MASSACHUSETTS GENERAL HOSPITAL
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)

POLICY FOR USE OF HAZARDOUS MATERIALS

GENERAL POLICY

All animal protocols that involve the use of biohazardous agents (including recombinant DNA), hazardous chemicals, radioisotopes, or lasers must be reviewed and approved by the appropriate safety officers and/or safety committees prior to initiation of the protocol. The electronic submission system automatically notifies appropriate safety offices of submitted protocols involving any of the various safety considerations referenced above for review. Any protocol using a hazardous material will not receive IACUC approval until after approved by the appropriate safety office. Protocols involving hazardous materials are assigned an appropriate housing level (HL1, HL2) that incorporates both biosafety designation as well as chemical, and radioisotope containment. It is recommended to identify cages (either color coded cards or labels) that contain hazardous agents for easier identification.

The MGH Occupational Health service has an electronic safety report (http://safety-feedback-mgh.partners.org/RMProWeb_RM_PROD/RiskWeb3.dll) that must be completed for any animal bite, accidental skin puncture, splash to eyes or mucous membrane, splash to skin, inhalation of hazardous material, ingestion of hazardous material or other lab related accident.

Infectious Agents and Recombinant DNA

Biohazardous agents are defined as infectious agents (e.g., viral, bacterial, fungal, parasitic), toxin-producing agents, either isolated naturally or constructed by recombinant DNA technology (e.g., viral gene therapy vectors), or human material, including both primary and established human cell lines, that have the potential for causing diseases in healthy persons, animals, or plants. All animal protocols involving the use of biohazardous agents must be reviewed and approved by the Partners Institutional Biosafety Committee (PIBC), the Institutional Biosafety Committee for MGH. Principal Investigators are required to submit a separate application to PIBC for review and approval and that submission must be selected on the IACUC hazardous materials sub-form to 'link' the animal protocol to the PIBC protocol. Once PIBC has approved the protocol, the Biosafety Officer will review the animal protocol and indicate the proper handling precautions that must be taken.

The Principal Investigator on the protocol is responsible for ensuring that laboratory personnel are trained in the safe use, handling, and disposal of the agent(s) involved. The Center for Comparative Medicine (CCM) is similarly responsible for ensuring that animal husbandry and veterinary staff are trained in the same manner. Appropriate personal protective equipment (PPE) must be worn at all times when handling infectious agents, recombinant DNA, and infected animals, their tissues, and wastes.

All injury incidents and accidental exposures involving rDNA are required to be reported to the MGH Biosafety office through the MGH on-line Safety Reporting service: http://safety-feedback-mgh.partners.org/RMProWeb_RM_PROD/safety.html

Hazardous Chemicals Including Carcinogens, Mutagens and Teratogens

All animal protocols involving the use of hazardous chemicals, carcinogens, mutagens or teratogens, must be reviewed and approved by the MGH Environmental Health and Safety Office (EH&S). The Material Safety Data Sheet (MSDS) must be attached with the electronic IACUC submission and a copy kept on file in the laboratory for each toxic chemical and carcinogen used. A lab specific Chemical Hygiene Plan which includes an annually updated inventory for any chemicals to be purchased, stored or used in the lab must also be attached and available to staff.

The Principal Investigator is responsible for ensuring that laboratory personnel develop and adhere to a standard operating procedure for use of the substance, and for training laboratory personnel in the proper use and disposal of the substance. Documentation of this training must be available for review. CCM is similarly responsible for ensuring that animal husbandry and veterinary staff are trained in the same manner.

Appropriate personal protective equipment (PPE) must be worn at all times when handling hazardous chemicals, carcinogens, mutagens and teratogens, and exposed animals, their tissues, and wastes. The EH&S office (http://intranet.massgeneral.org/ehs/ehs_home.htm) also has chemical monitoring badges (isoflurane, hydrogen sulfide, chloride) that are available on request.

Radioisotopes

All animal protocols involving the use of radioisotopes must be reviewed and approved by the Radiation Safety Officer (RSO). The protocol must include an investigator who holds a radioisotopes permit for the radioactive material involved. All workers handling the radioactive material must demonstrate appropriate training and knowledge, to be assessed by the RSO. Appropriate PPE and radiation exposure badges must be worn at all times when handling radioactive material and animals, their tissues, and wastes. Radioactive materials, animal carcasses, waste and bedding, as well as other potentially contaminated materials, must be disposed of in accordance with MGH policies.

Lasers

All research proposals involving the use of lasers must be reviewed and approved by the Laser Safety Committee and EH&S. All workers using the laser or in the immediate vicinity of its use must demonstrate appropriate training and knowledge in the use of the particular laser, to be assessed by the LSC. Appropriate PPE must be worn at all times when lasers are being used.

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