

**Use of Human Adenovirus / Adenovirus Vectors
Exposure Control Plan for Laboratories**

8) Disposal of Wastes. Solid wastes shall be collected into biohazard bags suitable for autoclaving. Two layers of biohazard bags used for collection shall be placed inside a suitably sized leak-proof secondary container, such as a large plastic bucket fitted with a lid. When full but not overflowing, the bags are closed and autoclaved. If waste is to be removed to a common-use autoclaving facility, it should be transported to the facility while still inside a closed secondary container. *Never* attempt to manually compact solid infectious wastes. The bags are removed from the secondary container only when they are placed in the autoclave or into a leak-proof tub in preparation for autoclaving. Sharps containers are tightly closed and autoclaved.

Fluid wastes (such as culture supernatants) may be discarded after autoclaving by carefully pouring down the drain with water rinse. Bleach (10% final bleach volume) may be used as an alternative to autoclaving, but must be allowed to sit for at least 10 minutes before discard to the sanitary sewer.

9) Access. Laboratory doors shall remain closed at all times when work is in progress, and entry to the area is restricted. The principle investigator will establish specific written entry requirements and policies whereby only those individuals who have a need to enter and have been made aware of the potential hazards within are allowed access. Infectious materials stored within the lab, in freezers or refrigerators, should be secured in leak-proof double containers.

A biohazard warning sign must be posted at all entrances to the laboratory with:

- (1) the name of the infectious agent, "Human Adenovirus" (plus others, as used)
- (2) special requirements for entry, such as PPE requirements, and
- (3) name and phone number of the laboratory director or other responsible person.

IV. Personal Protective Equipment (PPE)

Requirements:

1) Gloves. Gloves are required whenever hand contact with potentially infectious materials is likely or anticipated. Gloves are also required to be worn when handling or touching contaminated items or surfaces and for performing vascular access procedures. Gloves must be worn when handling clinical specimens, infected animals or potentially contaminated equipment. In research laboratories, gloves should be worn for *all* procedures, cleaning spills, and handling wastes.

Gloves must *never* be washed or disinfected for re-use. Detergents, alcohol or other disinfectants may compromise the ability of the glove to resist penetration by infectious substances. Gloves must be changed when visibly contaminated, torn or whenever tasks are completed. All layers of gloves shall be removed before handling telephones, doorknobs or "clean" equipment.

Gloves are to be removed for discard "inside out" to keep the "dirty" side inward and thus prevent inadvertent contamination of laboratory surfaces or equipment. Hands are to

be washed with soap and warm water immediately after glove removal.

2) Protective Clothing. Shorts and sandals are not appropriate attire in an infectious disease laboratory due to the risk of exposure through exposed skin, and are not allowed. Laboratory coats, gowns or aprons are required at all times in the laboratory.

Lab coats, gowns or aprons must be removed prior to exit from the laboratory, and are either disposable or laundered on the premises. Alternatively, lab coats may be bagged and autoclaved, and then removed off-site for laundering. Plastic buttons may melt in the autoclave, so coats should be fitted with heat-resistant closures.

3) Respirator. A fit-tested NIOSH N-95 or N-100 respirator must be worn when working with concentrated virus preparations and performing aerosolizing procedures outside the BSC.

4) Eye protection. Even though a BSC has a face shield, eye protection must be worn in the laboratory. Safety glasses with side-splash protection are recommended; even if the worker wears corrective eyeglasses safety glasses should be worn over them. Goggles or a full-coverage face shield may substitute for safety glasses, and must be used if procedures that could generate splashes have to be performed outside the BSC.

V. Use of Infected or Exposed Animals

1) Containment Practices. When animals are exposed or infected with adenoviruses or constructs utilizing adenovirus vectors, ABSL-2 facility and practices must be used. The Institutional Biological and Recombinant DNA Safety Committee and the Institutional Animal Care and Use Committee must both approve the work, and a DLAM biohazard warning sign must be filled out and posted on the animal room door.

2) Shedding. Infected animals may shed adenovirus, especially during the first 72 hours

a drench hose. Report the incident immediately to the principal investigator and the