

Pain and Distress Categories for Animal Studies Compared

CURRENT U.T. CATEGORIES

1. ACUTE STUDIES

Studies under anesthesia after which animals do not regain consciousness, or involving tissues collected under anesthesia or following euthanasia. Routine animal holding or breeding.

2. MINOR PAIN OR DISTRESS

Studies without pain or distress other than associated with routine injections or blood collection. Can include tumor models that do not cause pain if terminated prior to serious illness, or administration of mildly toxic substances that cause no significant morbidity.

3. PAINFUL PROCEDURES WITH ANESTHESIA/ANALGESIA □

a. Survival surgical procedures.

b. Painful or potentially painful non-surgical procedures done under anesthesia (e.g., bone marrow taps, injections into sensitive areas such as foot pads, cardiac punctures, mildly traumatic procedures).

4. MODERATE DISTRESS OR PAIN GENERALLY WITHOUT ANESTHESIA/ANALGESIA/TRANQUILIZERS

Induction of moderate distress or painful disease conditions. Examples: experimental arthritis, infections, immunosuppression resulting in disease, severe inflammation, whole body irradiation, stress models, inescapable low level electrical shock or heat, survival surgeries resulting in long term illness, booster immunizations with Complete Freund's Adjuvant, tumor models causing pain or morbidity, sight deprivation, restraint longer than 12 hours.

5. INTENSE SUSTAINED OR REPEATED PAIN WITHOUT ANESTHESIA/ANALGESIA □

Direct stimulation of CNS pain tracts, nociceptor stimulation by physical or chemical means that causes severe pain, or any category 3 procedures performed without chemical relief of pain.

USDA CATEGORIES

Category B -- NO EXPERIMENTAL MANIPULATION

Animal holding or breeding when no research is being conducted.

Category C -- NO OR MINIMAL PAIN OR DISTRESS

Routine injections (non-toxic, non-irritating), venipuncture, tail biopsy (pre-weaning), brief restraint, most behavioral studies.

Category D -- PAINFUL PROCEDURES WITH ANESTHESIA OR ANALGESIA

All survival and non-survival surgery, disease conditions with pain relief provided (e.g., arthritis treated with anti-inflammatory agents).

Category E -- PAINFUL PROCEDURES WITHOUT ANESTHESIA OR ANALGESIA

Only experiments that cannot be performed using anesthetics, analgesics or tranquilizers without adversely affecting the study. Requires detailed scientific justification. Institutions must report all covered species used in Category E to USDA. USDA issues an annual report containing this information to the public.

MAKING THE TRANSITION

Category 1 (holding, breeding) = Category B

Category 1 (euthanasia, tissue harvest) = Category C

Category 1 (non-survival surgery) = Category D

Category 2 = Category C

Category 3 = Category D

Category 4 = Category E

Category 5 = Category E