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

Cleaning Up a Spill in a BSC

If there is a spill inside the BSC, it must cleaned and decontaminated promptly. Wearing appropriate PPE is crucial for this.

Standard operating procedures (or SOPs) should be developed in advance for how to respond to spills. Clean up of large spills or spills that occur in parts of the BSC that are difficult to access for example, the drain spillage trough or catch basin, may require assistance from the Safety Office. The following demonstrates a general procedure for small spills that occur on the work surface. This procedure may need to be adjusted according to the specific work being performed and your laboratory SOPs.

The first thing you should do is cover the spill with an absorbent material such as paper towels.

Using a plastic squeeze squirt bottle, carefully apply the designated liquid disinfectant in your SOP to the absorbent starting at the outside of the spill and moving toward the center in circular motions. Wipe up as much of the spill as possible and discard the towels in the biohazardous waste container. Then repeat the process with more paper towels and disinfectant, this time leaving the wet paper towels on top of the contaminated area for the appropriate contact time to allow for disinfection. Contact time will vary depending on the organic material, specific infectious agent present, the type and concentration of the disinfectant, the concentration of agent, and other variables. Discard the paper towels in the biohazardous waste container. If bleach was used, wipe the surface with ethanol or water to remove the residual bleach and prevent pitting of the stainless steel.

If objects inside the BSC came in contact with the spill, they must also be decontaminated. Apply disinfectant to paper towels and wipe the exterior surfaces. Make sure the objects are wetted for the proper contact time before resuming work.