

Purdue University Laboratory Animal Program Standards of Care

Title: Animal Care Program Veterinary Care Policy

I. Purpose:

The purpose of this policy is to explain the delegations and responsibilities of personnel providing veterinary care at Purdue University. This policy covers research and teaching animals in the animal care and use program.

II. Policy:

The Institute for Laboratory Animal Research of the National Research Council, in its *Guide for the Care and Use of Laboratory Animals* (the Guide), defines the Attending Veterinarian (LAP) as the veterinarian responsible for the health and well-being of all laboratory animals used at an institution. It states, “The institution must provide the LAP with sufficient authority including access to all animals, and resources to manage the program of veterinary care. The LAP should oversee other aspects of animal care and use (e.g., husbandry, housing) to ensure that the Program complies with the Guide.”

The Federation of Animal Sciences Society’s *Guide for the Care and Use of Agricultural Animals in Research and Teaching* states, “The agricultural animal health care program is the responsibility of the attending veterinarian.”

United States Department of Agriculture’s Animal Welfare Act and the Public Health Service policy also require that the LAP have the authority to oversee the adequacy of other aspects of animal care and use, including animal husbandry and nutrition, sanitation practices, zoonosis control, and hazard containment.

In order to achieve veterinary oversight of such a large and diverse campus as Purdue University, delegations for immediate clinical care and herd health have been made with services within the PUVH and other campus and off-site veterinarians as approved by the LAP and IACUC.

To comply with the above referenced regulations and guidelines, the Purdue University LAP is the Purdue University Official responsible for the health and welfare of the teaching and research animals at the university and at its off-site facilities.

III. Procedure:

Delegation of Veterinary Care: The LAP approves areas of responsibility and delegates primary clinical and herd health management to various designated services. Some protocols due to their specialization or locale utilize veterinarians not from the three main services listed above. The veterinarian of record is named in the animal use and care protocol. A specialized program of veterinary care is described in the protocol via MOU then reviewed and approved by the LAP and IACUC prior to authorization of provision of care.

Designated veterinarians must notify the Purdue University LAP or designee by phone or e-mail of any significant animal health concerns that are the direct result of an animal care and use protocol or if a significant spontaneously occurring herd or colony health problem occurs.

Animal Procurement and Transportation: All applicable federal, state, and local laws and regulations must be followed when obtaining and transporting animals. Purchase and shipping records must be retained. To maintain the biosecurity of the laboratory animal colonies, animals must be purchased from the Approved Vendors or if not available, from a supplier that has been approved by the LAP veterinary staff prior to shipment. Selection of vendors for agricultural animals and other non-traditional species should involve clinical veterinarians and other staff to insure a high level of animal health. Animals may only be procured if they are linked to an approved IACUC protocol with the exception of agricultural animals for production purposes.

Preventive Medicine Programs: Disease prevention is the cornerstone maintaining healthy animals and limiting variables in their environment that may interfere with research. Some of the aspects of an effective preventive medicine program include adequate animal biosecurity procedures to prevent the introduction of unknown diseases; provisions for quarantine and stabilization; implementation of disease surveillance programs including investigations of unexpected deaths; procedures to minimize stress during handling and restraint; zoonosis prevention; etc.

Sick, Injured and Dead Animals: It is the responsibility of everyone working with animals at Purdue University to report any sick or injured animals to the appropriate veterinary service, clinical veterinarian or designee. Reporting must be timely and accurate. Records of the diagnosis, testing, delivery of medical treatments, and final resolution must be maintained by the facility or veterinary service. Assurance of compliance with study and humane endpoints is very important and recurrent or significant problems should be communicated to the IACUC. Unexpected deaths, unexpected or increased mortality must be documented and investigated as potential sources of infection or possible research complication.



The Purdue University LAP has the authority to immediately suspend an activity that causes significant animal welfare or health concerns. The Attending Veterinarian will immediately notify the IACUC of any such situation.

Medical Records: Documentation of provision of adequate veterinary care is important for regulatory perspective and animal welfare reasons. In addition to records of sick and injured animals, individual and herd/colony animal records should be maintained for behavioral abnormalities, prophylactic treatments and diagnostic tests including rodent sentinel testing, pre-, peri-, and postsurgical procedures, documentation of euthanasia, etc. Group health records are acceptable for non-USDA covered animals and USDA covered rodents maintained as a cohort. All entries should indicate the animal's ID, originator of the entry, and date. Medical records are retained for a duration specified in the LAP Standard of Care 40-404 and IACUC SOP #303.

Surgical Procedures and Postsurgical Care: There are many factors that contribute to successful surgical outcomes. First, appropriate training on good surgical technique is crucial. No one is allowed to perform surgery without demonstrating that they are adequately trained to perform the specific techniques they intend to perform. An online course is required by the IACUC for rodent surgeons. Pre-surgical planning is necessary to ensure all procedures, from before the start of surgery through patient recovery and suture removal, are performed at a high level of efficiency to minimize or eliminate pain or distress. Surgical facilities appropriate for the procedure and the species must be utilized. All surgical facilities must be approved by the IACUC prior to first use and inspected on at least a six-month interval thereafter. Clinical veterinarians should be consulted in assisting with all aspects of performing surgical procedures as needed to maintain high standards.

Pain and Distress: Recognition, prevention, and alleviation of pain and distress are important and integral responsibilities for everyone working with animals. Since recognition of early signs of pain can be difficult, especially in stoic animals, training in the recognition of species-specific signs of pain is important. In general, we assume that a procedure that causes pain in humans will also cause pain in animals. Preemptive analgesics or anesthesia should always be given before a procedure is performed that is expected to cause more than minor momentary pain, unless medically contraindicated or if IACUC exempted based on scientific necessity. If unanticipated pain that is more than momentary is recognized, relief of pain must be initiated promptly.

Consideration for minimizing the duration and intensity of distress is important when caring for animals and when planning the use of animals on a protocol. Humane use of animals dictates minimizing or eliminating factors that lead to distress. In addition, distress can cause significant physiological alterations which may negatively impact research.

Euthanasia: Unless an IACUC exemption is given for scientific reasons, the methods for euthanasia for all species should be consistent with the most current edition of the *AVMA Guidelines on Euthanasia*. Selection of agents is based on such factors as the species, animal's age, scientific objectives, agents and equipment available, and most importantly, inducing rapid unconsciousness without pain and distress. It is very important to be trained in delivery of the methods of euthanasia, especially for physical methods of euthanasia. Individuals who will be using physical methods of euthanasia must first be trained and then certified by a trainer designated as proficient in the technique by the Attending Veterinarian or designee. Euthanasia of animals for experimental purposes must comply with methods described in the IACUC-approved protocol. Animals euthanized for medical reasons or as culls must be euthanized following the AVMA recommendations.