

Biology Lab Safety

Document No.

000089

Audit Title

Biology Lab Safety Inspection

Conducted on

9/28/16, 1:43 PM

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Completed on

9/28/16, 1:45 PM

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Audit

Question	Response	Details
Standard Microbiological Practices for BSL-1		
The purpose of this section is to evaluate the microbiological practices of labs using well characterized agents not known to consistently cause disease in immunocompetent adult humans and present minimal potential hazard to lab personnel and the environment.		
Can the door to the lab be locked?	Yes	
Are mechanical pipetting devices available? No mouth pipetting.	Yes	
Sharps container is available and accessible?	Yes	
Non-disposable sharps are transported in hard walled container for decontaminating?	Yes	
Are disposable needles bent, sheared, or broken? Recapping or removing needles from syringes is greatly discouraged.	Safe	
An appropriate disinfectant is available and decontamination of work surfaces and equipment is performed regularly.	Safe	
Are procedures in place to minimize the creation of splashes and aerosols? The vortex or the centrifuge, if used with samples open to the room air, may be a source of splashes or aerosols.	Yes	
Materials transported outside of the lab along common hallways are placed in a durable, leakproof container and secured for transport.	Safe	
Is an inventory of agents available in the lab?	No	
Are there signs of unwanted insects or other pests in the lab?	Safe	

Question	Response	Details
<p>Have employees been informed of any immunizations or prophylactic interventions available, specific to the agents used in the lab?</p> <p>This includes information for immune compromised individuals.</p>	Safe	
<p>Are cultures, stocks, and other potentially infectious materials being decontaminated using an effective method if they are being disposed of in the regular waste stream?</p>	Safe	
Laboratory Facilities		
<p>The purpose of this section is to ensure the laboratory is designed in such a manor that it can be easily cleaned.</p>		
<p>Are floors constructed of non-porous materials? Are floor tiles intact?</p> <p>Unsealed cement exposed by missing floor tiles cannot be easily decontaminated due to its porous nature.</p>	Yes	
<p>Are lab benches impervious to water and resistant to heat and chemicals?</p>	Yes	
<p>Chairs used in the lab must be covered in a non-porous material that can be easily cleaned and decontaminated.</p>	Yes	
<p>Labs with exterior windows that open to the outside should be fitted with screens.</p>	Yes	
BSL-2 Special Practices		
<p>Biosafety level 2 builds upon biosafety level 1. BSL-2 agents pose moderate hazards to personnel and the environment.</p>		
<p>Does the lab entrance have signage indicating the lab is biosafety level 2?</p>	Yes	
<p>Is there appropriate signage posted at the entrance of the lab when agents or organisms are being manipulated?</p>	Safe	
<p>Are IBC approval documents up to date?</p>	Yes	

Question	Response	Details
Does the lab have a biosafety cabinet that has been certified annually?	No	
Is the BSC installed away from doors, windows that can open, or other high traffic areas?	Safe	
Are all procedures that may generate aerosols conducted within the biosafety cabinet or other physical containment device? Examples include centrifuges with sealed rotor heads or centrifuge safety cups.	Safe	
Are house vacuum lines protected with HEPA filters or an equivalent device?	Yes	
Vacuum flasks used to collect liquid biological unwanted materials should contain an appropriate disinfectant.	Yes	
There should only be animals or plants in the lab that are directly associated with the research and listed in the IBC approved protocol.	Yes	
If agents are being shipped to and from the lab, does personnel have Department of Transportation and International Air Transportation Association training within the last two years?	N/A	
If the autoclave is used as a means of decontaminating laboratory waste, has the autoclave been validated? Spore tests are a common method of validation. The frequency of validation is dependent of the rate of usage of the autoclave. Steri-strips and autoclave tape only indicate exposure to steam and temperature. They are not validation methods.	Safe	
If a chemical disinfectant is used in the lab, does the manufacturer or other supporting literature indicate that the chemical disinfectant is approved for use against the agent it is intended to neutralize?	Yes	

Question	Response	Details
Biosafety Level 1 for Plant Labs		
The purpose of this section is to cover NIH Guidelines Section III-E-2 for experiments involving nucleic acid molecule-modified whole plants or associated organisms.		
Is the IBC approval up to date?	Yes	
Are experimental organisms rendered biologically inactive before disposal outside of the lab or greenhouse? If autoclave is used, has it been validated?	Safe	
Is there a pest control program in place? (weeds, rodents, arthropods, and pathogens)	Yes	
Is there a record of current viable experimental organisms?	Yes	