**EH&S Biological Safety**

PI:

Lab Contact:

Room(s):

Inspected by:

Date:

Agents:

### Biological Safety Level 2 with 3 practices (BSL-2 with BSL-3 practices)

### Inspection Checklist

*References*:

[UW Biosafety Manual](https://www.ehs.washington.edu/resource/biosafety-manual-4)

[CDC/NIH Biosafety in Microbiological and Biomedical Laboratories (BMBL)](https://www.cdc.gov/labs/BMBL.html)

[NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules](https://osp.od.nih.gov/wp-content/uploads/2019_NIH_Guidelines.htm)

[Washington State Bloodborne Pathogen Regulations](https://www.lni.wa.gov/safety-health/safety-rules/rules-by-chapter/?chapter=823)

[Biosafety Level 2 (BSL-2) with Biosafety Level 3 (BSL-3) Laboratory Practices](https://www.ehs.washington.edu/system/files/resources/BSL2-with-3-info.pdf)

| **REQUIREMENT** | **YES** | **NO** | **N/A** | **NOTES** |
| --- | --- | --- | --- | --- |
| A BSL-2 + BSL-3 Practices [Biohazard sign](https://www.ehs.washington.edu/system/files/resources/biohazard-sign.pdf) is posted on door listing agents, entry requirements, and emergency contact information and any occupational health requirements. The sign is affixed in a way that it can easily be removed. When work is complete, agents are securely stored and surfaces are decontaminated, the sign may be removed or turned over. |  |  |  |  |
| The lab door remains closed when not in use. It is lockable with access controlled by the PI. |  |  |  |  |
| The Caution Sign for Hazards displays a biohazard symbol. |  |  |  |  |
| [Exposure Response Poster](https://www.ehs.washington.edu/system/files/resources/exposure-response-poster.pdf) is in lab; lab staff is aware of proper procedures. |  |  |  |  |
| Biohazard [spill procedures](https://www.ehs.washington.edu/system/files/resources/spill-response-poster.pdf) are in place, [posted](https://www.ehs.washington.edu/system/files/resources/spill-response-poster.pdf) in lab areas, and lab staff is trained. |  |  |  |  |
| The lab contains a sink for hand washing. |  |  |  |  |
| Personnel wash their hands after handling biohazardous materials or animals and before exiting the  laboratory. Hand soap and paper towels are available at the sink. |  |  |  |  |
| An eye wash is [readily available](https://www.ehs.washington.edu/research-lab/emergency-washing-equipment) (10sec/50ft, unobstructed) and flushed weekly with documentation. |  |  |  |  |
| A herpes B scrub kit is available for work with non-human primate source material. |  |  |  |  |
| Benchtops are impervious to water; lab furniture is sturdy. Chairs are covered with non-fabric  material; no rugs or carpets. The lab is designed so it can be easily cleaned; spaces between benches, cabinets and equipment are accessible for cleaning. |  |  |  |  |
| Work areas are kept free from clutter and are cleaned regularly. |  |  |  |  |
| Directional airflow draws air into the laboratory through the entry area (verified by smoke test). |  |  |  |  |
| Lighting is adequate for all activities. |  |  |  |  |
| Lab adheres to [UW hallway/corridor policy](https://www.ehs.washington.edu/resource/corridor-policy-focus-sheet-209). |  |  |  |  |
| All windows are closed and sealed. |  |  |  |  |
| No food or drinks consumed or stored in the lab. Smoking, chewing gum, handling contacts, applying  cosmetics is not allowed in lab. |  |  |  |  |
| Plants or animals that are not associated with research are not present in the lab. |  |  |  |  |
| Personnel wear clothing that covers the skin on legs (long pants or skirts) and closed-toe shoes. Long  hair is tied back so that it cannot contact hands, specimens, containers, or equipment. |  |  |  |  |
| [Appropriate PPE](https://www.ehs.washington.edu/workplace/personal-protective-equipment-ppe) is readily available. For BSL-2+3, includes rear-opening lab coat and gloves upon entry. Double-gloves, goggles, and face shield worn when risk assessment mandates. Reusable PPE is autoclaved prior to laundering. [No PPE is worn in the halls.](https://www.ehs.washington.edu/system/files/resources/no-ppe-outside-lab-poster.pdf) |  |  |  |  |
| An area for donning and doffing PPE is available. |  |  |  |  |
| Work surfaces are [decontaminated](http://www.ehs.washington.edu/biological/biological-research-safety#decon) with a suitable disinfectant once a day (following work) and after  any spill of viable material. |  |  |  |  |
| Liquid biohazardous waste is appropriately decontaminated prior to disposal. |  |  |  |  |
| If used with biohazards, vacuum lines are protected with [liquid disinfectant traps](https://www.ehs.washington.edu/system/files/resources/uw-biosafety-manual.pdf#page%3D40) and in-line HEPA filters. Glass flasks are kept in secondary containment if on the floor. Aspirator flasks or bottles containing liquids are labeled as “biohazard waste.” |  |  |  |  |
| Alternatives to sharps are used when feasible. If no alternatives, detailed safety procedures for their  use must be included in the lab-specific biosafety manual. |  |  |  |  |
| Policies for the [safe handling](https://www.ehs.washington.edu/resource/sharps-safety-research-578) and disposal of [sharps](https://www.ehs.washington.edu/biological/sharps-and-laboratory-glass) are in place. |  |  |  |  |
| Solid [biohazardous waste](https://www.ehs.washington.edu/biological/biohazardous-waste) is packaged in appropriate biohazard bags and waste bins. |  |  |  |  |
| Biohazardous [lab glass and plastic](https://www.ehs.washington.edu/system/files/resources/packaging-sharps-poster.pdf) is packaged to prevent punctures. |  |  |  |  |
| Waste is appropriately managed and safely stored in the lab. |  |  |  |  |
| Solid biohazardous waste and sharps waste are autoclaved prior to disposal. |  |  |  |  |
| Biohazardous waste is [autoclaved](https://www.ehs.washington.edu/biological/biohazardous-waste#autoclave) on-site by the laboratory. If so, are monitoring requirements in place?   * Autoclave tape used for each load * Approved chemical integrator used with each load * Monthly biological indicator and positive control are used * Temperature of each load is recorded in log book * Autoclave SOP is in place * Safety equipment is available (i.e., heat-resistant gloves) |  |  |  |  |
| Biohazardous waste is transported to an [autoclave cost center](https://www.ehs.washington.edu/biological/biohazardous-waste#autocost) for decontamination. |  |  |  |  |
| Biohazardous waste is [shipped off-site](https://www.ehs.washington.edu/biological/biohazardous-waste#shipbiowaste) for decontamination. If so, are the following in place:   * Triple packaging * Correct liner bag and shipping labels * Sharps packaged separately * Shipping RMW SOP in place * Shipping RMW training current |  |  |  |  |
| Potentially infectious material is [transport](https://www.ehs.washington.edu/biological/biohazardous-waste#transport)ed in a leak-proof secondary container. |  |  |  |  |
| [Biosafety Cabinets](https://www.ehs.washington.edu/biological/biological-safety-cabinets) (BSCs) are certified and appropriately located in laboratory. |  |  |  |  |
| Staff is aware of proper use and limitations of biosafety cabinets including air flow disturbance, use of volatile chemicals or flammables, etc. |  |  |  |  |
| UV lights in biosafety cabinets are not relied upon for primary decontamination. |  |  |  |  |
| Centrifuge aerosol containment safety cups or sealed rotors are used to centrifuge biological agents.  Safety cups are loaded/unloaded inside a biosafety cabinet. |  |  |  |  |
| Open manipulations of infectious materials are conducted inside a biosafety cabinet or other physical containment device. All procedures are performed carefully to minimize the creation of aerosols. |  |  |  |  |
| A process for inventory control is in place; stocks/cultures are documented and labeled. |  |  |  |  |
| The lab has documented [training records:](https://training.ehs.washington.edu/mytraining/index.php) Biosafety / BBP / Shipping RMW (if required) / BSL-2 w/  BSL-3 practices manual/SOP. |  |  |  |  |
| Lab-specific training about the specific hazards present in the lab is provided to lab personnel and documented. All staff and visitors are trained prior to exposure to lab hazards. A lab-specific biosafety manual or SOP exists with written standardized safety procedures including training, entry/exit requirements, spill/exposure procedures, equipment operations, decontamination procedures, and procedures for transporting agents outside of lab. (Template manual available upon request.) |  |  |  |  |
| A current [UW Biosafety Manual](https://www.ehs.washington.edu/resource/biosafety-manual-4) is accessible in the lab (electronic on lab computer or printed copy). |  |  |  |  |
| PI or lab manager reviews [BUA letters](https://www.ehs.washington.edu/biological/biological-research-safety) with lab personnel, and a copy is available for reference. |  |  |  |  |