

Biosafety Cabinets:

A Biosafety Cabinet (BSC) serves to protect the personnel, the environment, and the products being handled. BSCs are different from chemical fume hoods or laminar flow hoods. BSCs use airflow to create a barrier to airborne particulates. BSCs also utilize High Efficiency Particulate Air (HEPA) filters to mechanically decontaminate the air entering the work area of the BSC and the air being exhausted to the environment. This HEPA filtration removes biohazards from the air but does not remove fumes from volatile chemicals. As such, BSCs are not suitable for use as fume hoods. Likewise, chemical hoods are not suitable for use as a BSC.

Properly maintained BSCs, appropriate personal protective equipment, or other physical containment devices must be used whenever procedures with a potential for creating infectious aerosols or splashes are conducted. These may include pipetting, centrifuging, grinding, blending, shaking, mixing, sonicating, opening containers of infectious materials, intranasal inoculation of animals, and harvesting infected tissues from animals or eggs.

Anytime high concentrations or large volumes of infectious agents are used. Such materials may be centrifuged in the open laboratory using sealed rotor heads or centrifuge safety cups.

BSCs must be certified annually. Any BSC with an out-of-date certification must not be used until it has been recertified. Any BSC that fails certification must not be used until it has been repaired and recertified. Use of a BSC without up-to-date certification could jeopardize the health of students and employees, as well as the environment. Please notify the Work Order desk at (509) 359-2245 for assistance with out of certification BSC's.