

Use of Vaccinia Virus & Vaccinia Virus Vectors

Purpose:

To provide guidance for the use of vaccinia virus and vaccinia virus vectors in the laboratory and animal facility environment.

Guidance Information:

Vaccination should be considered for personnel who may be occupationally exposed to select vaccinia virus strains. Contact University Health Services (UHS) at 265-5600 for additional information.

Precautions:

1. Personal Protective Equipment (PPE) Required: Lab coat, gloves (standard nitrile or latex) and safety glasses. When working outside of containment, an N95 respirator* and goggles are worn. *Respirator use requires medical clearance and fit testing.
2. Laboratory: BSL-2 is required for administration and handling of vaccinia virus. A BSC (biosafety cabinet) or full mucosal protection is required anytime there is danger of aerosolization.
3. Animal housing and bedding/wastes:
 - a. Animals should be housed in microisolator or similar containment caging.
 - b. A biological safety cabinet (BSC) is needed when opening cages and handling animals.
 - c. Signage is required on each individual cage containing the biohazard symbol and "Agent, end date and disposal method". Signs are removed when special handling time has ended. *Cage signage available at www.ehs.wisc.edu
 - d. Decontamination of animal waste, caging and any other contaminated equipment is required before disposal. Autoclaving or a suitable chemical disinfectant is used prior to disposal into standard waste streams. Caging must be either bagged into biohazard bags for transport to the autoclave or must remain sealed during transport and at all times prior to autoclaving.

References:

"NIH Guidelines for Research Involving Recombinant and Synthetic Nucleic Acid Molecules", National Institutes of Health, current edition.
http://osp.od.nih.gov/sites/default/files/NIH_Guidelines.html

"Biosafety in Microbiological and Biomedical Laboratories", Centers for Disease Control and Prevention, current edition.
<http://www.cdc.gov/biosafety/publications/bmb15/>

“IBC Policy on Vaccinia Vaccination and Waiver Form”, IBC-POL-013, UW-Madison Office of Biological Safety- Institutional Biosafety Committee (IBC) Manual.

“Precautions for Work with Poxviruses that Infect Humans, Policy and Procedure No. 4.1.13, UW-Madison Office of Biological Safety-Institutional Biosafety Committee (IBC) Manual.

“Vaccinia (Smallpox) Vaccine Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2001”, Morbidity and Mortality Weekly Report (MMWR), March 2001.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5010a1.htm>