

Q&A Related to Biosafety 2 Laboratory

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02 Do you know that you may rate your lab to biosafety level 2 based on the use of personal protective equipment (PPE), lab features and decontamination?

Answer:

- ✓ In the lab you are required to wear safety glasses, gloves, lab coats, closed toed-shoes and long pants.
- ✓ Safety glasses (e.g. wide pairs) should be worn at all times as they protect your eyes from splashes, accidentally rubbing your eyes with unwashed or gloved hands.
- ✓ Gloves should be readily made available at least in two locations in the lab. Use them habitually in the lab for safety and once done dispose in a biohazard bin. Lab coats must be worn in the lab and after 8 weeks or in the event of any accidental contamination should be washed. If possible should consider disposable lab coats. You may wear lab coats and gloves if needed to go in between sections of your lab such as to get ice but not in the pantry section (if any). Lab coats should be stored in designated place such as a labelled drawer at your assigned station.
- ✓ Shoes enclosing your toes and heels are ideal but not sneakers.
- ✓ Long hair should be tied and all dangling jewellery or loose clothing should be kept out of the way during the conduct of the experiment.
- ✓ No food (also gum or candy), even water in the lab and to be placed in a designated cart (with instruction sign) outside the lab.
- ✓ Phones are common vectors for contamination. Nevertheless, phones are encouraged to take digital documentation of results of your experiment hence before you do so ensure to take off your glove and wash your hands first.
- ✓ During your sessions in the lab always be cautious by not touching your face, contact lens or biting your nails.
- ✓ Store your bags in the provided area or simply store them underneath of your bench tops. In this way no one trips over your back straps causing an accident.
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- ✓ Every lab should have a large biohazard waste container mainly to dispose biological materials (e.g. used agar plates).
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03 What you should do before leaving the lab for the day?

Answer:

- ✓ Disinfect (e.g. Decon or chlorox) the bench by spraying the bench to leave it to soak for 3-5min before wiping off. Next spray ethanol on the same area followed by wiping with a paper towel.
- ✓ Ensure all electrical equipment to be turned off to avoid fire hazards.
- ✓ If you have a smaller and temporary biohazard bin on your bench top, ensure to empty it if already full.
- ✓ Take off your lab coat and store in your designated drawer or hanger.
- ✓ Now you can remove your gloves and dispose them in the biohazard bin.
- ✓ Thoroughly wash your hands before leaving the lab.

04 What is the purpose of your biosafety cabinet II?

Answer:

To remove aerosol contained with pathogen microorganism. Unlike BSC I, BSC II able not only to protect the operator but also the product from contamination. The principle of work of a BSC II is by providing HEPA filtered air flow from the top of the cabinet to the flat bottom work area. This air will next flow out from the sides back to the top either filtered partially by the same HEPA filter or another filter before exiting out. To protect the operator a suction placed at the front (front grooves below the viewing window) to pump in air from the lab into the cabinet but fall short reaching the product. Some cabinet is equipped with audible alarm if the air pressure drops below the set value for any reasons.

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Answer:

As the top of the BSC II found with a protective air curtain barrier sensitive to strong external airflow such as air diffusers or door way located close to the cabinet hence ideally to place the cabinet at the far end of the lab. Also ensure easy access for maintenance of the cabinet.

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Answer:

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Usually maintenance is done by a trained service provider within a year and a test certificate sheet attached in front of the cabinet.

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