

Section 3: Applicable Regulatory Statutes/Guidelines

[OSHA Bloodborne Pathogens Standard](#)

[CDC/NIH's Biosafety in the Microbiological and Biomedical Laboratories \(BMBL 5th Edition\)](#)

WCU Biological Safety Manual

WCU Bloodborne Pathogens Exposure Control Plan

List any additional regulations or guidelines pertaining to the organisms used:

Section 4: Risk Assessment

Describe the risks of the agent(s) being handled. Describe disease caused in humans, signs and symptoms of illness, severity of disease, infective dose, stability in environment, and attenuated strains (as applicable).

Routes of Transmission:

- **Exposure routes/risks of concern:** Describe sharps or fragile glass items used and risk for puncture exposure. Describe any potential for aerosolizing and inhalation exposure, ingestion, or skin absorption.

- **Off target effects (insertional mutagenesis, etc.) from exposure to the biohazardous and/or recombinant material:**

Section 5: Risk Reduction

Medical Considerations: Describe any necessary medical screening and surveillance, as well as any recommended vaccinations. Personnel may be offered vaccines (HBV) and counseling depending on the organism(s) being handled in the lab.

Precautions: All laboratory work shall fully comply with biosafety level 2 (BSL2) containment as described in the current edition of the CDC/NIH's Biosafety in the Microbiological and Biomedical Laboratories.

Door Signage & Equipment Labeling:

- Posting of signs is the research staff's responsibility.
- Signs will be posted at all times when hazardous material is present.
- Signs will be removed by research staff when hazardous material is no longer present.

Access to laboratory is restricted: Describe restrictions in place (keys, electronic access, etc.).

Personal Protective Equipment (PPE): PPE will be donned when entering the work area and removed before leaving. Always wash hands after removing gloves. Inspect PPE before use. Replace damaged PPE. Remove and replace PPE after gross contamination. Do not take PPE home with you to be laundered.

Required PPE:

- appropriate street clothing (long pants, close-toed shoes)
- gloves; indicate type:
- safety goggles safety glasses face shield
- lab coat
- other:

Methods to minimize exposure: Describe alternatives to sharps & safer devices that will be used. Explain the use of conveniently located sharps containers, absorbent materials to contain spills, etc.

Methods to prevent the release of infectious agents/protect workers from aerosols, splashes, & splatter: Describe barrier equipment and procedures.

Specimen transport and removal of material(s) from the laboratory: Describe materials and methods used for transport (carts, leak proof containers, etc.).

Standard microbiological methods: Hands must be washed (thoroughly for 20 seconds with mild soap) as soon as possible after handling potentially infectious materials. Hands should also be washed after glove removal, and before exiting the laboratory. To minimize potential exposure, eating, drinking, smoking, applying cosmetics, and handling contact lenses is prohibited in laboratory areas. Food and drink may not be stored in refrigerators in which laboratory materials are also stored. For complete microbiological lab methods, refer to WCU's Biological Safety Manual.

Cleaning & Disinfection: Work benches will be maintained as organized and clutter-free as practical. Benches must be wiped down with a freshly prepared (within 24 hours) 10% bleach solution or other approved disinfectant at least once a day and immediately after a spill of potentially infectious material.
Other approved disinfectant to use:

Waste Generation and Disposal: Identify types of waste generated (liquid, dry, sharps, animals, etc.) and procedures for handling/disposing of waste, including contaminated and non-contaminated wastes and the use of sharps containers, red biohazard bags, autoclave bags, etc.

Spill and Accident Response Procedures:

If the spill is a respiratory hazard, mark the area as "SPILL, DO NOT ENTER" and evacuate 30 minutes to allow aerosols to settle. After 30 minutes (or if the spill is not a respiratory hazard) proceed with the following:

- Be especially cautious of sharps. Always remove sharps with mechanical means (pieces of cardboard, tongs, etc.) and do not pick up with your hands.

Blood or Body Fluids

- Don all appropriate PPE. Disposable gloves are required, shoe covers and face masks may be necessary.
- Absorb fluids with disposable towels. Place materials in a red biohazard bag.
- Clean area of all visible fluids with soap and water.
- Decontaminate area with a fresh 10% bleach solution or Tuberculocidal disinfectant.

BSL 2 Microorganism

- Alert people in immediate area of the spill and request that they leave the area.
- Don all appropriate PPE. Disposable gloves are required, shoe covers and face masks may be necessary.
- Cover spill with disposable absorbent (towels or inert loose material).
- Carefully pour a fresh 10% bleach solution around the edges of the spill and then into the center of the spill. Do not splash. Leave for 20 minutes.
- Using disposable paper towels, wipe up the spill, working from the outside towards the center. Dispose of materials in a red biohazard bag.
- Clean spill area with fresh towels soaked in an approved disinfectant or fresh 10% bleach solution and allow to air dry. Place these materials in a red biohazard bag or approved autoclave bag if autoclave sterilization will be used.

Describe any additional spill requirements for this procedure:

Section 6: Personnel Exposure to Biohazards

Accidental exposures, such as a splash to the face or a sharps injury, shall be reported immediately to your supervisor and University Health Services. The medical representative will help categorize the risk of developing occupationally-acquired infection and provide advice on an appropriate post-exposure treatment. Employee exposures must be reported to Safety & Risk Management within 24 hours.

Section 7: Training Requirements

Workers conducting research under this procedure must comply with the following training requirements:

- Complete Laboratory Safety Training, Biosafety Training, and Bloodborne Pathogen Training. Contact the Safety & Risk Management Office to be enrolled in the required training courses (828-227-7443).
- All personnel shall read and fully adhere to this SOP.
- The supervisor will maintain documentation of personnel reading and understanding of this lab-specific SOP using the attached signature page.

List any additional training requirements:

Additional Comments

Standard Operating Procedure for the Safe Handling of Infectious Organisms at BSL2 Containment

Procedure Title: _____

“I have read and understand this SOP. I agree to fully adhere to its requirements.”

Last Name (print)	First Name (print)	92#	Signature	Date