



Checklist for Safe Use of Biological Safety Cabinets

Use this checklist as a daily reminder of the activities/tasks needed for safely working in a Biological Safety Cabinet (BSC), as a training tool, or for annual audit of operational protocols. This job aid is a component of the free, on-demand CDC training course “Fundamentals of Working Safely in a Biological Safety Cabinet.” Find the course at <https://www.cdc.gov/labtraining>.

Biological Safety Cabinet (BSC) Checklist

Preparing for Work in a BSC:

- Put on PPE according to your laboratory SOP.
- Turn UV light OFF (if used).
- Turn fluorescent light ON.
- Turn the cabinet ON, allow it to run for 4 minutes (or manufacturer’s recommended time) to purge the BSC of particulates. Some cabinets may alarm until purge is complete.
- Verify proper sash height and that sash alarm is ON.
- Verify drain valve underneath the cabinet is closed (valve handle is perpendicular to valve body).
- Check cabinet’s certification sticker expiration date is within 1 year.
- Record the pressure differential gauge reading (if present), compare it against the calibration set point.
- Verify inward airflow according to your laboratory SOP (e.g., tissue test, smoke test).
- Schedule uninterrupted work time, if possible.
- Decontaminate all surfaces of the cabinet, according to your laboratory SOP.
- Collect all materials needed for the work.

Safe Use of a BSC:

- Place absorbent plastic-backed material to protect the work surface, if required by your lab SOP.
- Wipe the external surfaces of any equipment or supplies that you will need to place in the BSC.
- Place materials as far back in the cabinet as practical without blocking front and rear grilles.
- Separate clean/sterile items from dirty/potential contaminated items inside the BSC.
- Work from clean to dirty to minimize cross-contamination.
 - One person at a time should work in a cabinet. If two people need to work in a BSC, use a 6’ cabinet and document the protocol-driven need in a risk assessment completed by the Laboratory Supervisor prior to starting work.
- Move your arms slowly in and out of the BSC. Do not move arms in sweeping, sideways movements.
- If using the vacuum system, protect the vacuum line with a filter.
- Do not use open flame without approval from the Safety Office.
- Adjust the stool/bench height so your face is above the bottom of the sash and your arms enter the cabinet with elbows at 90° angles, armpits level with the bottom of the sash. Use a footrest if your feet do not touch the floor.
- Discard all waste in a biohazard bag **inside** of the BSC.

After Completing Work in a BSC:

- Do NOT turn cabinet OFF while removing items and decontaminating the cabinet.
- Close and surface decontaminate ALL containers and lab materials before removal.
- Surface decontaminate the exterior of the biohazard waste bag/container before removal and disposal.
- Decontaminate cabinet interior, including sidewalls, back wall, inside of sash and work surface.
- Remove the gloves you were using in the BSC and dispose of them according to your laboratory SOP.
- Turn fluorescent light and blower motor switches OFF.
- If required by your lab SOP, turn UV light ON. Keep the sash closed while the UV light is on.
- Wash your hands.