

Biosafety Level 3 (BSL-3)

- Yes No 1. Is access to the laboratory limited or restricted at the discretion of the laboratory director/supervisor based on institutional policy when experiments are in progress?
- Yes No 2. Do persons wash their hands after handling infectious materials, after removing gloves, and when they leave the laboratory?
- Yes No 3. Is Eating or storing food, drinking, smoking, handling contact lenses, and applying cosmetics not permitted in the laboratory?
- Yes No 4. Do persons who wear contact lenses in laboratories also wear goggles or a face shield?
- Yes No 5. Is no food allowed in the lab?
- Yes No 6. Is mouth pipetting prohibited?
- Yes No 7. Are mechanical pipetting devices used?
- Yes No 8. Are policies for the safe handling of sharps and broken glass instituted?
- Yes No 9. Are all procedures performed carefully to minimize the creation of aerosols?
- Yes No 10. Are work surfaces decontaminated at least once a day and after any spill of viable material?
With what _____?
- Yes No 11. Are all cultures, stocks, and other potentially infected waste decontaminated before disposal by an approved decontamination method, such as autoclaving?
- Yes No 12. Are materials to be decontaminated outside of the immediate laboratory placed in a durable, leak proof container and closed for transport from the laboratory?
- Yes No 13. Is infectious waste from BSL-3 laboratories decontaminated before removal for off-site disposal?
- Yes No 14. Are insect and rodent control programs in effect?
- Yes No 15. Are laboratory doors kept closed when experiments are in progress?
- Yes No 16. Does the laboratory director control access to the laboratory and restrict access to persons whose presence is required for program or support purposes?
- Yes No 17. Are persons who are at increased risk of acquiring infection or for whom infection may have serious consequences not allowed in the laboratory or animal rooms? (For example, persons who are immunocompromised or pregnant may be at risk of acquiring infections.) Persons w/immune system incompetence should be provided information regarding the risks and encouraged to discuss their work with the Occ. Med. Physicians
- Yes No 18. Does the laboratory director establish policies and procedures whereby only persons who have been advised of the potential

biohazard, who meet any specific entry requirements (e.g., immunization), and who comply with all entry and exit procedures, enter the laboratory or animal rooms?

- Yes No 19. Are there no minors allowed in the laboratory?
- Yes No 20. When infectious materials or infected animals are present in the laboratory or containment module, is a hazard warning sign, incorporating the universal biohazard symbol, posted on all laboratory and animal room access doors?
- Yes No 21. Does the hazard warning sign identify the agent, list the name and telephone number of the laboratory director or other responsible person(s) (2 emergency contact numbers required), and indicate any special requirements for entering the laboratory, such as the need for immunizations, respirators, or other personal protective measures?
- Yes No 22. Do laboratory personnel receive the appropriate immunizations or tests and medical surveillance for the agents handled or potentially present in the laboratory (e.g., hepatitis B vaccine or TB skin testing), and periodic testing as recommended for the agent being handled?
- Yes No 23. Are baseline serum samples collected as appropriate and stored for all laboratory and other at-risk personnel? (Additional serum specimens may be periodically collected, depending on the agents handled or the function of the laboratory.)
- Yes No 24. Is a biosafety manual specific to the laboratory prepared or adopted and made available by the laboratory director?
- Yes No 25. Are biosafety precautions incorporated into standard operating procedures?
- Yes No 26. Are personnel advised of special hazards and required to read and follow instructions on practices and procedures?
- Yes No 27. Do laboratory and support personnel receive appropriate training on the potential hazards associated with the work involved, the necessary precautions to prevent exposures, and the exposure evaluation procedures?
- Yes No 28. Do personnel receive annual updates or additional training as necessary for procedural changes?
- Yes No 29. Is the laboratory director responsible for ensuring that, before working with organisms at BSL3, all personnel demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the laboratory facility? (This might include prior experience in handling human pathogens or cell cultures, or a specific training program provided by the laboratory director or other competent scientist proficient in safe microbiological practices and techniques.)
- Yes No 30. Is a high degree of precaution always taken with any contaminated sharp items, including needles and syringes, slides, pipettes, capillary tubes, and scalpels?

- Yes No 31. Are needles and syringes or other sharp instruments restricted in the laboratory for use only when there is no alternative, such as parenteral injection, phlebotomy, or aspiration of fluids from laboratory animals and diaphragm bottles?
- Yes No 32. Is plasticware substituted for glassware whenever possible?
- Yes No 33. Are only needle-locking syringes or disposable syringe-needle units (i.e., needle is integral to the syringe) used for injection or aspiration of infectious materials?
- Yes No 34. Used disposable needles are not bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal; rather, they are carefully placed in conveniently located puncture-resistant containers used for sharps disposal.
- Yes No 35. Are non-disposable sharps placed in a hard-walled container for transport to a processing area for decontamination, preferably by autoclaving?
- Yes No 36. Are syringes which re-sheath the needle, needleless systems, and other safe devices used when appropriate?
- Yes No 37. Broken glassware is not handled directly by hand, but is removed by mechanical means such as a brush and dustpan, tongs, or forceps included in the 'Biospill Kit'?
- Yes No 38. Are containers of contaminated needles, sharp equipment, and broken glass decontaminated before disposal, and disposed of according to any local, state, or federal regulations?
- Yes No 39. Are all open manipulations involving infectious materials conducted in biological safety cabinets or other physical containment devices within the containment module?
- Yes No 40. There is no work in open vessels conducted on the open bench?
- Yes No 41. Is clean-up facilitated by using plastic-backed paper toweling on non-perforated work surfaces within biological safety cabinets?
- Yes No 42. Are laboratory equipment and work surfaces decontaminated routinely with an effective disinfectant, after work with infectious materials is finished, and especially after overt spills, splashes, or other contamination with infectious materials?
- Yes No 43. Are spills of infectious materials decontaminated, contained and cleaned up by appropriate professional staff, or others properly trained and equipped to work with concentrated infectious material?
- Yes No 44. Are spill procedures developed and posted?
- Yes No 45. Is contaminated equipment decontaminated before removal from the facility for repair or maintenance or packaging for transport, in accordance with applicable local, state, or federal regulations?
- Yes No 46. Are cultures, tissues, specimens of body fluids, or wastes placed in a container that prevents leakage during collection, handling, processing, storage, transport, or shipping?

- Yes No 47. Are all potentially contaminated waste materials (e.g., gloves, lab coats, etc.) from laboratories decontaminated before disposal or reuse?
- Yes No 48. Are spills and accidents that result in overt or potential exposures to infectious materials immediately reported to the laboratory director?
- Yes No 49. Is appropriate medical evaluation, surveillance, and treatment provided and are written records maintained?
- Yes No 50. Are animals and plants not related to the work being conducted not permitted in the laboratory?
- Yes No 51. Is protective laboratory clothing such as solid-front or wrap-around gowns, scrub suits, or coveralls worn by workers when in the laboratory?
- Yes No 52. Is protective clothing not worn outside the laboratory?
- Yes No 53. Is Reusable clothing decontaminated before being laundered?
- Yes No 54. Is clothing changed when overtly contaminated?
- Yes No 55. Are gloves worn when handling infectious materials, infected animals, and when handling contaminated equipment?
- Yes No 56. Is frequent changing of gloves accompanied by hand washing? Double gloves may be appropriate.
- Yes No 57. Are disposable gloves not reused?
- Yes No 58. Are all manipulations of infectious materials, necropsy of infected animals, harvesting of tissues or fluids from infected animals or embryonate eggs, etc., conducted in a Class II or Class III biological safety cabinet?
- Yes No 59. When a procedure or process cannot be conducted within a biological safety cabinet, are appropriate combinations of personal protective equipment (e.g., respirators, face shields) and physical containment devices (e.g., centrifuge safety cups or sealed rotors) then used?
- Yes No 60. Is respiratory and face protection used when in rooms containing infected animals?
- Yes No 61. Is the laboratory separated from areas that are open to unrestricted traffic flow within the building, and is access to the laboratory restricted?
- Yes No 62. Is there a passage through a series of two self-closing doors into the laboratory from access corridors?
- Yes No 63. Are the doors lockable?
- Yes No 64. Is there a clothes change room included in the passageway?
- Yes No 65. Does each laboratory room contain a sink for hand washing?
- Yes No 66. Is the sink hands-free or automatically operated?
- Yes No 67. Is the sink located near the room exit door?
- Yes No 68. Are the interior surfaces of walls, floors, and ceilings of areas where BSL-3 agents are handled constructed for easy cleaning and decontamination?

- Yes No 69. Are the seams, if present, sealed?
- Yes No 70. Are the walls, ceilings, and floors smooth, and impermeable to liquids and resistant to the chemicals and disinfectants normally used in the laboratory?
- Yes No 71. Are the floors monolithic and slip-resistant? (Consideration should be given to the use of coved floor coverings.)
- Yes No 72. Are penetrations in floors, walls, and ceiling surfaces sealed?
- Yes No 73. Are openings such as around ducts and the spaces between doors and frames capable of being sealed to facilitate decontamination?
- Yes No 74. Are bench tops impervious to water and are they resistant to moderate heat and the organic solvents, acids, alkalis, and those chemicals used to decontaminate the work surfaces and equipment?
- Yes No 75. Is laboratory furniture capable of supporting anticipated loading and uses?
- Yes No 76. Are spaces between benches, cabinets, and equipment accessible for cleaning?
- Yes No 77. Are chairs and other furniture used in laboratory work covered with a non-fabric material that can be easily decontaminated?
- Yes No 78. Are all windows in the laboratory closed and sealed?
- Yes No 79. Is a method for decontaminating all laboratory wastes available in the facility and utilized, preferably within the laboratory (i.e., autoclave, chemical disinfection, incineration, or other approved decontamination method)? (Consideration should be given to means of decontaminating equipment.)
- Yes No 80. If waste is transported out of the laboratory, is it properly sealed and not transported in public corridors?
- Yes No 81. Are biological safety cabinets located away from doors, from room supply louvers, and from heavily-traveled laboratory areas?
- Yes No 82. Is a ducted exhaust air ventilation system provided?
- Yes No 83. Does this system create directional airflow that draws air into the laboratory from "clean" areas and toward "contaminated" areas?
- Yes No 84. Is the exhaust air not recirculated to any other area of the building? (Filtration and other treatments of the exhaust air are not required, but may be considered based on site requirements, and specific agent manipulations and use conditions.)
- Yes No 85. Is the outside exhaust dispersed away from occupied areas and air intakes, or is the exhaust HEPA-filtered?
- Yes No 86. Can laboratory personnel verify that the direction of the airflow (into the laboratory) is proper? (It is recommended that a visual monitoring device that indicates and confirms directional inward airflow be provided at the laboratory entry. Consideration should be given to installing an HVAC control system to prevent sustained positive pressurization of the laboratory. Audible alarms should be considered to notify personnel of HVAC system failure.)

- Yes No 87. Is HEPA-filtered exhaust air from a Class II biological safety cabinet recirculated into the laboratory only if the cabinet is tested and certified at least annually?
- Yes No 88. When exhaust air from Class II safety cabinets is to be discharged to the outside through the building exhaust air system, are the cabinets connected in a manner that avoids any interference with the air balance of the cabinets or the building exhaust system (e.g., an air gap between the cabinet exhaust and the exhaust duct)?
- Yes No 89. When Class III biological safety cabinets are used are they directly connected to the exhaust system?
- Yes No 90. If the Class III cabinets are connected to the supply system, is it done in a manner that prevents positive pressurization of the cabinets (see Appendix A)?
- Yes No 91. Are continuous flow centrifuges or other equipment that may produce aerosols contained in devices that exhaust air through HEPA filters before discharge into the laboratory?
- Yes No 92. Are these HEPA systems tested at least annually? (Alternatively, the exhaust from such equipment may be vented to the outside if it is dispersed away from occupied areas and air intakes.)
- Yes No 93. Are vacuum lines protected with liquid disinfectant traps and HEPA filters/ Is the HEPA filter changed as needed?
- Yes No 94. Are filters replaced as needed? (An alternative is to use portable vacuum pumps (also properly protected with traps and filters)).
- Yes No 95. Is an eyewash station readily available inside the laboratory?
- Yes No 96. Is illumination adequate for all activities, avoiding reflections and glare that could impede vision?
- Yes No 97. Are the BioSafety Level 3 facility design and operational procedures documented?
- Yes No 98. Is the facility tested for verification that the design and operational parameters have been met prior to operation?
- Yes No 99. Are facilities re-verified, at least annually, against these procedures as modified by operational experience?
- Yes No 100. Is additional environmental protection (e.g., personnel showers, HEPA filtration of exhaust air, containment of other piped services and the provision of effluent decontamination) considered if recommended by the agent summary statement, as determined by risk assessment, the site conditions, or other applicable federal, state, or local regulations?
- Yes No 101. Are incidents that result in exposure to infectious agents or materials are immediately evaluated, reported to the supervisor and the Biosafety Office?
- Yes No 102. Does the lab staff ship biological materials or Dangerous Goods?
- Yes No 102a If so, is the training certification current?

Yes No 103. Does the laboratory work involve Blood and/or OPIM?

Yes No 103a If so, is the BBP training certification current?

Autoclave	Decon methods	Spill/Cleaning
Location: _____ Testing freq: _____	_____	_____

Biosafety Cabinets			
Location: _____ Model: _____ Serial#: _____ Cert Date: _____			

Lab Technician: _____

EH&S Reviewer: _____