



Environmental Health & Safety
Biosafety Level 2 (BSL-2) Commissioning Checklist

Department: _____ Principal Investigator: _____

Building: _____ Commissioned By: _____

Room(s): _____ Date: _____

Note: (1) A demarcation in the YES column indicates *compliance* with the respective observation.
 (2) A demarcation in the NO column indicates *action required* by the PI prior to EHS commissioning the laboratory
 (3) A demarcation in the N/A column indicates that the respective observation is *not applicable*

A. Laboratory Facilities	YES	NO	N/A
1. Specific compliance documents to be kept in laboratory or be easily accessible online: <input type="checkbox"/> Laboratory Specific Biosafety Manual <input type="checkbox"/> TCU Integrated Laboratory Management Plan (ILMP) <input type="checkbox"/> TCU Bloodborne Pathogens Exposure Control Plan <input type="checkbox"/> Biosafety in Microbiological and Biomedical Laboratories (BMBL), 6th Edition (2020) <input type="checkbox"/> NIH Guidelines [PDF] – April 2024			
2. The laboratory is designed to be easily cleaned, to include: <input type="checkbox"/> Bench tops impervious to water and resistant to acids, alkalis, organic solvents, and moderate heat <input type="checkbox"/> Spaces between benches, cabinets, and equipment accessible for cleaning <input type="checkbox"/> No carpets or rugs present in laboratory space <input type="checkbox"/> Chairs and furniture in laboratory covered with non-porous, chemical resistant material that is easily decontaminated			
3. Laboratory has appropriately labeled biohazard waste containers			
4. An autoclave for decontamination of biohazardous materials is available in the same building			
5. An uncontaminated sink for hand-washing is available and near the laboratory exit			
6. Eye wash station is functioning, readily accessible, and free of obstruction			
7. An insect and rodent control program has been instituted			
8. Windows, if present and can open to the exterior, are sealed or fitted with screens			
9. Illumination is adequate for all activities, avoiding reflections and glare that could impede vision			
10. No observations indicate the activities of prohibited actions - eating, drinking, smoking, handling contact lenses, applying cosmetics, or storing food for human consumption			
11. Laboratory doors are self-closing, unobstructed, and lockable. Doors to remain closed and access controlled during experimental procedures.			
12. BIOHAZARD sign is posted on the lab entrance door, which includes the biosafety level, required immunizations, emergency contact numbers, and any personal protective equipment that must be worn			



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Comments:			
B. Containment Equipment			
1. Biological safety cabinet (BSC) is present, located away from laboratory doors or other sources of air-fluctuation or disruption to maintain BSC's airflow for containment. BSC shall be used to contain aerosol-producing activities and equipment (vortexes, blenders, sonicators, centrifuges, etc.) except where the equipment is designed to contain aerosols.			
2. BSC has current certification from an approved vendor. All BSCs shall be recertified annually.			
3. A chemical fume hood or externally exhausted Class II BSC is available if hazardous chemicals, volatile solvents, or radioactive materials will be used.			
4. Vacuum lines in use are protected with liquid disinfectant traps and/or HEPA filters			
Comments:			
C. Standard Microbiological Laboratory Practices			
1. Work surfaces to be decontaminated routinely, at least daily, and following any spill			
2. A written procedure for routine decontamination is readily available in the work area. All contaminated materials intended for reuse are decontaminated before washing			
3. All wastes from the laboratory and/or animal rooms are properly packaged before disposal, according to the TCU Integrated Laboratory Management Plan			
4. Leak-proof and closed containers are available and used to transport contaminated materials if they are removed from the laboratory for autoclaving/decontamination			
5. Mechanical pipetting devices are available and used for all pipetting			
6. Experiment areas of lesser biohazard potential are carefully demarcated			
7. The PI has a documented training ensuring all laboratory personnel have a good understanding of safe microbiological technique, exposure controls/precautions, and are familiar with the biohazards in the room			
8. Suitable disinfectants, containers for disinfectants, biohazard bags, and other applicable items to the written laboratory procedures are available at the work area			
9. All containers holding biohazards are labeled with a biohazard sign			
Comments:			
D. Special Practices			
1. Mechanisms are in place to maintain inventory of all biohazards present in the laboratory and is available to personnel and emergency personnel.			
2. Practices are in place to minimize the creation of aerosols			



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3. Freezers and refrigerators, or other units used to store biohazards, are labeled with the biohazard symbol			
4. Personal protective equipment (PPE), appropriate for the research conducted, is required and provided by the PI, and is not permitted to be worn outside of the laboratory.			
5. Protocols are in place to provide medical monitoring, treatment, and surveillance, including immunizations and respirator usage, if appropriate			
6. A process for reporting and investigating injuries/illnesses involving biohazards exists			
7. Personnel working with infectious agents covered by TCU's Bloodborne Pathogens Exposure Control Plan have had Bloodborne Pathogen Training within the last year. All individuals have access to TCU's current Bloodborne Pathogens Exposure Control Plan			
8. PI has justified the use of any needle and syringe procedures and has documented all persons working with these items have been shown safe handling practices. Policies for the safe handling of sharps, including reporting of all sharps injuries, are instituted.			
9. PI maintains all information that pertains to the facility and safe work practices.			
10. A written procedure is available explaining required actions in the event of a laboratory emergency, such as accidental spills or personnel contamination. Spills and accidents resulting in overt exposure of humans to organisms are immediately reported to the Hazardous Materials Safety Manager.			
11. Onsite and offsite transportation of biohazards is coordinated through the Hazardous Materials Safety Manager			
12. Principal Investigator understands that certain biohazardous materials and/or toxins may be of interest to persons or groups interested in terrorist or other illegal activities. Those agents that might pose a serious threat to humans, animals, agriculture, or the livestock industry shall be kept in a secure place within the laboratory. Moreover, if a request to send a dangerous organism for academic purpose is received, the PI must assure that he/she is compliant in transferring such material and that all material transfer regulations are observed.			
Comments:			