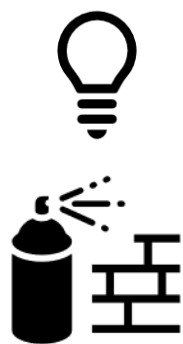


Class II Biological Safety Cabinets (BSCs): General Practices for Safe & Effective Operation

Class II BSCs are used within BSL-1 and BSL-2 labs at Vanderbilt University that handle biomaterials. They are used to protect the BSC's user, the biomaterials being manipulated, and the lab environment. The efficiency of these protections can be greatly impacted by practices employed by the user of the BSC and the location of the BSC in the lab. Follow the practices outlined below to get the best performance out of your lab's Class II BSC.

BEFORE Using BSC



- Schedule uninterrupted time alone to use the BSC.
- Ensure the BSC has been certified within the last year and air is flowing inward into the BSC with no alarms present.
- Turn the UV light off if it has been turned on. Turn on the blower and fluorescent light and allow the BSC to purge for 5 minutes before use.
- Disinfect the inside of the BSC with a disinfectant rated for the biomaterials in use. (If using a corrosive disinfectant, follow up with a wipe of sterile water or 70% ethanol/isopropanol.) Use absorbent wipes wetted with disinfectant to prevent disinfectant spray from coming in contact with HEPA filters.
- Using an absorbent wipe wetted with disinfectant, surface disinfect items and place them into the BSC.

DURING use of BSC



- Wear gloves and a body covering/lab coat that covers all exposed skin.
- Stage all items in a manner that allows you to work from “clean to dirty”. Remember to place waste receptacles, disinfectant and extra paper towels or wipes inside the BSC to minimize movements in and out of cabinet once work begins.
- Work in the center of the BSC with point of operation at least 4-6” behind the BSC sash. Do not block the air grilles.
- Do not use open flames, radionuclides, or volatile or flammable chemicals in the BSC.
- Avoid breaking the “air curtain” of the BSC. Do not rapidly move your arms in and out or use sweeping motions. Instruct others to not walk behind you while you work in the BSC.
- Collect waste generated in the BSC within the BSC. Securely close containers and surface disinfect with disinfectant-wetted wipes before removal from BSC.
- If a spill occurs in the BSC, clean the BSC before removing items. Notify your lab supervisor immediately regarding the spill and actions taken.

AFTER using BSC



- Close and surface disinfect all items (including waste receptacles) before removing them from the BSC. Use absorbent wipes wetted with disinfectant to prevent disinfectant spray from coming in contact with HEPA filters.
- Disinfect the working surfaces of the BSC as outlined above.
- Remove PPE and wash your hands before leaving area.

If you have additional questions relating to BSC use, maintenance, or selection, please contact VUBiosafety@vanderbilt.edu.