

Work Hazard Analysis

PRINCIPAL STEPS	POTENTIAL SAFETY OR HEALTH HAZARDS	RECOMMENDED CONTROLS	EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
Virus Dilution	Spill, aerosol generation	Perform all dilutions in Class II biosafety cabinets (BSC); Use mechanical / automatic pipettors; disinfectant	BSC; Virus stock vial; dilution tubes; diluent; automatic pipettors; tube holders; appropriate disinfectant; wet ice	Laboratory exhaust filter and BSC filter testing; BSC annual certification; training records; agent accountability records	Basic BSL-4 operations; BSC usage; pipet handling technique
Preparation for virus inoculation	Aerosol generation, auto-inoculation	Fill syringes in Class II BSC or on downdraft table; fill syringe barrel, using forceps or a hemostat, attach needle just prior to inoculation; use sterile 15ml centrifuge tube to keep syringe sterile before adding needle	BSC; Dilution tubes; wet ice; tube holders, 15ml sterile centrifuge tubes; 0.5 ml syringes, #28 gauge single use, Luer-Lock needle and syringe combination (or similar engineered sharps safety inoculation device); sharps disposal containers; appropriate disinfectant	Training records	Basic BSL-4 operations; BSC usage; sharps handling under BSL-4 containment; aerosol containment; pipet handling technique