

<b>Iowa State University Institutional Animal Care and Use Committee</b>	
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## **Institutional Animal Care and Use Committee (IACUC) Policy**

### **USDA Pain Classification**

#### **1. Background**

When submitting IACUC protocols for review, principal investigators are to assign a humane use category for their animals. The IACUC will also review the humane use category placement of animals used on IACUC protocols.

#### **2. Policy**

This policy is given as assistance in determining USDA pain level classification. The examples are not meant to be a comprehensive list but are meant to help investigators assign animals to the proper category.

#### **USDA Category B**

Animals being housed that have not been used are in category B.

Example:

Breeding colonies whose individuals do not need genotyping using tissue or fluid samples collected from them would be in this category.

#### **USDA Category C**

Animals upon which teaching, research, experiments, or tests will be conducted involving no more than momentary or slight pain or distress, or no pain or distress. No use of pain-relieving drugs is necessary. Includes AVMA-approved humane euthanasia procedures if no other procedures are performed that put them in a higher pain/distress category.

Examples:

1. Routine physical examinations
2. Positive reward projects
3. Observation of animal behavior in response to experimental treatments
4. Feeding studies which do not result in clinical health problems
5. Holding, measuring, or weighing animals

6. Animal identification procedures performed on protocol (examples would include tattooing, ear notching, ear punching, ear tagging, wing banding, fin clipping, radio/GPS collaring and micro chipping)
7. Tail sampling rodents if no anesthesia is required
8. Injections, fluid collection, or catheter implantation in superficial vessels with no anesthesia
9. Oral administration
10. Gavage
11. Imaging—radiography or ultrasound not requiring chemical restraint
12. Euthanasia procedures fully approved by AVMA Guidelines on Euthanasia
13. Chemical sedation or anesthesia for restraint purposes only
14. Electrofishing
15. Mist netting of birds or bats
16. Using live traps to capture birds, mice, raccoons, etc. provided that animals are not in the traps longer than 12 hours, providing food, water, shade and bedding as appropriate
17. Studies of nesting birds in which one handles animals in the nest (e.g. counts eggs, or young birds)
18. Capturing of frogs and snakes by hand

Breeding colonies whose members have fluid samples or tissue samples collected for the purpose of determining genotype would be placed in this category.

### **USDA Category D**

Animals upon which experiments, teaching, research, surgery, or tests will be conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs will be used.

Examples:

1. Diagnostic procedures such as laparoscopy or needle biopsies
2. Exposure of blood vessels for catheter implantation
3. Ocular blood collection in mice
4. Survival surgical procedures
5. Postoperative pain or distress
6. Any postprocedural outcome resulting in evident pain, discomfort, or distress such as that associated with decreased appetite/activity level, adverse reactions to touch, open skin lesions, abscesses, lameness, conjunctivitis, corneal edema, and photophobia
7. Induced infections or antibody production with appropriate anesthesia and postop/postprocedure analgesia
8. Nonsurvival surgical procedures
9. Exsanguination under anesthesia
10. Cardiac blood collection

11. Terminal perfusion
12. Implantation of transmitters in wildlife

Category D may be used in specific instances where onset of pain or distress leads to euthanasia of the animal and in cases where acclimation of the animal to the restraint, procedure, or technique sufficiently reduces the distress that would have been present without the acclimation.

### **USDA Category E**

Animals upon which experiments, teaching, research, surgery, or tests will be conducted involving accompanying pain or distress to the animals, and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs will adversely affect the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests.

Examples:

1. Toxicological or microbiological testing, cancer research, or infectious disease research that requires continuation until clinical symptoms are evident or death occurs
2. Experimental induction of disease (i.e., diabetes, epilepsy, Parkinson's, etc.) including metabolic, nutritious, or as the result of exposure to toxicants
3. Ocular or skin irritancy testing
4. Food or water deprivation beyond that necessary for ordinary presurgical preparation
5. Application of noxious stimuli such as electric shock if the animal cannot avoid/escape the stimuli and/or it is severe enough to cause injury or more than momentary pain or distress
6. Infliction of burns or trauma
7. Prolonged restraint in a conscious animal without acclimation (metabolic cage)
8. Any procedures for which needed analgesics, tranquilizers, sedatives, or anesthetics must be withheld for justifiable study purposes
9. Use of paralyzing or immobilizing drugs for restraint on a conscious animal
10. Exposure to abnormal or extreme environmental conditions without acclimation
11. Euthanasia by procedures deemed unacceptable by AVMA Guidelines on Euthanasia unless that method is approved by the specific societies.

### **3. References and Regulations**

USDA. Animal Welfare Act and Regulations

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