

Biosafety Protocol for Infectious Work

EBV, Retrovirus, Adenovirus, Human Blood and Tissues

(adapted from World Health Organization Biosafety Laboratory Manual, 3rd Edition, 2004)

General Guidelines: Consider all above mentioned materials to be potentially infectious, posing low to moderate risk from direct contact, splatter spills and aerosols generated during work. Use proper microbiological technique (lab coat, gloves, eye protection) as well as additional techniques to avoid dispersal of infectious materials outside of the **Biological Safety Cabinet (BSC.)** All contaminated materials require an additional decontamination or containment step before leaving the BSC and/or primary lab for final disposal.

Organization of the BSC:

Use a sterile pad to cover surface and catch spills.

All work must be carried out in the middle to rear of the working surface, and air circulation must not be blocked at the rear plenum or at the front grill

No paperwork may be placed inside the cabinet.

Pipetting:

Do not blow air through liquids containing infectious materials nor mix by alternate suction and expulsion.

Keep a discard container for contaminated pipettes inside the cabinet. For a vertical container, for instance a 4 L beaker, pre-rinse pipettes with 10 % bleach solution and let them soak 30 minutes before removing from the BSC for autoclaving. (A horizontal, covered tray is recommended.)

Tips, small tubes:

Decontaminate by immersing in bleach solution (10% 30 min) before disposal in approved sharps container. Keep a reagent bottle with a cap available for this purpose.

Flasks, Dishes, Vials:

Contaminated plastic ware must be either pretreated with disinfectant* before being removed from the cabinet to be placed in the biohazard waste or it can be **presealed in a smaller bag**. If using the second option, spray the exterior of the bag with disinfectant* before removing it from the hood.

Centrifuge:

Balance tubes with the scale rather than by eye if spinning down infectious materials. **Don't overfill** as this will lead to contamination of the rotor. If possible use the small centrifuge with aerosol sealing caps. If there is leakage, close the centrifuge for 30 min to allow aerosols to settle, then **spray with Biocidal for 30 min to decontaminate without corroding**.

Clean-up of BSC

At completion of work, place contaminated plastic waste and sterile pad in a primary bag and seal before removing from hood. Spray outside of bag with decontaminant* and discard in biohazard trash. Wipe all surfaces- including grills, sides, front glass and tubing, with **Biocidal**. Turn on UV for 15 minutes. Dispose of pretreated pipettes in red bucket in main room. **Leave lab coat in TC room, remove gloves before leaving lab and wash hands.**

(*10% bleach or biocidal)