SOP: Hazard Communication and Use

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SCOPE
The initial phase of a Hazards Communication Program is to evaluate the health hazards of chemical, biological, and radiation sources being used in the laboratory. This information must then be transmitted to the personnel with potential for exposure to these agents, including the location of the animals and caging in which the agent(s) are present. In addition to information on the presence and location of an agent in their work environment, personnel must be given information on safe work practices and exposure prevention methods to ensure personnel safety. This SOP defines methods of hazard evaluation, identification of hazardous agents through cage labeling, training and hazard education for personnel, the role of strategy sessions in risk mitigation and enforcement actions associated with noncompliance.

PROCEDURES
A. Evaluate Hazards
   All chemical, biological, physical, or radioactive agents to be administered to animals must be defined in the Application for Approval to Use Vertebrate Animals in Research. The Principal Investigator (PI) of the research project is responsible for evaluating the human and animal health hazards of the agents being used in a research project. For chemical agents, the PI should have or be able to readily access the manufacturer’s Material Safety Data Sheet (MSDS) which will list health hazards. For biological agents, the PI should assign a biosafety level (BSL 1, 2, or 3) to the agent according to the current edition of the CDC Biosafety in Microbiological and Biomedical Laboratories (BMBL) or the University of Pittsburgh Biosafety Manual (Section I. B.). The Risk Assessment Officer, Radiation Safety Office, and two Institutional Animal Care and Use Committee members will perform additional and confirmatory hazard evaluations. This will involve the review of the PI’s Application, the description of experimental manipulations, and the requisite materials listing. A risk assessment form delineating the identified hazard and agent associated will be completed by the Risk Assessment Officer and returned to the PI and IACUC coordinator.

B. Communication Hazards – Labeling
   The presence of a hazardous agent must be clearly identified and communicated to personnel. The PI is responsible for such labeling. When a hazardous agent is used in laboratory animals, a sticker identifying the presence of the agent is to be placed on the DLAR CAMS generated cage card. The stickers are yellow with the radiation safety symbol for radiation hazards, red with the biohazard symbol for biological agents of Biosafety level 2 or greater, and blue with “Chemical Hazard” for chemical hazardous agents. Stickers are supplied by DLAR and are available from the animal facility supervisor. DLAR facility contact information is located on the DLAR website at https://web.dlar.pitt.edu.
C. Communicating Hazards – Education (General)
All personnel conducting animal research at the University of Pittsburgh are required to attend Fundamentals of Laboratory Animal Research General and Occupational Health and Safety training sessions that provide information on preventing exposures. Design barriers, work practices, and safety procedures to prevent exposure will be presented. The application and use of personal protective equipment will also be discussed. More specific sessions on Chemical Hygiene training, Bloodborne Pathogens training, and Laser Safety training are available from the University Environmental Health and Safety department and may be required depending on agent use and exposure potential. Additional information of available training can be found on the EH&S website at http://www.ehs.pitt.edu.

D. Communicating Hazards – Education (Specific)
Personnel seeing hazard warning stickers in their work environment that have not been previously identified and discussed, are responsible for seeking out the specific hazard information. Take the protocol number to the facility supervisor and request to see the protocol, risk assessment form, and any other health hazard information available for the experiment. The facility supervisor has access to IACUC approved protocols through the ARO system. Protocols, risk assessment forms, and other health hazard information are obtained from the IACUC coordinator. Any questions or concerns can be addressed by contacting the Environmental Health and Safety or Radiation Safety Office. In situations where an agent is considered “highly hazardous” by the evaluation procedure designated in paragraph a., a strategy session with DLAR personnel is necessary prior to ordering animals. The PI may be asked to present additional information on the agent and all protective measures to the potentially exposed personnel will be defined.

E. Enforcement
Failure to follow the procedures outlined in this SOP will be addressed by the IACUC as a noncompliance.