

Fundamentals of Working Safely in a Biological Safety Cabinet (BSC)

After Completing Work in a BSC

Once you have completed your work, you will need to decontaminate all of the materials inside of the BSC and the BSC itself.

This is all done while the blower motor is on.

The first thing that needs to be done close all the containers.

Next, using the same disinfectant used to clean the cabinet before work started, generously apply disinfectant to the materials inside the cabinet. This can be done directly to the materials or by moistening a towel and wiping the surface of the materials starting with the least contaminated items first. Please note – samples should be surface decontaminated or placed into secondary containers that have been surface decontaminated prior to exiting the cabinet. Please allow materials to be wetted for the appropriate amount of contact time.

After the appropriate contact time has passed, remove any residual wetness and place the materials that will remain in the cabinet on the designated clean side of the cabinet. If a blue absorbent pad was used, discard it into the biohazardous waste container by grabbing the outer corners of the pad and folding it inward.

Remove other materials from the BSC, placing them on your cart.

After removing everything from the cabinet that needs to come out, proceed to decontaminate the inner surfaces of the BSC as you did before beginning work. Don't forget the sides and back wall as well as the inside of the glass sash. To remove the biohazardous waste bag or container, moisten a paper towel with disinfectant and carefully wipe the outside of the bag and/or waste pan. Dispose of the paper towels and gloves and allow for the appropriate amount of contact time.

Next, add the recommended amount of water to the biohazard bag and then loosely gather the opening of the biohazard bag and loosely tape it. The reason you "loosely" closed it is because you don't want it completely sealed when it goes into the autoclave. If it is, then the steam will not be able to penetrate the bag and the contents may not be decontaminated.

If only a biohazard bag was used, remove the bag and place it into a waste pan outside of the BSC for autoclaving. If a bag and a waste pan were used, remove both from the BSC. Leave the blower motor running for 4 more minutes to purge the air.

After 4 minutes, turn off the lights and blower, and close the sash. If you have a UV light, you may or may not turn it on, as per your SOPs.

Some labs will leave their BSC blower motor running continuously. In that case, you can turn off the light, but leave the sash open.

If your lab keeps a usage log, be sure to sign the BSC log form.

One final note. Each lab should have established schedules and SOPs for routine cleaning and any routine maintenance not requiring an outside contractor. Non-routine maintenance or repairs will be handled by a contractor designated by the safety office. Laboratory staff members should be aware of their responsibilities and established policies necessary to maintain the BSCs, and they should consult the safety office for any needed guidance.