> (ASU students). If ASU Employee Health or ASU Health Services is closed, follow-up care may be obtained at the nearest emergency room and reported to <u>ASU Environmental Health and Safety</u> the next business day.

#### Records

The <u>ASU Office for Research Integrity and Assurance</u> maintains records of registrations approved by the IBC. Training records must be kept for three years and medical records must be kept for the duration of employment plus 30 years. A sharps injury log must also be maintained.

Questions? Contact ASU Environmental Health and Safety at 480-965-1823 or email <u>asuehs@asu.edu</u>.