

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE
Policy #30
USE OF HAZARDOUS AGENTS IN ANIMALS

In concurrence with TTUHSC El Paso Assurance #D19-01056
and Federal Regulations and Guidelines

Purpose:

The intent of this policy is to define the requirements for the review and approval of protocols that propose the use of Hazardous Agents in live animals.

Introduction:

The use of Hazardous Agents in animal research has the potential to cause harm to the animals, the investigators and the LARC staff. These activities must be carefully managed to minimize the risks involved. The IACUC works closely with Safety Services to ensure a safe and healthy workplace for all personnel, and to ensure the safe use of hazardous chemicals in animals. The Institutional Biosafety Committee (IBC) regulates the safe use of biological agents and recombinant DNA. Additionally, Federal animal welfare regulations, policies, and guidance require research institutions to establish and maintain an occupational health and safety (OHS) program as an essential part of the overall program of animal care and use.

Definitions:

Hazardous Agents are substances that have the potential to cause health complications for animals and/or people.

For the purposes of this policy there are four classes of Hazardous Agents that are relevant to animal research:

- Chemical agents include: Acute Toxicity agents, Carcinogens, Reproductive Toxins and Teratogens (these agents may be identified according to the safety data sheet).
- Physical hazards include: radiation (x-rays, lasers and other radiation producing devices).
- Biological agents include: infectious agents, engineered cells and toxins.
- Recombinant DNA (not including existing transgenic mice).

IACUC requirements:

1. For all substances that fall into the categories described above, The IACUC requires that the substances are listed in the animal protocol under the section on Hazardous Agents. This step must be completed and IACUC approval must be obtained before these agents can be used in animals.
2. Agents that do not fall into the categories above do not need to be listed in the Hazardous Agents section of the IACUC protocol. However, the investigator should maintain best laboratory practices.
3. For chemical agents and physical hazards, the investigator should first consult with Safety Services and the LARC supervisor / Institutional Veterinarian to identify the appropriate use of PPE, animal handling practices, disposal of waste/bedding and carcasses, and any other control measures that should be used. Each hazardous agent used within the LARC must be included within the LARC standard operating procedure (SOP) to delineate the appropriate handling practices for the investigator and LARC staff. Personnel listed on the protocol, as well as animal care staff, must be trained on the elements of the SOP before the chemical is prepared or used.
4. For biological agents and recombinant DNA, approval must be obtained from the IBC before they can be approved for use in an IACUC protocol. The descriptions in the section on Hazardous Agents in the IACUC protocol should match the approved IBC protocol, in describing the Biosafety level, the

appropriate use of PPE, animal handling practices, disposal of waste and carcasses, and any other control measures that should be used.

5. Individuals working with Hazardous Agents may need to update their clearance with Occupational Health and Safety before their work begins. This clearance must be renewed every 3 years and whenever a person has a change in their health status (such as pregnancy or health conditions that may cause immunodeficiency).
6. When an N95 mask is required to complete the work, each investigator must be fit-tested by safety services before the work begins and then on a yearly basis thereafter. When a respirator (e.g. PAPR, half-face) is required to complete the work, each investigator must obtain clearance to wear from Occupational Health to use a respirator before the work begins.
7. Investigators should be aware that all individuals working with agents that require ABSL-2 or ABSL-3 containment must participate in the LARC orientation before the work begins and the annual safety services training for ABSL-3.
8. In cases where a question arises regarding the appropriate listing of Hazardous Agents on an animal protocol, the IACUC chair will contact the investigator and take appropriate steps to remedy the issue, with assistance from the IBC, Safety Services and Institution Veterinarian, as needed. In some cases, the IACUC may require that an investigator pause the use of that hazardous agent until it is listed appropriately in an approved IACUC protocol and the steps described above have been completed.

Related policies

Investigators must comply with all other institutional policies at TTUHSC El Paso and Federal Guidelines. This list includes, but is not limited to, the following:

IACUC policy #11: Complaints of Mistreatment of Animals and Policy Noncompliance at TTUHSC El Paso
IACUC policy #13: Protocol Review, Implementation and Amendment
TTUHSC El Paso LARC Standard Operating Procedure for Working with Hazardous Chemicals in Animals
IBC Bylaws and Policies and Procedures Manual
HSCEP OP 75.10
HSCEP OP 75.11
HSECP OP 75.12