

Appendix A

Sample university policy regarding severe and unrelieved pain and distress in animal research

University Policy

It is the policy of [Name of School] that the school will not allow any laboratory animals in our care to experience severe and unrelieved pain and/or distress.

Recommended Features of the Policy

- It applies to all vertebrate species, regardless of their Animal Welfare Act status.
- It applies to the animals' experience throughout their lives at the research institution, from arrival until death or relocation.
- In making an assessment regarding whether severe pain and distress are *expected* to occur, procedures that cause pain or distress in humans should be expected to cause so in other animals, unless the contrary is established, as is stated in the Animal Welfare Act and Public Health Service Policy.
- Procedures that would otherwise lead to severe pain and distress would not fall into this category if interventions are taken that preclude severe pain and distress, including provision of adequate anesthetics, analgesics, or palliative care and/or use of humane endpoints (i.e. euthanasia prior to severe pain and distress).

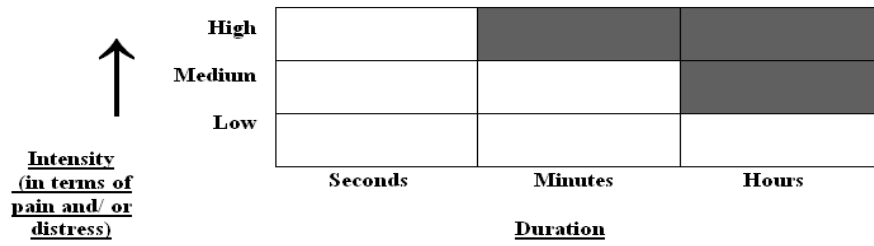
Additional Guidance

The duration and intensity of an experimental procedure can influence how an animal experiences the procedure. Accordingly, for purposes of the policy, a procedure that results in intense pain or distress but which lasts only for a few seconds would NOT be considered severe. On the other hand, a procedure that results in moderate pain or distress but which the animal experiences over the course of hours or days would be considered severe for the purposes of this policy. Please see the figure below for further guidance.

Situations at the transition between moderate and severe pain or distress should be treated as severe for purposes of complying with the policy.

Appendix B lists examples in two categories; research or procedures that would typically cause severe and unrelieved pain and/or distress that can be mitigated with proper intervention; and research or procedures that typically cause severe and unrelieved pain and/or distress that would most often not be allowed under the campus policy due to the nature of the procedures

Figure



This figure demonstrates the combined impact of two variables on the animals' experience of severe pain and/or distress, namely the duration of a procedure or condition and its intensity (in terms of pain and/or distress). The shaded areas indicate experiences that would be regarded as severe pain or distress under the policy.

Appendix B

1.) Examples of research that could lead to severe pain or distress if not prevented or relieved with proper use of anesthetics, analgesics, palliative care, humane endpoints, etc. (Appropriate intervention to prevent and/or promptly relieve pain and distress would meet the requirements of the policy).¹

- Cancer
- Use of paralytics²
- Arthritis
- Recovery from major surgery
- Infectious disease
- Irradiation
- Inflammatory conditions

2.) Examples of procedures that would typically cause severe and unrelieved pain or distress. These and similar procedures would, by default, be viewed as unacceptable under the campus policy.³

- LD50 tests
- Marked social deprivation
- Prolonged full-body restraint (lasting more than minutes)
- Noxious electric shock that is repetitive and/or is not immediately escapable
- Repeated and/or prolonged psychological insult to induce learned helplessness

¹ These examples all assume technical competence on the part of laboratory personnel.

² Paralytics cause severe distress when used without anesthesia.

³ If an institution demonstrates that it has an action plan that would be implemented and would subsequently avoid severe and prolonged pain and distress when using these and similar procedures, the institution would then be following its policy.