

Guideline Number:	IG044
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## **IG044: USE OF BIOLOGICAL MATERIALS IN RODENTS**

Administration of human or animal tissues (e.g., tumors, cell lines) or other biological materials into animals, especially rodents, is a common research practice. These tissues and biological materials may be infected with a variety of agents that may be infectious to humans or animals and potentially jeopardize the health of both. Additionally, contaminating pathogens may act as a confounding variable on research results.

Any biological materials of human origin require handling at the BSL-2 level (including animal housing at ABSL-2 containment), observation of universal precautions, and blood-borne pathogens standard operating procedures.

For rodent cell lines, it has been reported that approximately 1% of biological screens tested come up positive for murine pathogens, most commonly Mouse Parvovirus (MPV) and Lactate Dehydrogenase Virus (LDV), as well as Polyomavirus (POLY), Reovirus (REO), Mouse Adenovirus (MAV) and others. *Mycoplasma* is also a frequent contaminant of cell lines.

### **MSU Guidelines**

- A. Principal investigators (PIs) are responsible for testing all cell lines and biological materials BEFORE administration into any rodent species. Panels that include agents found in the CLEAR Panel from Charles River ([Link to Charles River Rodent Cell Line Biologics Information](#)) or the IMPACT I Mouse Panel and IMPACT V Rat Panel from IDEXX BioAnalytics [Link to IMPACT Mice/Rat Profiles Information](#) are acceptable.
- B. PIs currently using biological materials in their animals or anticipating administration of biological materials, must list the biological materials in their IACUC protocol (see Question 2 of the Additional Information page in the CLICK protocol template).
- C. If the material is of human, nonhuman primate, or sheep origin; or involves rDNA or an infectious agent, the PI **MUST** contact EHS for further guidance and/or approvals.