

## **USDA Pain and Distress Categories**

USDA Category B	USDA Category C	USDA Category D	USDA Category E
No pain or distress	Slight or momentary pain or distress that generally does not require anesthetics/analgesics	Pain or distress appropriately relieved by analgesia, tranquilization or anesthesia	Unrelieved pain or distress. Note: MAF typically will <u>not</u> fund studies that fall within Category E
Examples	Examples	Examples	Examples
<ol> <li>Animals being maintained without any research manipulation</li> <li>Observation of animal behavior without manipulating the animal or its environment</li> <li>Routine husbandry procedures</li> <li>Breeding colonies with no experimental manipulations</li> <li>Collection of body fluids or tissues postmortem</li> </ol>	<ol> <li>Holding, weighing or transporting animals (relatively short distances under non-stressful conditions)</li> <li>Physical restraint and preventive medical procedures such as routine vaccination</li> <li>Venipuncture, cystocentesis, fecal collection by manual evacuation or fecal loop, hair pulling for genetics.</li> <li>Injections (non-irritating), blood collection or catheterization of superficial vessels</li> <li>Tattooing, microchipping, or ear tagging of animals</li> <li>Observation of animal behavior with manipulation of the animal or its environment</li> <li>Procedures, which do not result in clinical signs of pain and/or distress (e.g. abdominal ultrasound performed awake)</li> <li>AVMA-approved humane euthanasia procedures</li> <li>Live trapping (traps must provide adequate shelter/food and be checked frequently to ensure survival)</li> </ol>	<ol> <li>Potentially stressful transportation or handling of animals requiring tranquilization</li> <li>Surgical procedures</li> <li>Skin biopsy with local anesthetic</li> <li>Exposure of blood vessels for catheter implantation</li> <li>Infusion under anesthesia</li> <li>Genetically engineered phenotype that causes pain or distress that will be alleviated</li> <li>Any post-procedure outcome that causes noticeable pain, discomfort, or distress—such as reduced appetite or activity, sensitivity to touch, open skin lesions, abscesses, lameness, conjunctivitis, corneal edema, or light sensitivity — but is alleviated with analgesics</li> </ol>	<ol> <li>Any procedures where indicated analgesics, tranquilizers, sedatives, or anesthetics are withheld for study purposes</li> <li>Euthanasia by non-AVMA approved procedures</li> <li>Burns or trauma</li> <li>Radiation sickness</li> <li>Toxicological or microbiological testing, cancer or infectious disease research that requires continuation until clinical symptoms are evident or death occurs</li> <li>Experimental induction of disease including metabolic and nutritional diseases or disease resulting from exposure to toxicants</li> <li>Mutants with chronic pain or debilitation</li> <li>Food or water deprivation that exceeds ordinary pre-surgical preparation or is stressful to the animal</li> <li>Application of noxious stimuli (i.e. electrical shock) that cannot be avoided or escaped</li> <li>Restraint using paralyzing or immobilizing drugs without anesthesia or prolonged restraint for long periods of time</li> <li>Exposure to abnormal or extreme environmental conditions</li> <li>Behavior or testing resulting in injury to cage mates or self</li> <li>Studies that allow endpoints that are painful or stressful (i.e., addictive drug withdrawals without treatment, pain research)</li> </ol>