

X. Pain Classification

Classify individual procedures as C, D or E in the chart below. Investigators should assign procedures to pain classes honestly. There is no penalty to the investigator for placing a procedure in a higher pain class. Please note: The descriptions we may include in a policy will not necessarily mimic or restate what the regulations state because the purpose of a policy is to provide clarification of the existing regulation. We hope that the following explanations and examples (among many) of the various categories will clarify these categories.

Class C:

Pain or distress will be absent or minimal and momentary

Description:

Testing, teaching, or experiments involving no pain, distress, or use of pain-relieving medications. Again, recognize that pain or distress must be more than slight or momentary to be, by definition, a painful procedure.

Example:

Collection of a blood sample from a peripheral vein not resulting in pain or distress. The animal remains calm throughout.

This category includes but is not limited to

- *Breeding.*
- *Gavage.*
- *Tissue collection after euthanasia.*
- *Most injections, if the injection does not introduce an agent which causes pain or distress.*
- *Blood collection from a peripheral vein.*
- *The use of Freund's complete adjuvant in immunizations in accord with IACUC policy http://casemed.case.edu/ora/iacuc/policies/freunds_adjuvant.cfm.*
- *Nutritional studies if they do not lead to debilitation of the animal.*
- *Subclinical infections.*
- *Procedures which cause only minor discomfort.*
- *Tumor studies in rodents within the IACUC-recommended limit http://casemed.case.edu/ora/iacuc/policies/tumor_production.cfm.*

Class D:

Pain or distress will be present and appropriate anesthetics, analgesics or tranquilizers will be provided.

Description:

Testing, teaching, or experiments involving pain or distress for which appropriate analgesic, anesthetic, or tranquilizing drugs are used.

Examples

1. **Use of an anesthetic agent to prevent pain or distress associated with intercardiac blood collection or perhaps any number or other types of procedures.**
2. **Use of a therapeutic agent to remedy an intentionally induced disease process. It would be a bit of a leap from where we are now, since current regulations recognize only anesthetics, analgesics, and tranquilizers or other pain-relieving medications as a means to appropriately classify procedures in Class D.**

IX. Pain Classification

This category includes but is not limited to

- *Terminal tissue or organ harvest under anesthesia.*
- *Pithing or exsanguination under anesthesia.*
- *Surgeries such as biopsy, gonadectomy, exposure of blood vessels, chronic catheter implantation, bronchoalveolar lavage, laparotomy or laparoscopy when performed with appropriate anesthesia and analgesia.*
- *Surgical invasion of body cavities, orthopedic procedures, dentistry or other hard or soft tissue damage when performed with appropriate anesthesia and analgesia.*
- *Blood collection by invasive procedures such as intracardiac or periorbital collection from species without a true orbital sinus such as rats and guinea pigs when performed with appropriate anesthesia.*
- *Blood collection from the periorbital sinus of mice when performed with appropriate anesthesia.*

Class E:

Pain or distress will be induced and will not be relieved because relief would interfere with procedures, results or interpretation of the results.

Description:

Teaching, testing, or experiments involving pain or distress for which the use of appropriate anesthetic, analgesics, or tranquilizing drugs would have adversely affected the procedures results or the interpretation.

Examples

- 1. Collection of an inter-cardiac blood sample without the use of pain-relieving medications.**
- 2. Presence of an experimentally induced disease process that causes pain or distress that is not relieved by the use of pain-relieving medications.**

This category includes but is not limited to

- *Administration of chemicals or agents which produce pain or distress which is not relieved with analgesics.*
- *Mutants with chronic pain or debilitation which is not relieved with analgesics or by appropriate intervention.*
- *Procedures producing pain or distress unrelieved by analgesics such as toxicity studies, microbial virulence testing, radiation sickness studies and research on stress, shock or pain.*
- *Negative conditioning via electric shocks or other methods of stress which would cause pain or distress in humans.*
- *Prolonged restraint without appropriate measures to alleviate distress.*
- *The administration of Freund's complete adjuvant by means not in accord with IACUC policy http://casemed.case.edu/ora/iacuc/policies/freunds_adjuvant.cfm.*
- *Studies where the death of an animal is an experimental endpoint.*

Investigators should consider that pain relief may be incomplete despite best efforts to provide analgesia. In such cases, it may be appropriate to categorize the procedure as Class E. Where appropriate, the experience of humans subject to the same conditions can be used as a guide to classification.

USDA Regulations and Guidelines Pertaining to Pain Classification:

<http://books.nap.edu/readingroom/books/labrats/chaps.html#pain>